



THE FUNDAMENTALS OF SOUND PUBLIC PENSION FUNDING

In some ways, calculating a viable path to ensuring the health and integrity of a public pension fund is like piecing together bits of a puzzle. While you may not need every piece to appreciate the full picture, there are certain key elements that will make arriving at a pension funding solution immeasurably simpler.

🧩 Two Key Questions

There are two basic questions that need to be considered: How much will it cost, and how will it be paid?

Determining actual costs requires a series of calculations involving a myriad of factors that are based on actuarially sound principles. These factors include actual and/or projected age, salary, years of service, various risk measurements, contributions, benefit accrual rate, investment returns, and more.

On the basis of these calculations, independent actuaries engaged by SERS produce what is called the Actuarially Required Contribution (ARC), or Actuarially

Determined Contribution (ADC), which is another term for the same concept.

The National Association of State Retirement Administrators (NASRA), describes the ARC as the amount needed to be contributed by employers to adequately fund a public pension plan. The ARC is the sum of two factors: 1) the cost of pension benefits being accrued in the current year (known as the normal cost), and, 2) the cost to amortize, or pay off, the plan's unfunded liability. Essentially, the ARC is the required employer contribution after accounting for other revenue, primarily expected investment earnings and contributions from employee participants.

🔍 Penny-Wise, Pound-Foolish

The second question, how the ARC gets paid, is an equally important consideration. In a perfect world, employers and state legislatures pay the full amount of the calculated ARC according to an actuarially sound schedule. If, for whatever reason, the required contributions are not paid in full, then the fund will be short that foregone principal, as well as the interest that principal would have earned. This is significant, as investment earnings have funded more than 62% of SERS' liabilities over the past 20 years.

Countless studies have documented the importance of making consistent and adequate contributions to fund pension benefits. Generally speaking, these studies find that adequate contributions play a vital role in the long-term funding condition of public pension plans.

The mathematics are straightforward. Just as the failure to consistently and fully pay one's credit card bill will increase its long-term cost through escalating interest payments, a failure to pay the ARC in full inevitably increases the long-term cost of funding a pension plan and forfeits investment earnings. ***Instead, funds that might otherwise have been deployed for critical services must be allocated to "make up" the shortfall.***

For many pension funds across the U.S., full payment of the ARC has been a variable rather than a constant, thereby contributing to the “unfunded liability” that continues to challenge them.

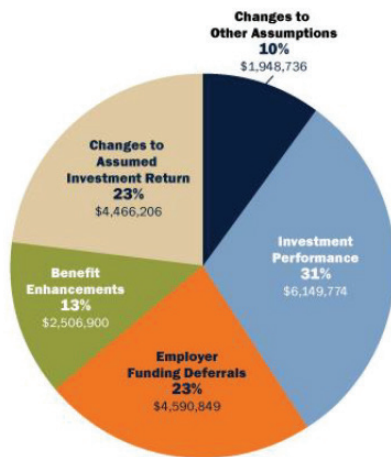
A quick review of recent history underscores just how important full funding of the ARC can be. At the beginning of the millennium, SERS had a funded ratio that was over 100%.

While investment losses during two significant economic recessions (2002 and 2008) contributed to the deterioration in SERS’ funded position, far greater impacts stemmed from continued underfunding of the ARC (for 11 years, beginning in 2005), several legislatively-prescribed benefit increases without requisite prefunding (Act 2001-9 and Act 2002-38), and, in particular, artificially suppressed employer contribution rates as a result of Act 2003-40 and Act 2010-120.

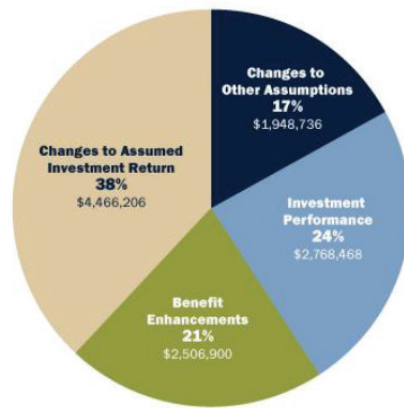
Act 2003-40 also imposed a split amortization that recognized COLAs and certain large gains over 10 years, while recognizing other gains and losses over 30 years. The effect was to suppress the unfunded liability rate for 10 years ending in 2011.

The charts below offer a comparative perspective of the direct impact that artificially suppressed employer contribution rates had on SERS’ funded status – a difference of approximately \$8 billion over the long term.

SERS Sources of Unfunded Liability
Total Liability as of 12/31/17
\$19.7 Billion
 (Amounts in chart below in thousands)



SERS Hypothetical:
"What If There Had Been No Funding Deferrals
Under Acts 2003-40 and 2010-120"?
Estimated Unfunded Liability as of 12/31/17
\$11.7 Billion
 (Amounts in chart below in thousands)



Another much-debated issue that comes into play – particularly in the context of ongoing unfunded liabilities – is the concept of “intergenerational equity.” Theoretically, employees’ wages are paid currently. But pension benefits are different. They are future obligations that rely on current funding that is contributed to a trust. When current funding falls short, it shifts the responsibility of funding those future obligations, almost always at a higher cost, to a future generation of workers and taxpayers. Many states and other public entities (Pennsylvania included) have, at times, made decisions that undermine those current funding responsibilities – often during times of economic and budgetary distress. Nevertheless, the fallout is virtually inevitable – eventually one needs to pay the piper.

Best Practices for Public Pension Funds

Pension benefits for employees of state and local governments are paid from trust funds to which public employees and their employers contribute during the employees' working years. These timely contributions are crucial to adequate funding and to maintaining the stability of these plans. As noted, when required contributions are not paid, or underfunded, the result is higher future costs – the consequence of foregone principal and significant investment earnings that the contributions would have generated. Again, these future higher costs eat further into future budgets, requiring funds that might otherwise have been available to be deployed for critical services.

From the national perspective, full funding is generally recognized as a key element of public pension fund best practices.

In 2013, the Government Finance Officers Association (GFOA) a 20,000-member organization of public finance officials throughout the United States and Canada, issued "Best Practice: Core Elements of a Funding Policy" calling for the establishment of an actuarially determined contribution that provides reasonable assurance that the cost of retirement benefits will be funded in an equitable and sustainable manner. Such a retirement benefits funding policy would incorporate the following principles and objectives:

1. Every government employer that offers defined benefit pensions or other post-employment benefits (OPEB) should obtain no less than, biennially, an actuarially determined contribution (ADC) to serve as the basis for its contributions to those respective plans.
2. The ADC should be calculated in a manner that fully funds the long-term costs of promised benefits, while balancing the goals of 1) keeping contributions relatively stable and 2) equitably allocating the costs over the employees' period of active service.
3. Every government employer that offers defined benefit pensions or OPEB should make a commitment to fund the full amount of the ADC each period.
4. Every government employer that offers defined benefit pensions or OPEB should demonstrate accountability and transparency by communicating all of the information necessary for assessing the government's progress toward meeting its pension funding objectives.

"...pension policy should promote fiscal discipline and intergenerational equity, and clearly report when and how pension plans will be fully funded."

-- Pension Funding Task Force

In addition, a report issued by the Pension Funding Task Force (a joint study undertaken by seven national associations representing local and state government entities) came to the following conclusion: The most important step for local and state governments to take is to base their pension funding policy on an actuarially required contribution that is set on an annual or biennial basis and that the pension policy should promote fiscal discipline and intergenerational equity (so that the cost of employee benefits is paid by the generation of taxpayers who receives services), and clearly report when and how pension plans will be fully funded.

The Pennsylvania Perspective



For the Pennsylvania State Employees’ Retirement System (SERS), the assurance of dedicated funding is a vital and ongoing objective. In testimony during the October 2018 hearing of the Public Pension Management and Asset Investment Review Commission (PPMAIRC - established as part of Act 2017-5), SERS executives urged the General Assembly and the Governor’s office to incorporate into the State Employees’ Retirement Code a dedicated funding source and a contribution payment amount that is based on sound actuarial methods and assumptions consistent with generally accepted actuarial standards of practice.

Such action would help “(ensure) funding at an amount that cannot be impaired by the changing priorities of elected officials, insulating it from the unpredictability of the appropriations process, and preventing the manipulation of amortization methods and other funding deferral mechanisms that have cost the system approximately \$8 billion through 2017 (as illustrated in the charts on page 2). Those assets could have offset the unfunded liability and provided more investment flexibility to the Retirement Board – flexibility that may well have included an asset allocation with more lower cost investments,” SERS Executive Director Terrill (Terri) J. Sanchez told the commission.

Pension Review Commission Recognition

In December 2018, the PPMAIRC issued its final report, which included the following specific recommendations:

Full Funding of the Retirement Funds

- We recommend that the Commonwealth annually maintain full payment of the actuarially determined contribution amount necessary to fund each public pension plan as a fundamental and necessary requirement to ensure the future viability of both retirement systems.
- We recommend that the General Assembly consider additional legislation mandating full funding of each retirement fund, pursuant to Act 120 of 2010, as an annual budgetary priority.

- We recommend that the General Assembly consider legislation requiring the pre-funding of any benefit structure enhancement or cost-of-living increase.
- We recommend that the General Assembly consider the creation of a rate stabilization fund as a precaution against annual underfunding for the two retirement systems during periods of state budgetary stress.

At its March 2019, board meeting, the SERS Board approved a resolution directing the SERS Executive Director and staff to work with the General Assembly to pursue legislative strategies to ensure full funding in a manner that meets the objectives of the PPMAIRC recommendations including exploring the use of a dedicated funding source to fund future obligations.

Dedicated Funding Policies in Other States

Across the country, a number of states and municipalities have instituted dedicated funding practices. The National Association of State Retirement Administrators (NASRA) notes that, across the country, it is increasingly common for public pension plans to receive some funding from dedicated funding sources – either an ongoing or a one-time revenue source that must, by law, be contributed to the pension fund. For example:



Colorado: In 2018, Colorado allocated annual funding of up to \$225 million to the Colorado Public Employees' Retirement Association. The amount can be increased or decreased by \$20 million if the combined PERA contribution rate is less than 98%, or greater than or equal to 120%, respectively, of the actuarially determined contribution.



Hawaii: Voters in 2016 approved a constitutional amendment adding unfunded pension liabilities and state bonded debt to the list of permissible uses of surplus general fund monies.



Kansas: In 2012, the Kansas legislature approved legislation that requires a share of state gaming revenues from state-owned casinos to be directed to the KPERS unfunded liability beginning in FY 2014 when the amount was estimated to be \$30 million. Also, 80% of the proceeds from any sale of state surplus real estate was directed to the KPERS unfunded liability until the retirement system reaches an 80%-funded ratio.



Louisiana: Voters in 2016 approved the creation of a Revenue Stabilization Trust Fund for the deposit of recurring mineral and corporate tax revenues. Within set limits, monies from the fund may be used to pay down state employee retirement debt, among other purposes.



Minnesota: In 2018, the legislature adopted an annual state aid payment to the Minnesota Public Employees Retirement Association of \$4.5 million in FY 2019 and FY 2020, and \$9.0 million annually thereafter until FY 2048.



Montana: In 2013, the legislature approved a bill dedicating a portion of the coal severance tax to amortizing the state's unfunded pension liabilities.



North Carolina: In 2018, the legislature established a solvency reserve fund to help pay down the state's unfunded pension and health care liabilities. The reserve is to be funded through several sources including General Assembly appropriations, overflows or statutory excesses from the state's "rainy day" fund, or savings from the refinancing of general obligation bonds.



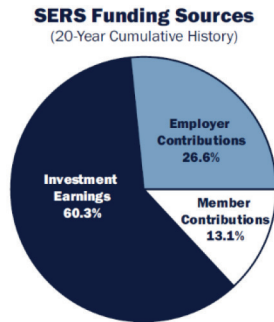
Oklahoma: Oklahoma Teachers' Retirement System receives 5% of the State's sales, use, and corporate and individual income taxes, collected as dedicated revenue. The system receives 1% of the cigarette taxes collected by the State and 5% of net lottery proceeds collected by the state. Also, in 2013, the Oklahoma Legislature created the Oklahoma Pension Stabilization Fund, into which surplus state revenues are deposited and from which the legislature may appropriate to the state pension fund.



Oregon: In 2018, the legislature approved legislation directing a variety of revenue sources, including tax receipts on alcohol and marijuana, lottery revenues above estimates, and others, to fund public pensions.

✦ Positive Steps

During the past decade, the General Assembly and Administration took several positive steps to effectively manage employer costs and address the unfunded liability. While Act 120 of 2010 did “collar” employer contribution rates below actuarially determined payment levels that would have otherwise been necessary, it also obligated a politically affordable annual payment schedule that steadily increased employer payments over the course of several years until full payments again would be made, beginning in 2016.



Act 120 also provided a more consistent means for calculating investment gains and losses – allowing SERS to amortize unfunded liabilities over a 30-year

period, and providing that additional liabilities to the system (Cost of Living Adjustments, etc.), be amortized over 10 years.

Both Act 120 of 2010 and Act 5 of 2017 reduced employee benefits for future hires to reduce future employer normal costs from more than 9% to 1.25% for new hires. Furthermore, a risk-sharing provision will increase employee contributions (within reasonable limitations) if future investment earnings do not meet future assumptions. Act 5 of 2017 also included a “plowback” provision to make additional contributions to further reduce the unfunded liability due to assumed savings from the legislation.

In addition, since 2015, the General Assembly and the Wolf Administration have made all actuarially required payments annually – a point we want to emphasize and for which we are grateful. Annual funding increases were particularly significant for both SERS and PSERS during recent years, totaling \$1.4 billion for the first three years of the Wolf Administration.

✦ Ensuring Future Financial Health

Even so, there is no guarantee that future lawmakers and administrators will continue to follow that model of financial and fiscal responsibility.

Enacting dedicated funding provisions would help prevent future governors and legislative leaders from repeating the mistakes of the past. While the U.S. economy at the start of 2020 continued the longest expansion in history, recent turmoil related to the Coronavirus pandemic may be the catalyst for an economic downturn. Any recession will bring new budget challenges for Pennsylvania and prompt a renewed search for ways to reduce budget expenditures.

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That’s why it is important to take the long view. **Underfunding of pension obligations can have serious and long-term financial ripple effects on other budget priorities.** As unfunded pension obligations build up over time, the eventual reconciliation of those debts inevitably require higher payments to make up the shortfall. (Not unlike paying minimum balances, or less, on a credit card.) **One result is that budget and policymakers may be constrained from providing financial support for other purposes – for example, education funding, economic or community development programs, or tax cuts, depending on the legislative purview.**

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Taking proactive steps now, to make sure the commonwealth can pay its mandated bills first, would help ensure we can fund essential costs, including debt service, and pension obligations, before considering discretionary spending programs. Bond rating agencies also would be likely to look favorably on such a budgetary strategy, as they have previously, following past actions to automatically fund certain debt service payments. Indeed, the ability of the commonwealth to meet its current and future obligations is one of the major rating criteria used by agencies in their analyses of the commonwealth's financial health. This is significant, as the commonwealth's ability to meet its financial obligations is impacted by the relatively high contribution rates to SERS and PSERS over the next two decades. (Note: The last change to the bond rating occurred in September 2017, when Standard & Poor's downgraded

the commonwealth's bond rating from AA- to A+, citing historical structural imbalance, late budget adoption, and the opinion that the pattern was likely to continue into the future.)

Sound budget practice is especially important for pension payments. As noted, costs grow exponentially if not fully funded annually, since any shortfall is not available to be invested. Investment earnings have funded more than 62% of SERS liabilities over the past 20 years.

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✦ Drafting Dedicated Funding Legislation – Key Points

Below is a summary of legislative language that could be crafted to provide for dedicated funding for annual required SERS contributions.

The legislation would establish the State Employees' Retirement Contribution Fund to receive annual payments to fund SERS' State General Fund retirement obligations. Periodic transfers would be made by the Department of Revenue from tax receipts to fund these obligations.

This restricted account in the General Fund would be established for the Department of Revenue to deposit these transfers. The transfers would begin each July 15th, and on the 5th of each month thereafter, in equal monthly payments, following an annual determination by the Secretary of the Budget specifying the total amount required for transfer.

The total amounts funded through these dedicated revenue payments would include the employer normal contributions, accrued liability payments on behalf of active members, participants and annuitants, and the required additional accrued liability contributions as determined by Act 5 of 2017 for General Fund agencies.

On an annual basis, following SERS certification of annual employer contribution rates, the SERS Board would be required to provide that certification, as a percentage of employer contributions, to the Secretary of the Budget. The Secretary of the Budget would use the certified percentage contribution rate to determine a required annual contribution amount earmarked from an existing revenue source (such as Personal Income Tax receipts, or some other sufficient and reliable revenue source) that would then be transferred to the State Employees' Retirement Contribution Fund based upon payroll assumptions for the following fiscal year.

Beginning in 2021, and each year thereafter on June 15th, the Secretary of the Budget would certify the amount to be transferred into the Contribution Fund, including any reconciliation for amounts transferred for the current fiscal year. Money in the Contribution Fund would be transferred to General Fund agencies as needed for agencies to make their required contributions to SERS.

This process would not impact how bi-weekly commonwealth employer contributions are paid to SERS. General Fund agencies would still be liable to SERS for the full amount of their employer contributions, regardless of how much money is in the Contribution Fund. *(Note: the Budget Office and legislative staff have expressed a desire for assurance that this funding mechanism would not impact the receipt of federally funded payments for required employer contributions.)*

The legislation could provide for a one-time certification from the appropriate federal officials to the Secretary of the Budget that the dedicated funding mechanism would have no impact on the continued receipt of federal payroll contributions before any revenues are paid into the Contribution Fund.

From a transparency perspective, while a concern legitimately has been raised if SERS' costs are no longer appropriated through the General Fund budget, this concern could be addressed by requiring these costs to be clearly delineated within the dedicated tax receipts itemized in the commonwealth's financial statement that accompanies the annual General Fund budget.

Please Note: We offer this white paper to provide you with background to assist you in better understanding what can be very complex and even arcane issues – but ones that are vitally important, not only to the members and participants in Pennsylvania's retirement systems, but also to taxpayers.

Our purpose is to offer our specialized expertise and share our knowledge of sound actuarial practices and effective funding policies with those who make laws and set public policy.

We look forward to your comments and questions, and to the opportunity to discuss these issues in greater detail. In addition, we continue to be open to exploring alternative approaches and suggestions, and to providing any technical and other assistance, as needed.

Thank you in advance for your review and consideration of this important issue.