EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

EXAMINATION OF TURNOVER TRENDS SINCE RETIREMENT REFORMS

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EXECUTIVE SUMMARY

This report has been developed to examine the changing turnover patterns of public workers covered by the Employees' Retirement System of Rhode Island (ERSRI).

While there are many factors that come into play when considering worker decisions regarding whether to stay in their job or leave for other opportunities, retirement plan offerings are generally considered an effective worker retention tool that incentivizes long careers at an organization. Given the significant structural changes to ERSRI employee retirement benefits, examining subsequent workforce behaviors can provide insight into how modifying benefits has impacted worker retention.

To study these issues, this report analyzes the past five experience studies that are available on ERSRI's website, covering June 30, 2004 through June 30, 2022. It is important to keep in mind that other issues, like the availability and size of pay raises, employer-initiated terminations during recessions, and the impact of the Covid-19 pandemic surely also are key factors. While ERSRI experience studies provide an accurate snapshot of employee behavior, the studies do not provide explanations for employee choices.

The report's key findings are as follows

- Employee turnover has been consistently higher in the most recent actuarial experience report for nearly every age grouping (using five-year intervals), and for each group of workers, including state employees, general employees, police officers and firefighters, and teachers. The data was grouped into 19 segments (four types of workers and by service groupings), and turnover was the highest in 17 of the 19 groupings studied in the most recent report.

- Higher turnover will result in fewer workers providing full careers in their communities. For instance, the experience shown from the 2022 study suggests that only 29 of 100 new state employees would reach 25 years of service. Past experience studies estimated 34 to 45 of 100 new state employees reaching the same mark.

- It is possible to develop a return-on-investment perspective regarding hiring by using the same experience data. To do this, the analysis projects the total service provided to Rhode Island citizens by 100 newly hired workers based on the experience data for each study. For state employees, this measure has been falling since 2010— from 1,518 years of service per 100 new hires to 1,191 years—or from about 15 years per new hire to about 12.

- These increased turnover trends not only dictate how much hiring public employers must undertake, but also the average and median level of experience of their workforce. Higher turnover translates into workers with fewer years of experience with their employers, which could impact the productivity of a workforce as well as the quality of public services.

- Finally, the rate of change in attrition may be somewhat understated in this report because each experience study covers six years, while the report is conducted every three years. So, each study is examining data that is roughly half new and half from the prior three years. This almost certainly has a smoothing effect on the rate of change that is being measured every three years.

INTRODUCTION

Retirement plan structures provide incentives that drive employee decisions about when to retire or when to leave one job for another. A key feature of defined benefit (DB) pension plans is that they often incentivize long careers for workers in both the public and private sectors. Long careers can be especially valuable in the public sector because there are many professions with large sunk costs to provide specialized training for new employees. Examples include public safety jobs like policing or firefighting, as well as professions in which a new worker gains markedly in effectiveness over time like teaching. Therefore, changes to the structure of retirement plans that adversely affect employee retention should be studied and their long-term impact examined.

Significant changes were made to the Employees' Retirement System of Rhode Island (ERSRI) in 2011. The plan was changed from a DB pension plan to a hybrid plan with a reduced DB component and mandatory participation in a defined contribution (DC) plan. Participation in the new hybrid plan has been obligatory for all new hires since July 1, 2012, as well as current active workers with less than 20 years of service as of June 30, 2012. The hybrid plan has been in place for more than 11 years, which is sufficient time to study its impact on employee behavior.

Table 1 below displays data about new hires in ERSRI from the 2023 actuarial valuation report, including the number of new hires and their ages. This is relevant to the analysis of the change in employee behavior because employees hired at different ages can be impacted differently by various plan designs.

Often, data on worker participation in retirement plans is presented as an employee who begins working at age 25 and works continuously for forty years, retiring at age 65. Real world experience, however, often is different. Table 1 shows that many new hires in ERSRI were in their mid-thirties when hired, and more than one-third of municipal general employees were over age 45.

Previous National Institute on Retirement Security (NIRS) research finds mid-career hires are more adversely impacted by a savings-based retirement plan than early career hires are.[1] The growth in investment earnings, especially towards the end of a career, is critical for success in a savings-based plan, so starting to save early and having decades for compound interest to accrue is crucial. When a worker does not begin participating in a savings plan until age 40 or 45, those important early years of saving are missed and the retirement savings outcomes are lower as a result. Participation in a defined benefit plan, on the other hand, can be a significant advantage for a newly-hired mid-career worker who has not previously saved in a retirement plan.

The interaction of factors like hire age and plan design drives employee decision-making. A mid-career hire

Table 1: Average and Median Age of New Hires; Percent Over Age 45

Worker Group	# New Hires	Average Age	Median Age	Percent Over Age 45
State Employees	984	37.8	35	30%
General Employees	798	39.9	35	36.5%
Police and Fire	140	29.4	27	7.1%
Teachers	367	37.2	35	28.9%

joining a DB pension plan may feel an added incentive to remain with their employer for the long term, especially if they lack any retirement savings from previous employment. On the other hand, a mid-career hire joining a hybrid plan with a less robust DB benefit and a DC plan in which they have fewer years to accrue investment earnings may feel less incentive to stay, especially if they have the opportunity to earn a higher salary elsewhere.

Table 2 shows that employee turnover has been higher for almost all groups in the most recent actuarial experience studies, which captured employee behavior since the implementation of the hybrid plan. This data suggests that the change in plan design is, at least partly, increasing employee turnover by providing less incentives for public employees to stay with their employer. It is noteworthy that this increase in turnover has occurred across the different service groupings. The attrition is not limited just to new hires, but also includes workers with more than twenty years of experience since the adoption of the hybrid plan design for some current employees and all future hires. This is a strong indication that it is not only younger workers, who may work for a few years and then decide to pursue other career paths, but workers with decades of experience that are choosing to leave at higher rates than in the past.

Table 2: Recent Turnover Experience by Worker and Service Groupings, Ranked Highest to Lowest, Among Five Most Recent Studies

Worker Group	0-5 Years	6-10 Years	11-15 Years	16-20 Years	21-25 Years
State Employees	1st	1st	1st	1st	1st
General Employees	1st	1st	1st	1st	1st
Police and Fire	1st	1st	2nd	1st	N/A
Teachers	4th	1st	1st	1st	1st

STATE EMPLOYEES

Focusing specifically on state employees as one employee category, the data show that turnover has increased over time for this group of workers. The state employee withdrawal rate was higher in 2022 across the full range of years of service than in any of the previous four actuarial studies (**Figure 1**). The withdrawal rate still follows the same trendline of fewer workers leaving with the more years of service they have, but at each point, more state employees were leaving sooner in 2022 than in previous years.

This ultimately impacts the number of experienced employees performing public service jobs. **Figure 2** shows a projection of employee retention at certain intervals for a group of 100 newly hired workers. The chart shows that, at each point, the plan would expect there to be fewer of those 100 employees still working than in previous years. For example, at year 20, the most recent actuarial study projected only 31 of those 100 new hires would still be employed in Rhode Island state government. In contrast, the 2010 actuarial study would have projected 47 to still be employed. This reduction in the number of experienced state employees likely has an unavoidable impact on the quality of public services.

Figure 1: Turnover Experience (2004-2022) - RI State Employees

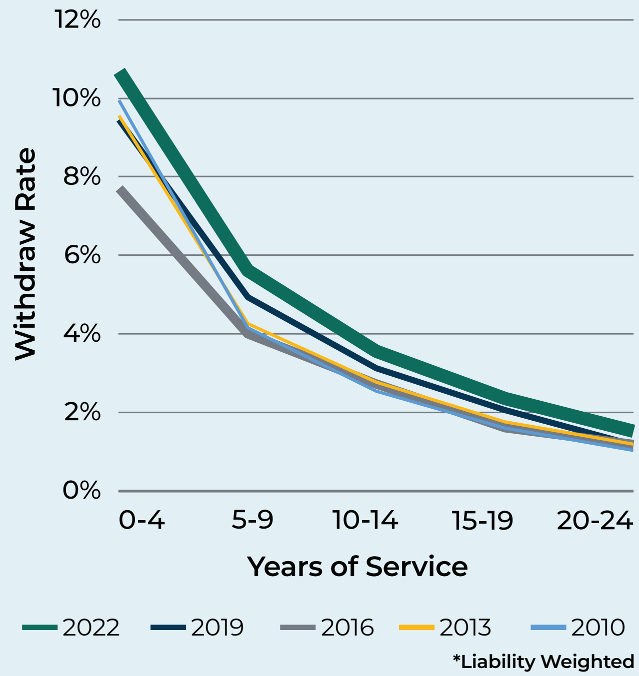
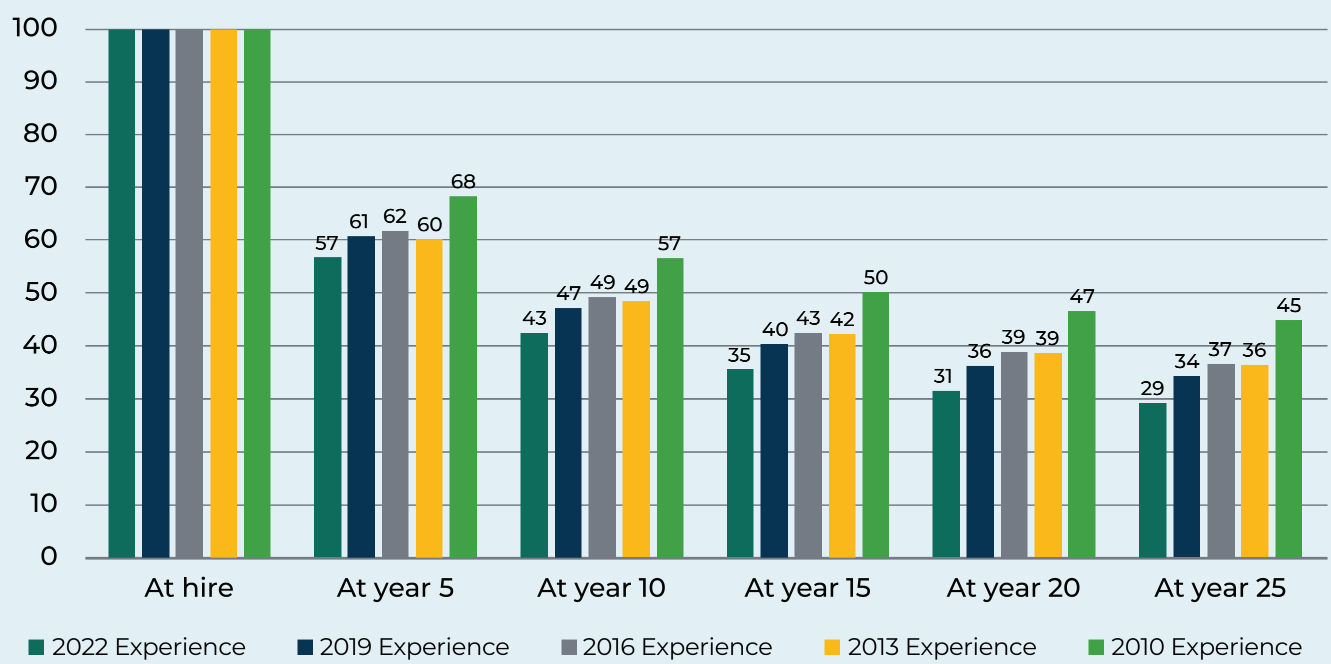
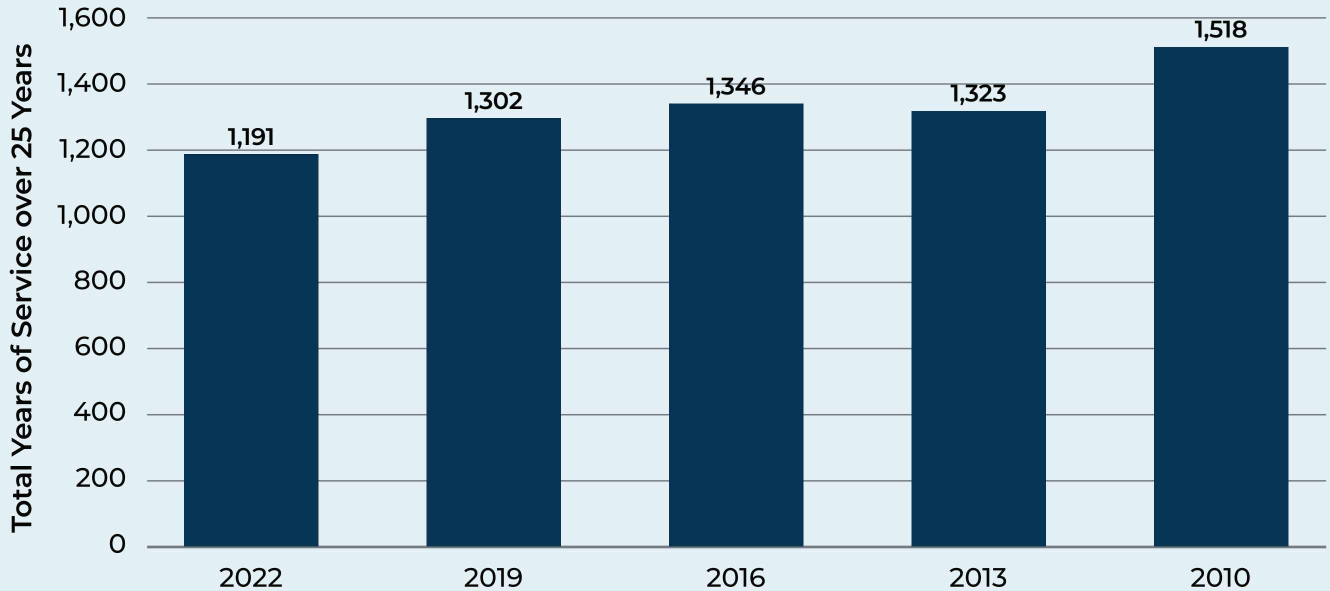


Figure 2: ERSRI State Employees Retention Experience - 100 New Hires



Ultimately, it is not just the number of experienced employees working, but the number of years of service they provide that matters. Using similar projections as in Figure 2, **Figure 3** forecasts the total years of service provided by those 100 new hires over 25 years. The trend has been decidedly downward from 2010, before the hybrid plan was implemented, to 2022, after the hybrid plan had been in place for more than a decade. The typical years of service per new hire declined from roughly 15 to just under 12. This means the state government and its agencies will spend more time, money, and staff power filling vacant positions as new state employees now tend to leave more quickly and provide fewer years of service.

Figure 3: Projected Service Over 25 Years, Based on Experience



GENERAL EMPLOYEES

Turning from state government employees to municipal general employees, the data reveal strikingly similar trends. Turnover was higher across the full range of years of experience in the most recent actuarial study than in previous studies (**Figure 4**). Turnover patterns continued to follow the same trend line as was seen with state employees, but there was a noticeable separation of the trendline from the most recent study, revealing that turnover has increased. Moreover, turnover is higher across all years of service at a rate not seen previously.

This data allows for the same projections to be made as were done for state employees. **Figure 5** shows that, at each point, the most recent actuarial study expected fewer municipal general employees to be retained than in previous studies, e.g., 31 employees at year 15 in the most recent study compared to 41 at year 15 in the 2010 study.

Again, this data can be used to project the total years of service provided. The same decline is seen as was seen with state employees, though the decline is not as sharp, with municipal general employees declining from a little more than 12 to a little more than ten years of service on average (**Figure 6**). This higher attrition rate has the same implications for the provision of government services at the local level as it does at the state level. Fewer experienced municipal employees mean higher and more frequent hiring costs, along with more time and resources spent training new employees.

Figure 4: Turnover Experience (2004-2022) - RI General Employees

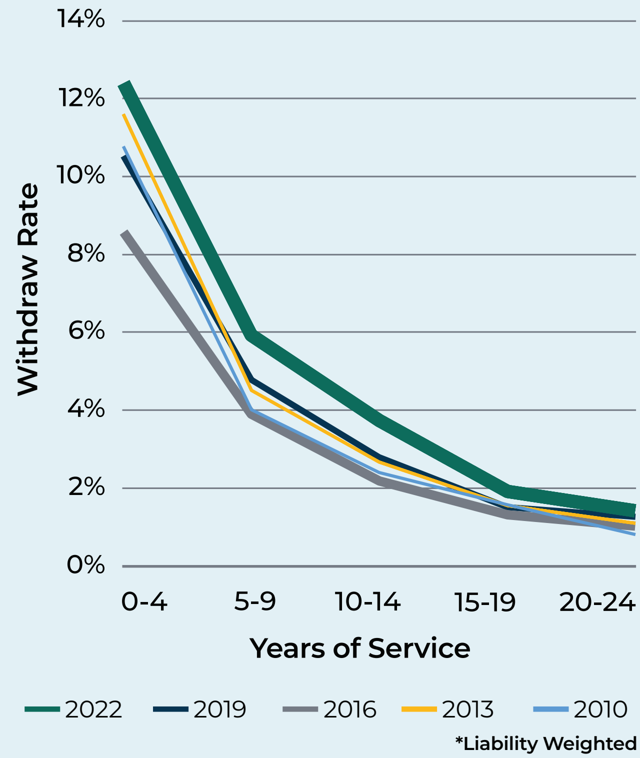


Figure 5: ERSRI General Employees Retention Experience - 100 New Hires

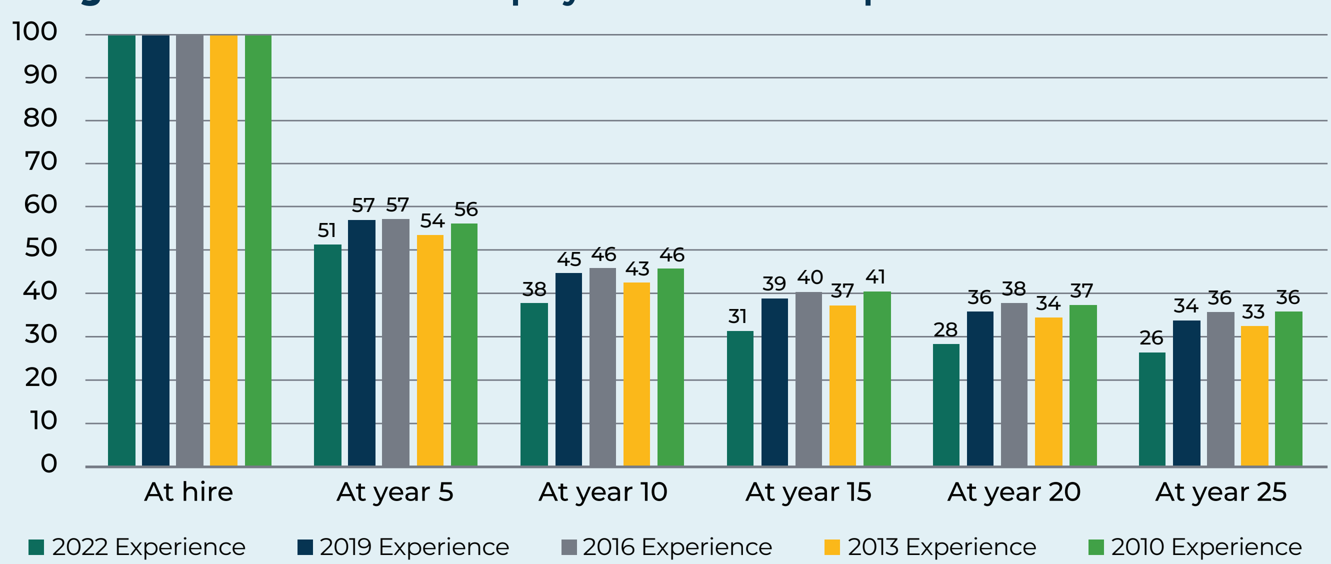
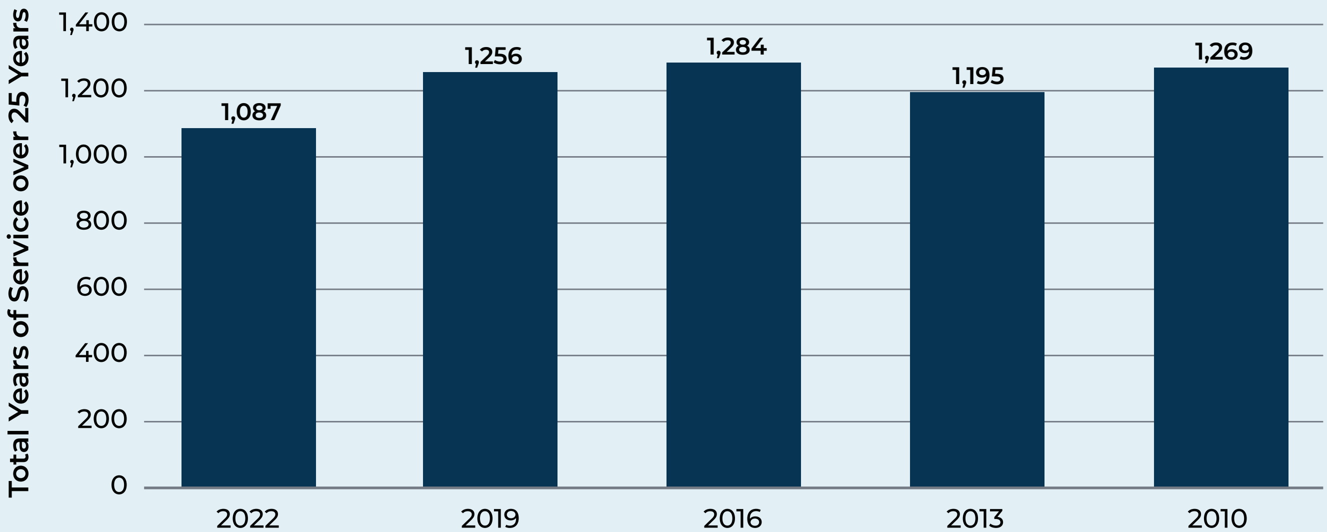


Figure 6: Projected Service Over 25 Years, Based on Experience



POLICE AND FIRE

Public safety professionals, such as police officers and firefighters, often have employment patterns and career trajectories that differ somewhat from other public employees. More specifically, the physical demands of the job often mean fewer years of service and earlier retirements. Nevertheless, there are similar patterns among the turnover data for these professions as there are for state and municipal government employees.

Turnover in the early years for public safety professionals was noticeably higher in the most recent actuarial study as shown in **Figure 7**. Interestingly, the trendline then converges with that from the 2010 study. It appears that total turnover among police and fire was lower in the middle three actuarial studies (2013, 2016, 2019) than for either the 2010 or 2022 studies, but early year turnover was higher in the 2022 study as noted already.

Making the same projections of years of service from the data, the pattern remains the same, with the most recent study projecting fewer employees retained (**Figure 8**) and fewer total years of service provided (**Figure 9**). Police and fire, on the whole, retain more employees and for longer than either state or municipal government, but the trend has still been downward, e.g., 46 new hires retained at year 20 in the most recent study compared to 51 retained in the 2010 study. Especially for public safety professions, which have high costs to train new firefighters and police officers, there are important implications for the return on investment of taxpayer dollars by not keeping these public employees as long.

Figure 7: Turnover Experience (2004-2022) - RI Police and Fire

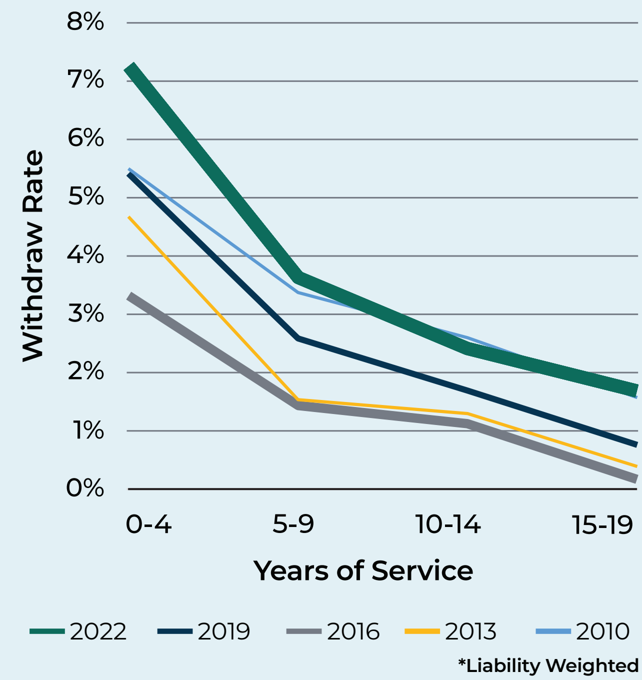


Figure 8: ERSRI Police and Fire Employees Retention Experience - 100 New Hires

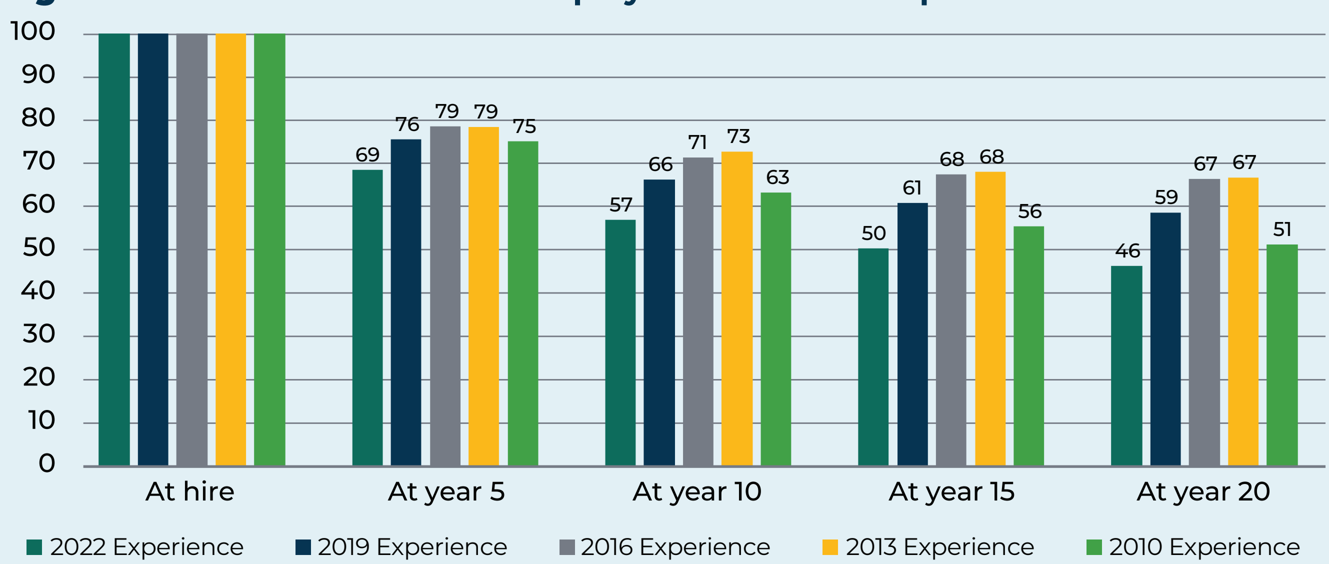
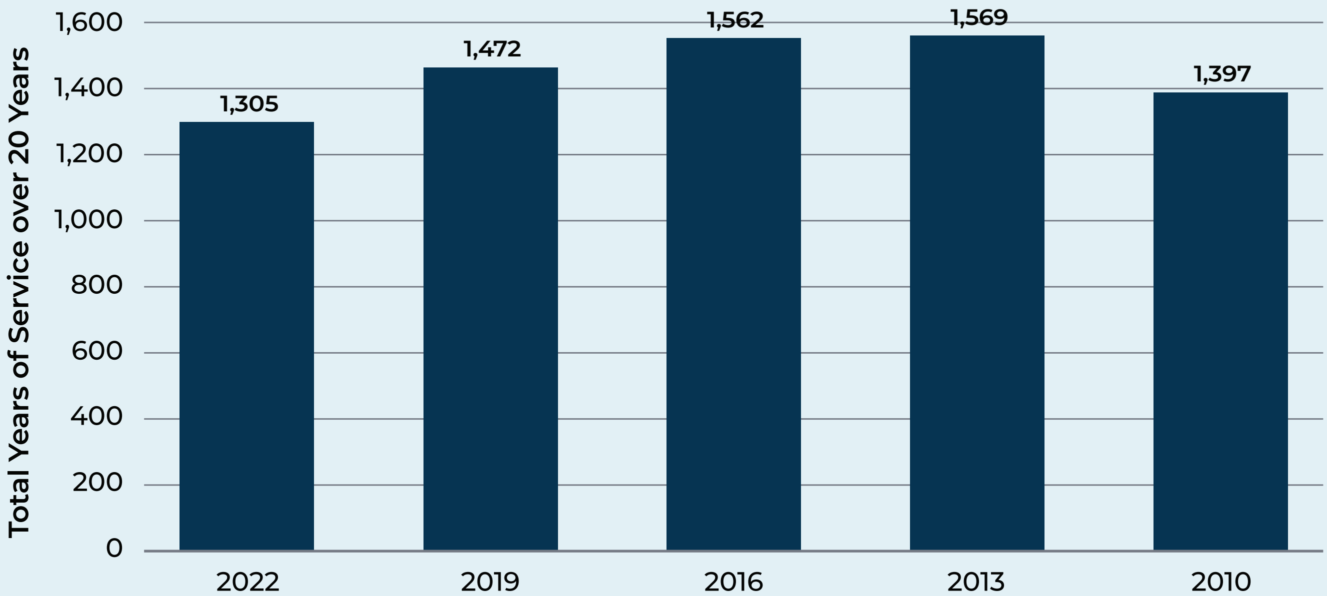


Figure 9: Projected Service Over 20 Years, Based on Experience



TEACHERS

Teachers deviate even more from the patterns of state and municipal government employees than police officers and firefighters do. Teacher turnover was lower for early career teachers in the most recent actuarial study than in earlier ones. However, after year five, the trendline of teacher turnover almost perfectly overlays the trendline from earlier studies, although it is higher in the 2022 study as seen in **Figure 10**. There likely is a connection between the high churn seen among new teachers and the fact that teaching still remains a career choice for many, even if the hybrid plan is somewhat weakening incentives to stay.

This results in the projections of service producing different results for teachers than for other public employees in Rhode Island. **Figure 11** shows that, at years five and ten, the number of teachers expected to be retained is nearly the same in the 2022 study as in the 2010 study. Retention then declines somewhat at later points, but not as sharply as for other categories of public employees, e.g., only from 43 teachers (2010 study) to 39 teachers (2022 study) in year 25. This also means the total years of projected service holds up and was nearly the same in 2022 as it was in 2010 (**Figure 12**).

Given that the experiences of newly hired teachers was surprising, and an outlier, it may be important to understand that teachers who change school districts (employers) but keep working in Rhode Island, will not appear as terminated in the experience study.

Figure 10: Turnover Experience (2004-2022) - RI Teachers

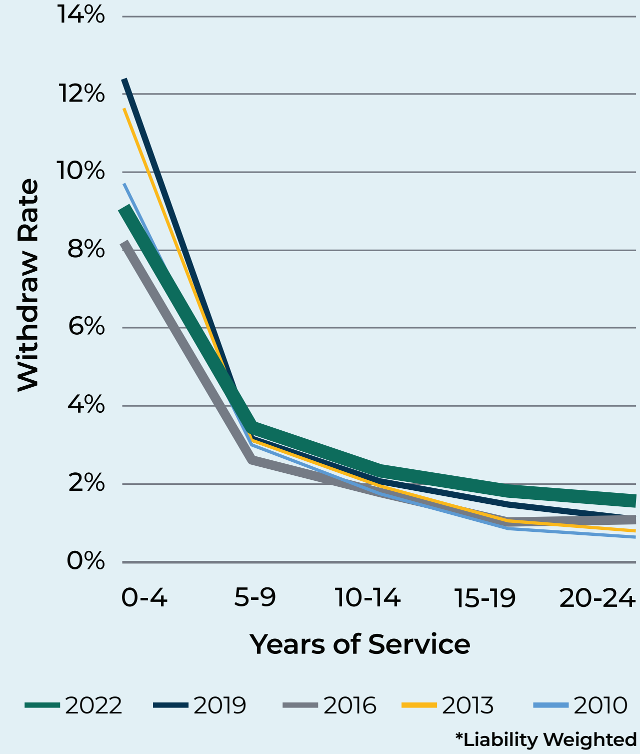


Figure 11: ERSRI Teachers Experience - 100 New Hires

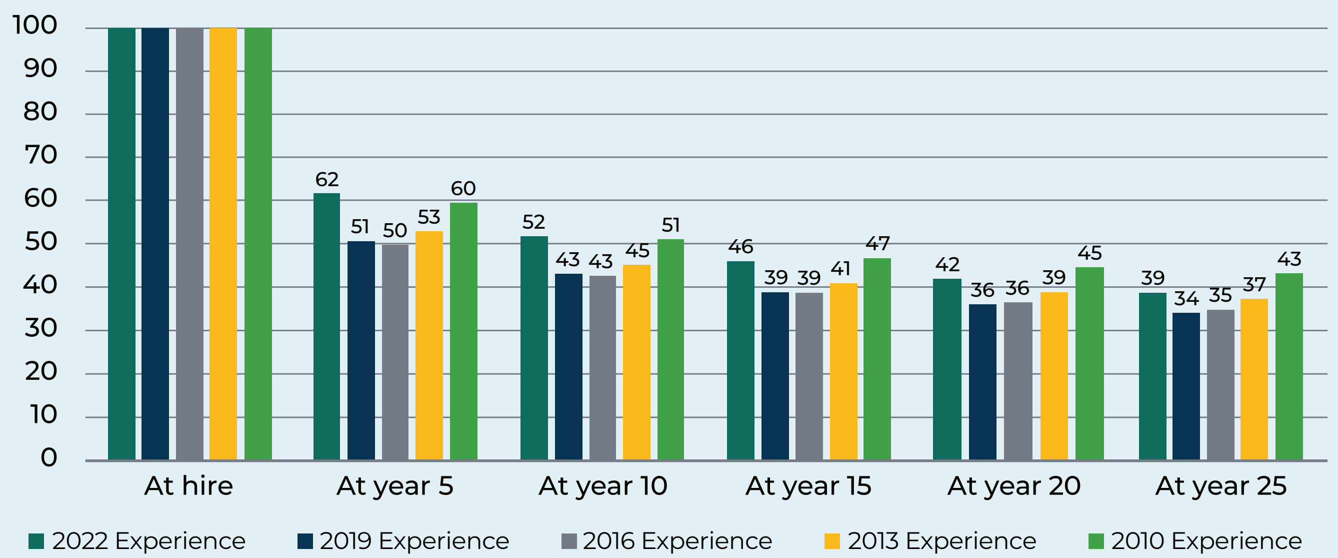
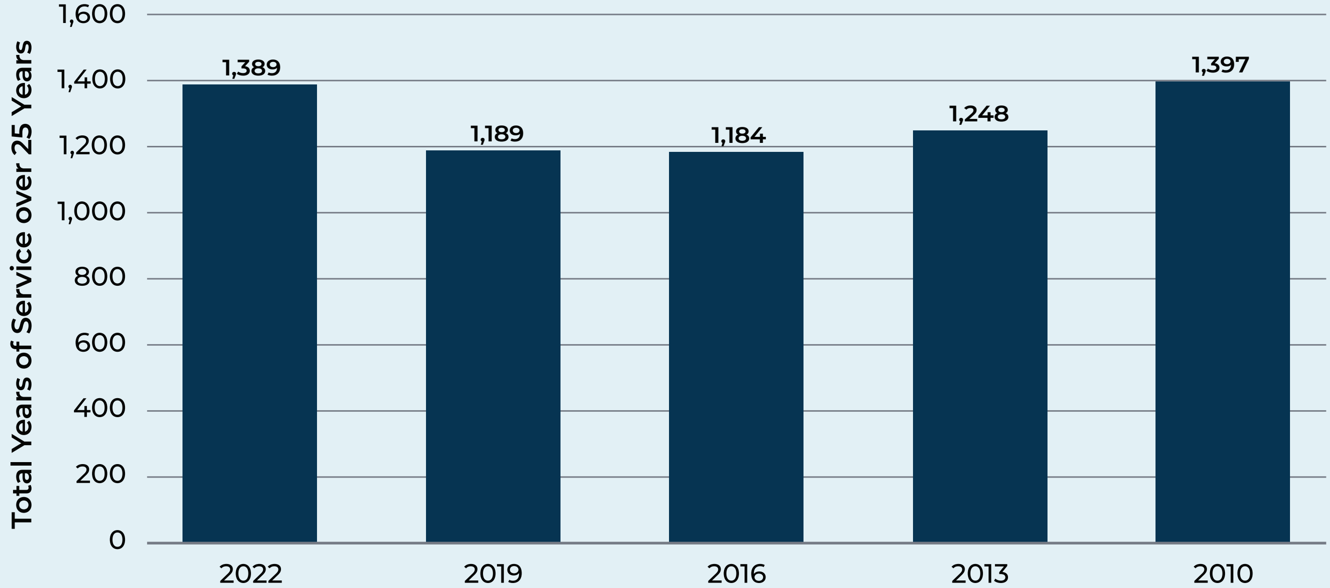


Figure 12: Projected Service Over 25 Years, Based on Experience



WHY RETIREMENT BENEFITS MATTER TO WORKERS AND EMPLOYERS

Defined benefit pension plans have long been used as a workforce management tool to help recruit, retain, and retire public employees. This has promoted a model of career service in the public sector. When the Rhode Island legislature changed the plan design of ERSRI from a DB pension plan to a hybrid DB-DC plan in 2011, that changed the incentives for public employees. Almost across the board, there has been an increase in turnover resulting in fewer employees retained and fewer years of service provided. This has negative downstream effects on the provision of public services.

Many public sector jobs, such as teaching, policing, and firefighting, are unique and don't have direct counterparts in the private sector. This means it requires both time and money to find, hire, and train new employees to perform these essential public service jobs. More frequent turnover forces public employers to spend more resources on filling vacancies.

High attrition also impacts the quality of the services provided. Educational research has established that new teachers experience the most striking gains in effectiveness during the first five years, although they continue to increase in effectiveness in the following years.[2] A portion of new teachers will leave within those first five years, when they realize the demands of teaching are not for them. But for those teachers who do stay past five years, most will be more effective teachers after gaining that early experience. Moreover, there are strong reasons to keep teachers in the classroom for decades because their growing experience has positive outcomes in areas beyond student test scores.[3]

For new police officers and firefighters, they are required both to attend an academy and get on-the-job experience before they are fully trained to protect public safety. For all of these professions, the incentives should push strongly toward keeping workers who have received those critical early years of training and experience.

The hybrid plan currently in place weakens the incentives for new employees to stay for a career. The less generous provisions of the DB portion of the hybrid plan provide a less compelling reason to stay for a career to collect a robust pension benefit at retirement. And for the defined contribution plan, it is the early years of contributions that have the greatest impact as investment earnings accrue over the course of decades. With a three-year vesting period for employer contributions to the DC portion of the plan, new hires don't have as much reason to stay and continue accumulating contributions in their DC plan.

RETIREMENT BENEFIT OBSERVATIONS

Efficiency of Delivering Benefits

In general, designing a hybrid DB/DC combination plan with the same cost will not provide the same level of benefits as a DB-only plan because pensions pool risks and investments in a manner that produces greater economic efficiencies. Unlike most DC plans, the ERSRI DC plan does offer in-plan annuitization, which enables plan members to generate some life income at retirement from their DC savings. ERSRI hybrid plan members also likely benefit from lower fees as in-plan annuitization is similar to buying wholesale instead of retail.

Financial planners often start talking about generating income from savings by discussing the "Four Percent Rule." This rule states that one can get real annual income equal to about four percent of savings at retirement. For example, a retiree would need $1 million to generate $40,000 in annual income (inflation adjusted). It is likely that annuitization through the ERSRI plan can produce more income than following the Four Percent Rule, and it certainly reduces risks. But to have a better understanding of the broader impact, it would be helpful to have more information about how many people take the annuity option and what terms are used for the conversion from lump sum to benefit payments.

Accrual Rates and Age at Hire

Another effect of the benefit changes is clear: those hired at a later age will be impacted more than those hired at younger ages. Pensions are a lifeline to workers hired mid-career or later who have not managed to stay on track saving for retirement, as later accruals are quite valuable. In contrast, early contributions in a defined contribution plan have a larger impact in generating retirement income because market returns typically outpace wage growth over extended periods, assuming those contributions remain in a retirement account.

This dynamic is illustrated in a NIRS report, *Not All Hybrids are Created Equal*, in **Figures 13** and **14**. In short, in a DC or cash balance plan, the account growth as workers approach retirement should be much larger for people who have more service because the early contributions have had time to compound. But workers hired later never reach a place where investment returns do much of the heavy lifting.

Figure 13: Annual Increase in Account Balance, with Contributions and Interest Defined - Full Career

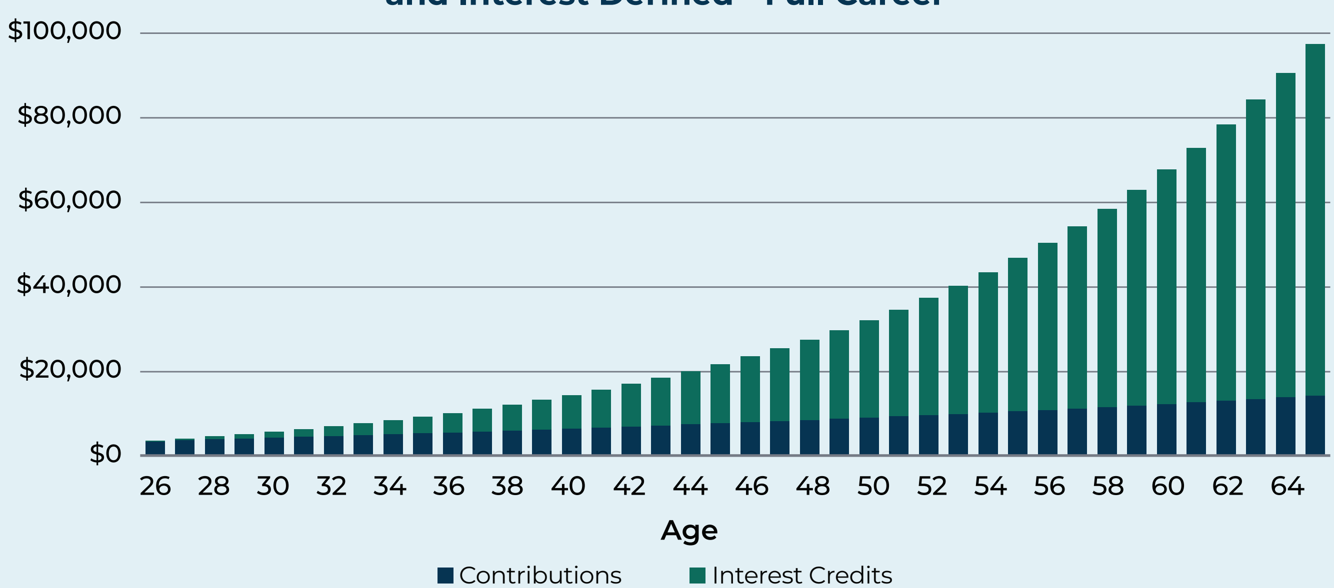


Figure 14: Annual Increase in Account Balance, with Contributions and Interest Defined - Mid-Career Hire

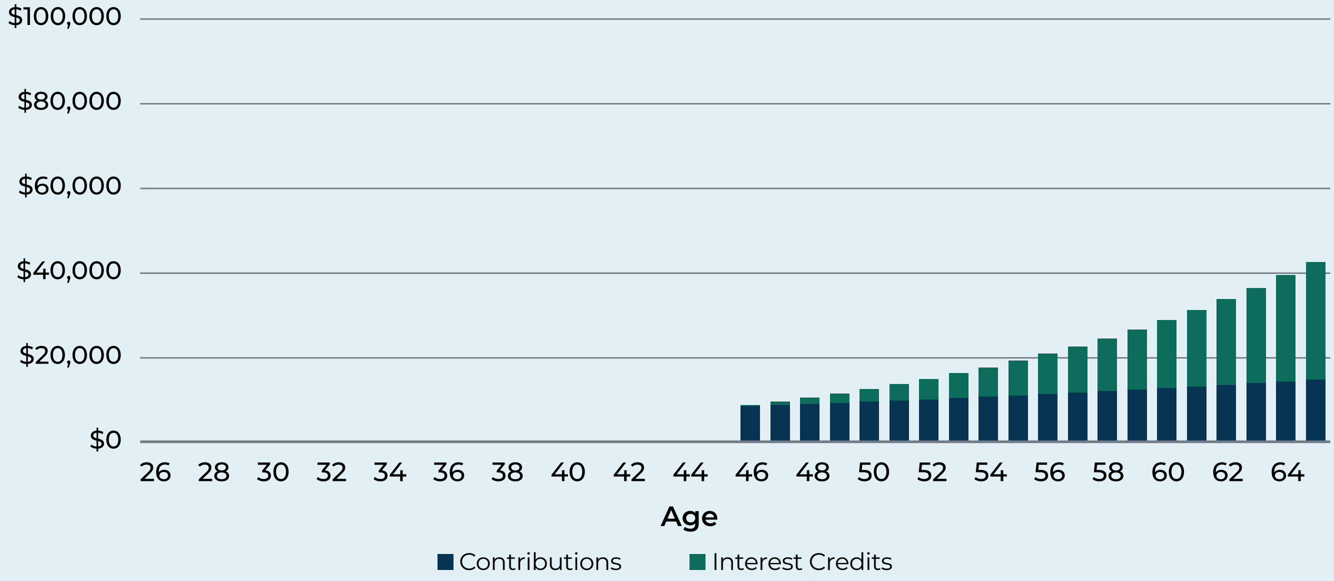
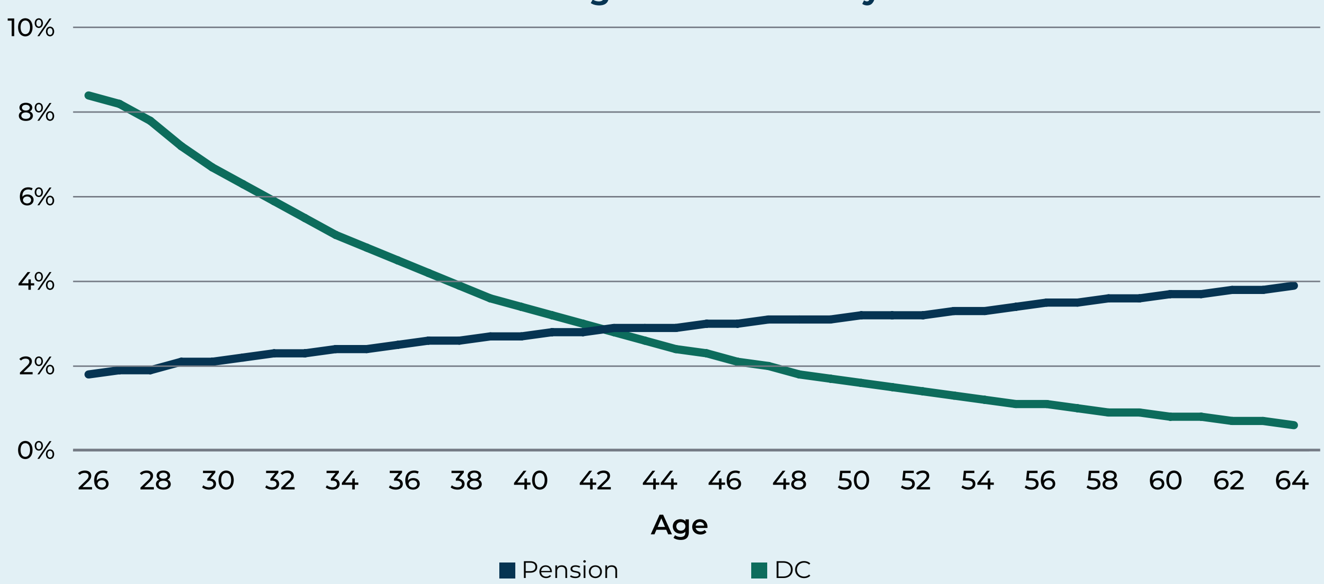


Figure 15: Dollars of Life Income Earned from Additional Year of Service as Percentage of Current Pay - Full Career



Therefore, the transition to a side-by-side hybrid likely will have a larger impact on people hired mid-career or later, including those who transitioned mid-career after the reforms were passed. Another way to think about this issue is to look at how much income, relative to pay, is generated by working another year at various ages. As **Figure 15** shows, starting your career in a DB plan and finishing in a DC plan produces the least favorable outcome. Unlike many private sector employers who fully closed their DB plans and moved to offering workers a DC plan, the changes to ERSRI diverted some resources to a DC plan for future accruals but retained a less generous, but still significant, DB plan benefit for future service.

If one studies projections of income from different plan types, it is important to look at young hires, average hire ages, and those hired at later ages to better understand the impacts.

Types of Benefit Changes

The benefit multiplier is a key aspect of benefit adequacy in a pension system. Reforms, particularly increases in the multiplier, can be done in various ways. One option is to increase the multiplier for future service only, which increases the normal cost and contributions but does not add unfunded liabilities to the system, assuming those benefits are funded going forward.

However, if past accruals also are increased, this will add accrued liabilities to the plan that were not prefunded. One option to address this might be to allow workers to buy up their past service, instead of granting it on top of the DC contributions that they received. When West Virginia Teachers moved back to offering a pension from a DC plan, participants had the option to buy past service in the DB plan but were not granted those years in addition to the DC plan assets they had accrued.

One way or another, any additional benefits will have to be funded.

Another way to improve benefits is to increase the DC plan contribution, either in all years or by using a profit-sharing strategy to make overall retirement costs more level over time. A profit-sharing strategy might take into account funding levels or cost levels and make contributions when the DB plan's funded status is improving. The Baltimore City Employees' Retirement System uses this approach, with employer contributions for hybrid members defined as "City contributes *1.5%-3% of earnable compensation to their RSP accounts based on ERS Class D funding status*. This contribution begins one year after hire date."

Cost-of-living adjustments (COLAs) for retirees currently are reduced from prior levels. Granting COLAs is costly and would create additional unfunded liabilities, unless a funding source is secured.

Another aspect to consider in this particular situation is that retiree COLAs are conditional upon funding levels. Therefore, any benefit changes that are not funded adequately could impact the timing of when the plan reaches 80 percent funding and COLAs are restored.

It also is noteworthy that, as pointed out in the recent committee meeting, workers who are not covered by Social Security are more likely to face financial challenges in retirement as compared to those who participate in both ERSRI and Social Security.

Balancing Priorities

The options above come with different cost implications, as well as varying potential impacts on retention. One would expect rational workers to appreciate benefit improvements that benefit them, which may help—at least marginally—with reducing turnover.

Providing current retirees with increased COLAs is unlikely to impact the retention of active workers significantly, but instead addresses a different priority: delivering benefits levels that are closer to what was promised.

CONCLUSION

The examination of turnover trends among public workers covered by ERSRI reveals significant shifts since retirement reforms were implemented in 2012. The transition from a DB pension plan to a hybrid plan with a reduced DB component and mandatory participation in a DC plan is likely causing demonstrable changes in employee attrition, though other factors also impact employee decisions on whether to stay or leave their organization.

The data specific to state employees, municipal general employees, police officers, firefighters, and teachers demonstrates a consistent pattern of higher turnover in the most recent studies. The impact varies across professions, but the overall trend indicates challenges in retaining experienced workers.

The trend towards higher turnover contributes to a workforce with less experience, potentially affecting productivity and the quality of public services.

The impact on workers hired or transitioning to a hybrid DB-DC plan at different ages is important to understand. Generating retirement income through a DC plan becomes more difficult when a worker begins participating at later ages. This makes it harder to recover when sacrificing DB accruals at older ages. Employees hired at younger ages who work a full career may see a less dramatic change in retirement security, compared to those who move from a full DB plan to a hybrid plan mid- or late-career.

Addressing these issues requires careful consideration of benefit structures, accrual rates, and adequate funding to balance these priorities to ensure the long-term sustainability of the retirement system and the quality of public services provided.

ENDNOTES

1. Dan Doonan and Elizabeth Wiley. *The Hybrid Handbook: Not All Hybrids Are Created Equal.* National Institute on Retirement Security. May 2021.
2. Stephen Sawchuk. "New Studies Find That, for Teachers, Experience Really Does Matter" *Education Week.* March 24, 2015. and Tim Walker. "Does Teaching Experience Matter? Let's Count the Ways" *NEA Today.* June 6, 2016.
3. Suzanne Capek Tingley. "Is the Teacher Performance Plateau Still a Thing?" Hey Teach! Available on the web at: https://www.wgu.edu/heyteach/article/is-the-teacher-performance-plateau-still-a-thing2203.html.

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Our Vision

Through our activities, NIRS seeks to encourage the development of public policies that enhance retirement security in America. Our vision is one of a retirement system that simultaneously meets the needs of employers, employees, and the public interest. That is, one where:

- employers can offer affordable, high quality retirement benefits that help them achieve their human resources goals;
- employees can count on a secure source of retirement income that enables them to maintain a decent living standard after a lifetime of work; and
- the public interest is well-served by retirement systems that are managed in ways that promote fiscal responsibility, economic growth, and responsible stewardship of retirement assets.

Our Approach

- High-quality research that informs the public debate on retirement policy. The research program focuses on the role and value of defined benefit pension plans for employers, employees, and the public at large. We also conduct research on policy approaches and other innovative strategies to expand broad based retirement security.
- Education programs that disseminate our research findings broadly. NIRS disseminates its research findings to the public, policy makers, and the media by distributing reports, conducting briefings, and participating in conferences and other public forums.
- Outreach to partners and key stakeholders. By building partnerships with other experts in the field of retirement research and with stakeholders that support retirement security, we leverage the impact of our research and education efforts. Our outreach activities also improve the capacity of government agencies, non-profits, the private sector, and others working to promote and expand retirement security.

The National Institute on Retirement Security is a non-profit, non-partisan organization established to contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. NIRS works to fulfill this mission through research, education and outreach programs that are national in scope.

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