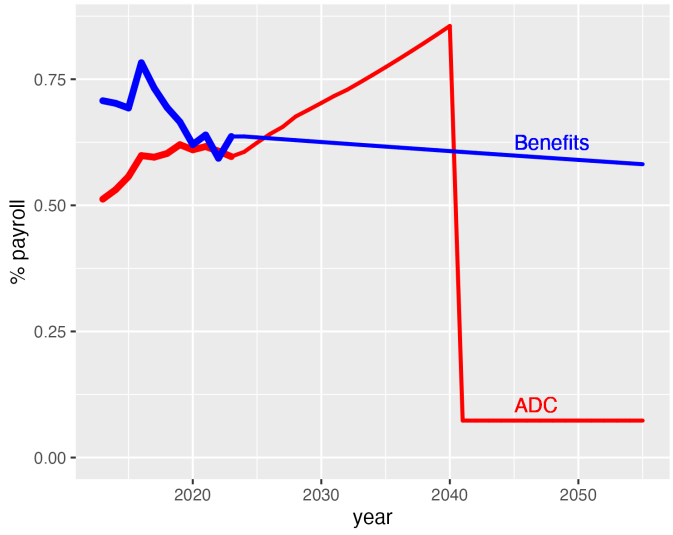
To: Anyone who cares
From: Tom Sgouros
Date: 14 February 2024
Re: Providence pension funding strategies

Summary

Providence can address its pension crisis, reduce payments in the near term, and achieve an 80% funding level within a decade by separating plan members into two plans, and running them both pay-as-you-go, one indefinitely, the other until assets are rebuilt. Investment proceeds are devoted to rebuilding the assets for several years in order to reduce volatility of city contributions. This is not a recipe for avoiding any of the pension checks to be paid—*all pensions are to be paid*—only a way to meet those obligations at the lowest cost possible.

The pension crisis in Providence is, as we all know, the result of a collection of ill-advised decisions from the 1990s, involving skipping payments to the system, and failing to appreciate the impact of the benefit packages granted to retirees at the time. The result is the current system and its anemic levels of funding. The seemingly untenable situation resulted in the 2022 talk of issuing a huge pension obligation bond.

The bond did not happen for a variety of reasons, but addressing the crisis is not optional. The financial future of the city demands it. But the city is already squeezed and further squeezing is hardly feasible. The payment schedule laid out by the current actuaries has payments rising from just over $100 million per year in 2024 to almost $250 million 15 years down the line, before projected payments plunge to around $22 million. The city operating budget was only $583 million in 2024, so it seems vanishingly unlikely that the city can make payments escalating at such a rate without major displacement. A city whose taxes are constrained by state law to rise only 4% per year must slash mercilessly, or face bankruptcy, in order to make these payments.



Benefits and ADC as a percentage of payroll. Thick lines are past, thin are projections. Red line projections are from actuary, blue from me, 2.7% growth rate from 2024. Payroll growth is per the actuary's assumptions.

The problem period is where the ADC line ramps up after 2023. Payroll is around $170M in 2024, so the difference between the red and blue lines works out to around 10% of the entire city budget in 2040.

However, note that the ADC is about equal to the benefits in 2025.

This is true even though the financial demands of the pension system are scheduled to be reduced substantially in the year following the final amortization payment. It is no comfort to know that Eden lies nearby when the barrier to getting there is utterly insurmountable.

What's more, many amortization schedules only appear sensible until they meet the fact that investment returns vary significantly from one year to the next. When a system is withdrawing significant amounts from the fund each year, a bad investment year inevitably forces the liquidation of some assets to make those withdrawals, resulting in a decline in investment assets. In other words, a symmetric fluctuation around some mean return value becomes an asymmetric secular decline as gains are only temporary while losses become locked in.

A better way to proceed Examination of the evidence shows that the obstacle to progress is not so much the expense of the overall system, but the amortization schedule for addressing the sins of the 1990s. That, along with the volatility risk and the expense of the remaining members of the system who were granted those expensive benefits are the real obstacles to recovery. The last is a self-solving problem, and you can see it in the decline in benefits as a percent of payroll in the graph above, though it will take time.

A workable strategy going forward can be based on an important truth: that the sins of the past are largely in the past. The public travails of the system have obscured the fact that the system serving current employees seems eminently manageable. Benefits are not outsize and the payments into the system have been made responsibly for almost 20 years.

Those sins of the past, of course, have been the subject of a confusing welter of lawsuits, and an equally confusing set of judgments and consent decrees. Obviously any solution to the crisis will have to obey these judgments, but we do not address them in this memo. Our purpose here is to outline a responsible course forward—one that can be defended to the ratings agencies and other critics—that tries to meet the city's past obligations at the lowest cost possible. If the benefit from following that course is deemed large enough, presumably there will be a way to address any judicial decrees that might appear to block that path. We leave that to further discussion with city legal counsel.

Because the city has been responsibly paying the normal costs since the Cicilline administration, the retirement costs of current employees are mostly funded, unlike the retirees of the 1990s. The overall funding ratio of the system is around 25%, but if the assets are allocated to the liability of the active employees, the ratio is more like 75%.[1] You might think of the Providence system as a well-funded and well-run system concealed inside of a legacy of disaster.

This suggests that a responsible course of action might be to separate the system into different components: a well-funded pension system to cover current employees and recent retirees, and a pay-go system to cover the remaining retirees from the before times.

Separating a system into a well-funded component and a pay-go component is not without precedent. In the public pension world, it is a well-known story that the Indiana teachers system did exactly that in 1996 to address their funding issues. Indiana is now a well-regarded system and the state has an excellent bond rating.

[1] See p.7 of the 2022 Valuation Report.

In fact, one need not go nearly as far afield as Indiana for precedent since this is also how the Rhode Island judicial retirement system works. In 1990, when the RI state pension system, was extended to cover judges, they distinguished between legacy liability and future liability. The legacy liability was turned into a pay-go system.[2] Only the future liability was assumed by the new judicial pension plan.

Something similar could work in Providence. The ADC line in the graph above shows the currently recommended schedule of payments. Recall that these combine payment of the normal costs with a relatively aggressive schedule of payments to amortize the liability. The amortization payments go to zero in 2042, causing the steep decline, but the aggressive nature of the payments is the reason for the steep rise before the plunge. It is standard actuarial practice to recommend amortizing the unfunded liability as quickly as possible because in an open system it is thought the unfunded portion of the liability grows rapidly. In Providence, however, a large share of the unfunded portion of the liability is due to members who retired decades ago. The number of these members will inevitably decline, and so it is unlikely that the unfunded liability will grow as fast as in a system at a steady state.

To a large degree, the purpose of a pension fund is to provide earnings against the pension benefits and a cushion against investment volatility. However in its current state, the Providence fund not only cannot provide much income, but it becomes a *source* of volatility, as fluctuating investment returns work against the fixed amortization schedule to produce unmanageable swings in the city's contributions. At these funding levels, the fund assets are a net detriment to the plan.

The city should take advantage of the fact that in the near term the cost of benefits will be approximately equal to the ADC (the lines cross in 2025) and commit to funding the declining blue line instead of the rapidly rising red one. These are the steps:

1. Separate the legacy members from the current members. This is for reporting purposes only. Again, all pensions are to be paid.
2. Both plans are run pay-as-you-go. The legacy plan is switched indefinitely, the other temporarily. The resulting net change in city contributions is small this year.
3. Split the fund itself into two pieces. In its current state, a substantial proportion of the fund is only used as liquidity for making sure checks clear. This is to remain available to manage payment liquidity. The bulk of the fund is to be invested as usual, but earnings will be reserved as amortization payments. This will allow the plan to build assets from 75% to 100% in the range of 5-10 years, but will do it with dramatically lower volatility risk to the city.

There are a variety of variables to work out, such as the division of members between the legacy plan and current plan. The 75% number assumes a division between active and retired members, but it would seem appropriate to draw the line some years further back, to include recent retirees, which would make the funding ratio of the current plan lower. If that line was set so the current assets constituted 50% of the current liability, assuming ten years of earnings equivalent to the

[2] These pensions continue to appear as line items in the annual state judiciary budget, see https://omb.ri.gov/sites/g/files/xkgbur751/files/2024-01/Tech%20-%20PS.pdf, page 19, search for "Pensions". For FY25, they are budgeted at $3.8 million.

earnings of the past decade, the system would be at around 80% funded in a decade. At this point, it would be prudent to switch the current members off the pay-as-you-go system, and take better advantage of the investment earnings. The cost to the city, as a percent of payroll, would follow the blue line on page 1, until 2034 when it would tick down a little bit.[3]

There are a variety of factors that can be tuned with better data and some decisions. For example, the further back the city can afford to push the dividing line between the legacy and current systems, the sooner the legacy liability will be extinguished.

The record shows that benefit volatility exists, too. It could be prudent to reserve some investment earnings in the good years in trust to iron out benefit volatility. Assessing exactly how much would be appropriate would require more detailed data than is available in the public valuation reports, as would, of course, working out the specifics of the overall plan.

Considered as a whole, the unfunded liability of the entire system will not go to zero as quickly under this plan as in the status quo plan, and some will think of this as a flaw. But the overall liability of the system is only growing very slowly, and the liability represented by the oldest legacy members is only declining. If the line between legacy and current members is chosen carefully, the plan outlined here can provide a route to more manageable (and predictable) costs in the near term, and a better-funded, stable, pension plan in the medium-term. There is precedent for separating a plan, and precedent for switching to pay-as-you-go to address low levels of funding. In other words, this is a plan that can not only address the city's financial issues, but also be sold to the ratings agencies as a way to avoid bankruptcy and rebuild trust in the pension system.

[3]The estimates in this document are just that, estimates. I have used the actuarial estimates for the ADC, as published in the 2022 Valuation Report, as well as for payroll growth. The post-2024 benefit figures were extrapolated from the 2012-2022 record, and then inflated at 2.7%. This was arbitrarily chosen to be less than 3%. For this proposal, the only important thing about this number is that it average something less than the average rate of payroll growth over the next decade or so. Since the outsize COLAs belong to the oldest retirees, there is reason to believe this may be true.