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We pursue this mission by

- educating and informing Minnesotans about sound fiscal policy;
- providing state and local policy makers with objective, non-partisan research about the impacts of tax and spending policies; and
- advocating for the adoption of policies reflecting principles of fiscal excellence

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I. Introduction

It’s likely you’ve come across articles about the state of public pensions around the country. Chances are you skipped over them. That’s completely understandable. As both a policy issue and a topic for discussion, its dullness is surpassed only by the mind-numbing complexity.

But there is a reason these stories are in the headlines. Across the country, pension liabilities are starting to impact state and local government budgets in important ways. As these stories unfold, it’s natural to wonder what Minnesota’s pension situation looks like.

Answering that question is difficult because lots of different voices chime in on this topic. Everyone seems to have their own set of myths and facts. As a result, it can be difficult to assess whether our situation is a crisis, a non-issue, or something in between. It is true that the choices policymakers have made mean that Minnesota has escaped many of the really devastating problems plaguing other states. It is also true that many of the same underlying issues that have led to such budgetary havoc around the country also exist in Minnesota, are affecting some of our smaller pension plans right now, and put us at risk of the same fate.

Our purpose in this guide is to educate citizens on this important topic. We are not advocating for a particular solution or type of reform. We do, however, want to communicate the legitimacy and seriousness of a problem that needs to be addressed. This guide is written in a “question and answer” format to make it easier to follow and understand the key ideas, issues, and arguments associated with this topic. The guide is comprised of three parts:

- In “The Basics” we describe what defined benefit pension plans are and how they work. We look at why they are now so rare in the private sector but still so prevalent in the public sector. We also explore the tricky issue of benefit generosity and what constitutes an “adequate” retirement benefit.

- In “The Problem” we describe the common measures used to evaluate pension plan health, discuss Minnesota’s current situation based on these measures, and examine why these measures commonly misrepresent the severity of the problem. We explain why Minnesota’s current pension debt is really just the symptom of a deeper and more fundamental problem: flawed funding policies and reporting practices that make a fiscally responsible and financially sustainable defined benefit plan under current practices impossible to achieve and big deficits entirely predictable. We examine how these policies and practices mask the true cost of pension promises, encourage underfunding, and transfer current liabilities to future taxpayers.

- In “The Solutions” we identify what the goals of reform should be, highlight several reform options – both within and outside of the traditional defined benefit system – and discuss why transition costs should not prevent us from pursuing a reform agenda.
We conclude with some final thoughts on steps you should consider taking.

Minnesota’s high quality public sector workforce deserves a high quality retirement plan. Minnesota’s citizens deserve protection from pension obligations that demand higher taxes and “crowd out” the delivery of public services over time.

How can we meet both these goals? Read on!
II. The Basics

Q: OK, I want to get started. How are public pensions different from my own retirement plan?

Minnesota’s public pensions are “defined benefit” (DB) pension plans. In public DB plans, employers and employees make specified contributions that the employer invests on behalf of employees, who receive a lifetime income stream at retirement (the “defined benefit”). Although private sector DB plans still exist, various forms of the very familiar “defined contribution” (DC) plans are far more common. DC plans allow employees to contribute as little or as much as they want, up to a certain amount, into a commercially managed retirement account. Employers often match those contributions in some way. The employee owns the account, invests the money, and decides how to use it at retirement.

Q: The guaranteed income stream and retirement security defined benefit plans offer sound like a great idea. Why aren’t these plans more common in the private sector?

Analysts have suggested four reasons why the private sector has moved away from DB pensions over the last several decades. First, over the years the federal government has tipped the scales in favor of DC plans. It made DC plans more attractive by allowing employees to contribute to their employer’s plan using pre-tax dollars. It made DB plans less attractive by reducing tax incentives for employers to maintain them, virtually stopping new DB plan formation. At the same time, heightened government regulation, disclosure, and reporting rules significantly increased the costs of administering DB plans. One study found increased government regulation was the major factor in 44% of private sector DB plan terminations; another study found that private sector DB administrative costs were twice that of a comparable-sized DC plan.

Second, many companies faced frequent unpleasant surprises in managing these plans – higher than anticipated pension expenses and bigger liabilities– that increasingly came into conflict with business objectives and profitability expectations.

Third, structural changes in the economy and employment – most notably the shift away from manufacturing toward rapidly changing service and technology industries, combined with increasing frequency of job changes and long-term decline in employee tenure trends – have also made DB plans less attractive to employers.

Finally, other research has found that some workers simply prefer the features of a DC plan, particularly its portability – the ability to move retirement plan assets as employment changes.

Q: So why are defined benefit plans still so common in state and local government?

Because the issues that tipped the balance in the private sector don’t really apply to government. Government is not a business driven by the profit motive, and unanticipated expenses don’t threaten its existence since it can raise money through
taxes. Government jobs are highly stable – there are few external forces causing workforce change and turnover. Government employees – especially those in jobs with no real private sector counterpart – tend to spend much of their career in government, so portability is far less important to them. Most importantly, state and local governments are largely exempt from all the tax, administrative cost, and regulatory issues that facilitated the demise of DB plans in the private sector. Instead, state and local governments themselves create the laws, regulations, procedures, and practices that their pension funds have to follow.

Remember this last point – it will be critical when we talk about Minnesota’s public pension problems later on.

Q: Are there a lot of public pension plans in Minnesota?

State and local government workers in Minnesota generally belong to one of a handful of public pension plans. Three big pension systems operate eight plans that cover different groups of employees across the state. They are:

- **Minnesota State Retirement System (MSRS)** – covers state employees. MSRS has four big pension plans. One covers the State Patrol, one covers judges, one covers other correctional workers, and the fourth covers almost every other state employee.

- **Public Employees Retirement Association (PERA)** – covers local government employees except for teachers. PERA has three pension plans. One is for police and firefighters, one is for other correctional workers, and the third covers most other local government employees.

- **Teachers Retirement Association (TRA)** – covers teachers except for those in the St. Paul school district.

There are also some locally-run pension plans. While most of these cover volunteer firefighters, the largest locally-run plan is the **Saint Paul Teachers Retirement Fund Association (SPTRFA)** which covers teachers there. When we say “Minnesota pension plans” in the rest of this guide, we’re talking about these 9 pension plans (the eight statewide plans above plus the one serving St. Paul teachers).

Q: How do these things work?

There are three basic ideas related to Minnesota’s public pension plans that every citizen should understand.

- The concept of actuarial funding
- “Coordination” with Social Security
- How retirement benefits are determined

Q: Let’s start with that first idea. What is “actuarial funding”?

Unlike Social Security, our pension plans are not “pay as you go,” where current employee and employer contributions pay for current retiree benefits. Instead, our plans are “actuarially funded,” meaning professional actuaries estimate how much government employers and employees need to contribute to the system to pay for the promised benefits. The State Board of Investment – the state’s professional money
managers – invest those contributions and use investment gains to help pay for pension benefits. The important idea is this notion of “pre-funding” – taxpayers and employees are expected to foot the bill for pension benefits as they’re earned, and pension costs don’t get kicked down the road to future taxpayers and employees.

In some ways, the math behind actuarial funding is pretty simple. Think of it as:

| Contributions + Investment Income | = | Pension Benefits + Expenses |

Over the long term, the inflows of contributions from employees and employers plus the investment income those contributions generate have to equal the outflows of benefits paid plus the expenses that come with running a pension system.

**Q: That sounds like a responsible way to do things. Is there a catch?**

The catch is that the concept is awfully difficult to carry out, mostly because it involves accurately predicting the future. Figuring out how much money is needed today to pay for benefits 30 years down the road involves lots of assumptions. Among other things, actuaries have to assume how fast salaries will grow over time, how long retirees will live and – most crucially – what investment returns will be. Problems start to pop up when reality differs from the assumptions. Problems start to get very serious when financial reporting and funding policies prevent reality from being recognized and get in the way of solutions. We’ll talk more about that later.

**Q: What do you mean by “coordination with Social Security”?**

All that really means is that most state and local government employees in Minnesota also receive Social Security in addition to their pension. They pay into both programs, along with the governments that employ them. The primary exception is public safety employees, who don’t take part in Social Security. Policymakers have decided that they want public safety officers to be able to retire much earlier than the Social Security retirement age in large part because public safety work is so physically demanding. However, pension benefits for public safety employees are more generous to make up for the lack of Social Security.

**Q: So how are pension benefits determined?**

A retiree’s pension benefit is based on three factors. They are:

1. The “years of service” – essentially, the number of years the employee worked for state or local government in Minnesota.
2. The “high five salary” – the average salary over the five-year period when the employee had his or her highest salaries. This is usually the last five years of employment.
3. The “multiplier” – 1.7% for most state and local employees and 1.9% for most teachers. Public safety employees have higher multipliers, but as we mentioned before this is because they don’t get Social Security.

A retiree’s benefit is determined by multiplying these three factors together. For example, a state employee who is eligible for a full pension and retired with a high
five salary of $60,000 and 37 years of service would have an annual pension of $37,740.

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<th>“High five”</th>
<th>Multiplier</th>
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<td>$60,000</td>
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**Q: Does the pension benefit a retiree gets ever change once it starts getting paid?**

Like Social Security benefits, a retiree’s benefit usually increases every year to help it keep pace with inflation. However, in recent years Minnesota has reduced or suspended these annual “cost of living” adjustments altogether and will continue to do so until the condition of our public pension funds improves. Currently, the annual increases generally range from 1% to 2% depending on which plan a retiree is in.

**Q: How do these Social Security and pension benefits compare with the salaries employees earn while they’re working?**

Social Security benefits generally equal 30-35% of someone’s pre-retirement income. The amount the pension benefit equals mostly depends on the employee’s years of service and the multiplier. For example, someone with 30 years of service in a pension plan that has a multiplier of 1.7% would have a benefit equal to about 50% of pre-retirement income. Lawmakers have designed Minnesota’s public pensions to replace 85% - 90% of a career government employee’s highest income when the benefit is combined with Social Security. But most government employees are contributing 7.65% of their paycheck for Social Security and Medicare – like most workers – and anywhere from 5% to 8% more toward their pension. Retirees don’t make those payments. When you account for these avoided payments, a 30-year retiree’s income has about the same purchasing power as it did when he or she was working.

**Q: Are you sure? This doesn’t jive with the modest average benefit I’ve heard reported.**

The average pension payment is lower than this because the average includes:

- Retirees who worked as little as three years in state and local government and who will generally have access to additional retirement income through their private sector employers.
- People who chose to forego some benefits by retiring early (before age 67) because their circumstances allowed it.
- People who retired decades ago whose pensions were determined using less generous formulas and lower wage levels.
- Widows and widowers who are collecting only a portion of their spouse’s original pension.

This shows why evaluating the adequacy of Minnesota’s public pensions based on the average reported benefit is so misleading. We should evaluate adequacy based on how a pension system treats long-term career employees who are mostly or entirely dependent on it for their retirement security.
Q: So are these pension and Social Security benefits adequate?

To some extent that is in the eye of the beholder. However, it’s awfully difficult to argue that providing retirement income to career employees for the rest of their lives that offers about 100% of the purchasing power they had during their peak earning years is not an exceptionally good retirement arrangement. For government’s lowest-wage workers, the pension is undoubtedly a welcome supplement to Social Security that’s used to help meet basic needs. For higher-wage workers, it functions more as a life-long taxpayer backed guarantee of pre-retirement lifestyles than as an anti-poverty or income security measure for senior citizens.

To be sure, health expenditures increase in old age and health security is a vitally important issue. But senior expenditure surveys suggest that a lot of household expenses decline upon retirement – especially transportation expenses (no more commuting) and housing expenses (the house is nearly or completely paid off). One of the challenges for public pension policy is that it’s hard to define where “security” ends and “abundance” begins.

Retirement and financial planning experts recommend an 85% income replacement standard for retirees – a standard clearly geared toward preserving pre-retirement lifestyles. But it really doesn’t matter whether you believe this is too high, too low, or about right. The relevant issue relating to adequacy is how much of this income replacement goal taxpayers should guarantee.
III. The Problem

**Q: OK, I get the basics of the system. How can someone tell whether these pension plans are in good financial shape?**

The pension plans have their actuaries give them an annual financial checkup every July 1st. The actuaries prepare “valuation reports,” which summarize each pension plan’s financial condition. These reports include two measures commonly used to evaluate and discuss pension fund health. They are called the “funded ratio” and the “annual required contribution.”

**Q: Let’s start with the first. What is a funded ratio?**

A funded ratio simply compares a plan’s assets against an estimate of its liabilities. It essentially asks the question, “If all our assumptions about the future are true, will we have enough money to pay all the benefits we’ve promised?” If a pension plan’s funded ratio is above 100%, then it has more assets than it needs to pay future benefits (if those assumptions hold). If the funded ratio is below 100%, then the pension plan has “unfunded liabilities” and needs more assets to pay for the benefits it has promised.

Unfunded liabilities are a problem because they are an extra pension cost above and beyond the cost of the benefits themselves. It is a potentially manageable problem because they can be paid off over time, like a mortgage. But pension plans depend on investment returns to help pay for retirees’ benefits, and they can’t earn investment income on assets they don’t have. So it’s very important for pension plans to have a strategy and a timetable for eliminating unfunded liabilities.

**Q: So how do the funded ratios for Minnesota’s pension plans look?**

If we look at Minnesota’s biggest public pension plans – which cover teachers, public safety officers, and virtually all state and local government employees – the latest valuation reports for July 1, 2017, show funded ratios ranging from 52.5% to 94.5%. Collectively, these pension plans have a funded ratio of 79.3%, which translates to about $16.9 billion in unfunded liabilities.

**Q: That sounds really bad. Am I right?**

Well it isn’t good. Occasionally, news coverage suggests that a funded ratio of 80% still reflects decent fund health. The American Academy of Actuaries has called that idea a myth, while other experts have noted that a DB plan should only fall as low as 80% under the worst economic circumstances. If it does so, aggressive corrective action to put the fund on a path to full funding is immediately required.

But we don’t have the whole picture yet. To get a complete picture we need to talk about that second measure: the “annual required contribution.”

**Q: What’s that?**

If the funded ratio gives you a “snapshot” of a pension plan’s health on a particular day, the annual required contribution looks ahead. It tells you how much new money a pension fund needs in the upcoming year to cover the costs of three things: 1) the
pension benefits employees will earn over the next year; 2) paying off a plan’s unfunded liabilities (if there are any); and 3) administering the pension plan.

If actual contributions are more than the annual required contribution, pension plans report a “contribution sufficiency.” If, however, contributions don’t cover these three costs, plans report a “contribution deficiency.” The contribution sufficiency/deficiency is important because it forecasts whether a pension plan will gain or lose ground over the next year.

It’s important to keep one thing in mind – the name “annual required contribution” is a little confusing. There’s no law that makes the state set its payments to the pension plans at the “annual required contribution.” Lawmakers can underfund or overfund pensions as they see fit.

**Q: How are Minnesota’s pension plans doing on this measure?**

Looking again at the 2017 actuarial valuations for Minnesota’s pension plans, they project contribution deficiencies in 2018 for all nine of the plans. In total, the actuaries have forecasted that contributions will be over $325 million short of what these pension plans need to cover the costs of new benefits, administer the plans, and pay off unfunded liabilities.

In fact, Minnesota’s pension plans have generally fallen short on this measure recently. Most of the state’s large plans have had a contribution deficiency in each of the last ten years. In total, they have run nearly $5.5 billion combined in contribution deficiencies in the ten years between 2008 and 2017.

**Q: So let me see if I understand all this correctly. Our state and local pension plans are underfunded by many billions of dollars, have been losing ground for quite some time, and may lose more ground this year?**

That’s right. Most of Minnesota’s pension plans have funded ratios under 100% along with contribution deficiencies. This means they don’t have enough assets to pay for all the benefits they owe and aren’t on track to get to full funding by the date lawmakers have chosen. And economists argue that it is even worse than this, because funded ratios are based on optimistic assumptions, as we’ll soon discuss.

**Q: Can’t we just cut our losses?**

No. Walking away from the problem isn’t really an option. Minnesota’s courts have ruled that the pension promises lawmakers have made to public employees generally have to be kept. Ultimately, this passes the risk on taxpayers, because governments will probably have to keep providing pension benefits to retirees even if the pension assets run out.

There is an important moral issue here as well. Pensions are compensation for work already done – they are part of the employment bargain. Both current employees and retirees undoubtedly make many important life choices expecting they will receive the benefits they have been promised.

**Q: Just how did we get to this point?**

At first glance, the problems just appear to be the lingering effects of a bad decade of investment returns. One of the assumptions Minnesota’s pension plans are based on
is that investments will earn, on average, 7.5% each year. That assumption was even more aggressive in the past – from 1989 to 2012 the state assumed that the investments in its pension plans would earn 8.5% per year, which lawmakers reduced to 8% from 2012 to 2018 for most pension plans. According to the actuaries, the failure to meet these expectations about investment performance has created $16.5 billion in unfunded liabilities since 2001.

Q: *Wait a minute. Investment returns been pretty good lately. Aren’t we making any progress?*

We have put a dent in the problem. Minnesota’s public pension plans have had excellent investment returns over the last five years (2012 to 2017), with an average gain of 10.2% during that time.

However, recent gains or losses aren’t completely accounted for in the actuarial work the pension plans have done. Instead of realizing investment gains and losses immediately, the state instructs actuaries to phase them in over a five-year period. “Smoothing” out these gains and losses makes the annual changes in funded ratios and annual required contributions less volatile, so that policymakers don’t overreact to one year of tremendous investment gains or losses. Using these “smoothed” numbers, investment gains beat expectations over the last five years, reducing the unfunded liabilities these pension plans reported down by about $5.3 billion. But these smoothing efforts can significantly distort the current measures of a pension plan’s financial fitness – the funded ratio and annual required contribution.

Including these unrealized investment gains and losses changes the picture – sometimes considerably. Without this “smoothing”, the unfunded liabilities for these pension plans would total just over $16 billion (a 80.0% funded ratio). Moreover, instead of a $350 million contribution shortfall, contributions to the system would now be about $283 million less than what are needed for the coming year. While these numbers aren’t too different than the “smoothed” results, in other years the disparities are much higher.

Q: *So things are a little better than they look on paper right now, but this seems like a huge hole – especially after double digit investment gains in four of the last five years. It sounds like there’s something else going on. Is there more to the story than investment returns?*

Yes, there is. Remember in Part 1 when we said public pension plans are subject to the laws, regulations, procedures, and practices that state and local governments themselves create? The trouble is that governments – both in Minnesota and elsewhere – have created policies and practices that mask the true cost of pension obligations and incentivize chronic pension underfunding.

*If there is just one takeaway to remember from this guide, it’s this: The real pension problem isn’t that Minnesota’s public pension plans are $16 or $17 billion short depending on how you choose to look at it. The problem is that the policies, practices and laws guiding pensions make the existence of multi-billion shortfalls not just possible but entirely predictable.*
**Q: Like what?**

Let’s start with the expectation that these pension plans will earn 7.5% each year on their investments. Basic economics says that to get higher investment returns, you have to take on more risk. Minnesota’s pension investment history clearly illustrates this. Once upon a time, Minnesota’s pension plans were more heavily weighted toward very secure, highly predictable fixed income investments (think corporate and government bonds) and assumed its investments would earn 5% each year. Over time, to help support better benefits, the state increased its assumed rate of return and changed its investment strategies to focus more on riskier asset classes, like stocks, that promised higher returns. In the chase for yield, the state allowed the State Board of Investment (SBI) to invest more heavily in investments besides stocks and bonds. These “alternative assets” include things like real estate, private equity and venture capital.

These changes have made a big difference in how the pension plans’ investment portfolio is divided up. In 1986 the SBI had about 50% of its pension assets invested in stocks and alternative assets with the other 50% or so invested in bonds and cash. Compare that to today, the SBI policy is to invest around 80% of its pension assets in stocks and alternative assets and just 20% in bonds and cash.

There is nothing wrong with investing in these riskier asset classes as long as you realize that more investment risk means more year-to-year volatility in your investment returns. With more volatility, your biggest gains will be bigger but your biggest losses will also be bigger – meaning pension assets will grow or shrink over time with a lot more variation. Fantastic outcomes are possible, but so are devastating results and everything in between.

This sheds light on one of the most dangerous myths about public pensions: the idea that pension risk goes away if you only take a long-term perspective. This is simply and factually wrong. In fact, just the opposite occurs. Mathematically, the risk of not having enough wealth to actually pay benefits always increases with time. Governments can’t simply ride out losses believing that good returns will balance them out. Markets and investment returns don’t work that way.

**Q: Interesting, but it seems like there may be even more to this. Don’t higher investment return expectations also affect how much governments and employees need to contribute to support the system?**

Absolutely, and that points to another fundamental flaw. To determine its unfunded liabilities and the annually required contribution, a pension plan has to calculate the present value of all its future pension liabilities – how much those promises cost in today’s dollars. Basic principles of economics and modern finance say the correct way to convert future cash flows to current dollars is with discount rates that reflect the riskiness of those cash flows.

Cash flows to pay pension benefits are low risk – they must be paid. This is why the federal government requires DB plans in the private sector to use very conservative, high-quality corporate bond rates (currently around 4.5%) when figuring the current value of their future pension liabilities. State and local governments, however, allow
themselves to use the rates of return they expect their investments to generate, which are typically in the 7% to 8% range. (The 7.5% assumption Minnesota’s plans use is above average for the nation but is used by 40-50 other pension plans across the country.) The way the math works, higher discount rates make your future liabilities look smaller in today’s dollars, because you assume your money will work harder over time.

The fundamental flaw is this: there is absolutely no logical connection between what an investment portfolio might earn and what the present value of a future liability is. It’s like arguing that your bank should lower your reported mortgage balance because you expect to earn 7.5% annually over the next 30 years on the investment portfolio you use to make the payments.

Many years ago, the practice of using expected returns as a discount rate was not a big issue because interest rates were much higher, the investments were weighted toward lower risk, debt-oriented portfolios, and these expected returns matched up quite well with the risk free character of pension liabilities. But those days are long over.

Q: Is this just an argument about how big the problem should look on paper?

No, and we can’t emphasize this enough. Financial economists of every stripe – as well as many staunch defenders and supporters of public sector defined benefit plans – are harshly critical of using expected investment returns to discount pension liabilities. They argue this mismeasurement significantly understates the true cost of promised pension benefits while essentially guaranteeing chronic underfunding of pension promises.

Here’s the problem: a pension system based on discounting future liabilities at expected investment returns of 7.5% is really a pension system that must make sure adequate contributions are always available to support a perpetual 7.5% annual growth in liabilities, regardless of actual investment performance. That is a huge economic and political challenge.

The economic challenge begins whenever a pension plan is underfunded. The smaller level of plan assets can’t hold their own against this larger growing liability if they just match the expected rate of return, because the larger pool of liabilities is growing just as quickly. Plus, money is flowing out of the pension plan all the time in the form of benefit payments. As a result, you need more contributions and/or higher-than-expected returns just to keep funding levels from getting worse. Since the differences between expected and actual returns compound with time, when a pension plan has a number of years where investments fall short of expectations – even if those years see investment gains – it creates real havoc.

Politically, the challenge comes when an economic downturn hits and investment markets decline. That is exactly when immediate additional contributions are absolutely needed the most. But the budget challenges that come with downturns mean it is also when politicians are least likely to divert additional money toward pensions, making the situation worse.
Discounting pension liabilities using expected returns is often argued as the responsible way to avoid “over-contributing” for pension promises. In reality it’s just the opposite. There is no better way to threaten the long-term viability of defined benefit plans than by making them appear cheaper than they really are and undercut necessary and fiscally responsible contribution policies in the process.

That is why defined benefit pension expert Barton Waring, author of *Pension Finance: Putting the Risks and Costs of Defined Benefit Plans Back Under Your Control*, has this to say:

> “The use of an inaccurate discount rate creates real and consequential differences in the health of the pension plan as the use of the expected return assumption as the discount rate virtually guarantees the eventual failure of any plan using it”

Not only does this practice increase the likelihood of having insufficient assets and put the pension plans themselves into long-term risk, but can also affect public services in the future if more tax dollars have to be diverted to deliver on the promises that must be kept.

If you need any more evidence of the dubious, harmful nature of discounting liabilities at the expected return rate, consider this. This discounting practice cannot be found in public pension plans in other countries or in private plans. For that matter, it cannot be found in any other area of public or private sector finance.

**Q: If I get what you’re saying, I should take reports on Minnesota’s pension fund health with a grain of salt because government has a lot of control over how pensions are measured and evaluated.**

Others have come to the same conclusion. The Government Accounting Standards Board (GASB) has tried to take on this concern by changing the accounting and reporting standards that apply to public pensions to improve the quality, consistency, and accuracy of their financial reporting. However, some argue that these reforms have fallen far short of what’s needed, perhaps because state and local governments put significant pressure on GASB to compromise.

**Q: Why have governments resisted these changes?**

For starters, because requiring public sector DB plans to use lower discount rates, like their private sector counterparts, means the amount of unfunded liabilities they report on their financial statements would go way up. It would not be surprising to see funded ratios cut in half. This could put pressure on governments to increase contributions to pension plans. Higher contributions are painful for employees (less take home pay) and governments (redirect dollars away from other services and into pension support). Existing financial reporting and funding practices keep current pension costs low and push underfunding risks into the future. It is much easier and more politically acceptable to keep them as they are.

In reality, GASB’s compromise reporting standards only affect how pension plan finances are reported. Remember, state and local governments determine how much funding to give them. Some argue that the new standards will just add more
confusion to public pension debates by effectively creating two sets of pension books. One set would meet financial reporting requirements; the other set would be used to fund the system based on traditional actuarial practices.

**Q: You just said “for starters.” Are there other issues I should know about?**

Yes, there are. Remember that part of the “annual required contribution” includes money to pay off a pension plan’s unfunded liabilities. Paying these unfunded liabilities off isn’t controversial, but the length of time pension plans have to do so can be.

**Q: Why is this important?**

Remember, the whole point of actuarial funding is to be fiscally responsible by prefunding future benefits as employees earn them. This avoids passing today’s pension costs along to future taxpayers, who don’t directly benefit from the services these employees provide. Lawmakers undercut this goal when they reset and extend the payoff periods for unfunded liabilities. Responsible pension practice would instead set this period to the average length of time the current group of employees will work before they retire from public service – preventing the next generation from paying for the current generation’s pension costs. Given today’s government workforce demographics, that timeframe is probably around 15-20 years.

**Q: Do we follow this standard?**

Not as well as we could. In the past, Minnesota’s lawmakers have at times given public pension plans a little breathing room by “refinancing” their unfunded liabilities by extending payoff periods. This lowers the annual required contributions but also pushes current pension costs onto future taxpayers. The worst example of this type of accounting convenience occurred in 2008 when the state allowed the local pension plan that provides benefits for teachers in the Saint Paul school district to create a fresh 25-year payoff period annually -- in essence, creating a “mortgage” that never went away. Lawmakers changed this back to a fixed payoff period in 2014.

**Q: So creating a fresh payback period lowers the annual required contribution and the contribution deficiency a pension plan reports?**

Yes. As with the discount rate discussion, lengthening the payback period for unfunded liabilities makes things look better on paper while transferring responsibility to future taxpayers.

**Q: I almost hesitate to ask, anything else?**

No discussion would be complete without mentioning the role politics can play in preventing fixes from realizing their full potential.

**Q: How so?**

Minnesota lawmakers, to their credit, have stepped up to the plate several times over the last decade and approved contribution increases for various pension plans. Unfortunately, those increases didn’t have the impact they could have had on pension plans’ financial health because of their timing. Since contribution increases can have
big impacts on government budgets and employee paychecks, lawmakers have often phased contribution increases in very gradually over a period of years, in part because requested contribution increases often come when government finances are weakest. The problem is that the best time to make new investments is when the market has bottomed out, not months or years after that – because you’ve already missed some of the economic recovery.

To illustrate this point simply, consider two pension policy options Minnesota’s lawmakers had in 2009, when the Dow cratered to around 6,500 in a Great Recession-induced market crash:

- Scenario 1 (what we actually did): To make contribution increases more palatable, slowly phase them in over several years – and delay starting the increases for some months.
- Scenario 2 (what we could have done): Immediately implement all of the required contribution increases to take full advantage of “buying low.”

It doesn’t take Warren Buffett to understand that four years later, Minnesota’s public pensions would be astonishingly healthier today if we had chosen Scenario 2 instead.

_**Q:** Just out of curiosity, how much better would our reported investment returns have been if we had chosen Scenario 2?_

They would have been absolutely identical to Scenario 1. No difference at all.

_**Q:** What? How in the world is that possible?_

Here’s a final crazy kicker in the world of pension reporting. The investment returns the pension plans report don’t factor in the size or timing of cash flows or their impact on returns. This is because these return calculations’ main purpose is to evaluate money managers’ performance. Since the money managers have no control over cash flows, it doesn’t make any sense to consider them when evaluating their performance.

_**Q:** Why does this even matter?_

The reason to point this out is that debaters often reference the SBI’s excellent track record over the last 30 years as evidence that Minnesota’s public pensions are sustainable. It has been an admirable performance. But because these reported returns don’t factor in how cash flows affect portfolio growth and resulting pension wealth, they really don’t provide any meaningful information about pension sustainability.

You can only get investment returns on the money you have to invest. If a pension plan is underfunded, a 15% annual return generates fewer investment dollars than if it was 100% funded. That’s why it is so difficult to invest your way out of a big pension deficit. It’s also why the annual return rates that SBI publishes tell you next to nothing about pension fund sustainability.

_If you don’t believe all this, then ask yourself how it’s possible that the SBI can report an average annual investment return of 8.7% over the last 30 years – beating expectations – yet our public pensions remain $16.9 billion in the hole._
On the other hand, an investment return calculation that did factor in the influence of cash flows and underfunding would be a very good way to benchmark against investment return expectations and evaluate pension plan sustainability. Unfortunately, the pension plans have never published such return calculations. That should change.

**Q:** You’re talking about how all of these issues and problems may affect the average taxpayer. Do they impact public employees and pension beneficiaries?

Absolutely. Despite efforts to shield them, current and future workers are now bearing responsibility for paying off significant amounts of unfunded liabilities through higher contributions. Without changes, there will be pressure for them to take on even more burden. More compensation dollars will have to be directed away from salary and toward pension support. Retirees face a future of potential benefit changes and cost of living freezes like those imposed as part of the 2010 sustainability fixes.

And since they are also taxpayers, public employees will face the prospects of higher taxes and service cuts to keep these retirement promises along with all other Minnesotans.

**Q:** My head is spinning – but are these the key ideas?

- Minnesota’s public pension plans report being underfunded by $16.9 billion and expect to contribute around $325 million less this year than what’s needed to cover pension costs, under assumptions that many consider (including most all other states around the country) unduly optimistic.

- These unfunded liabilities and contribution shortfalls are actually symptoms of the real problem with Minnesota’s pensions. Current financial and reporting practices mask the true costs of our pension promises, encourage underfunding, transfer current pension liabilities to future taxpayers, and incentivize taking on large amounts of investment risk. And – this risk falls 100% on taxpayers because the benefit is a promise that must be kept.

- Because it can dictate assumptions and accounting practices, state government has considerable ability to create the pension reality it wants to present to taxpayers. This hides the severity of our public pension problems.

- Policy makers have few incentives to pursue change because corrective action creates political pain and resistance in the short run.

- Nevertheless, without corrective action pension liabilities will create growing stress not just on the level of services government can provide but on employee wages and benefits as well.

Congratulations – you got it! Let’s turn our attention now to what can be done about these problems.
IV. The Solution

**Q: What have policymakers done to address this situation?**

Lawmakers made significant changes to the state’s pension systems in 2010 and made more changes in 2018, all with an eye toward making them more sustainable. Both these efforts included a “shared sacrifice” of higher contributions from government employers and public employees, more aid from the state to local governments for pensions, a fresh 30-year period for paying off the unfunded liabilities, and temporary reductions in retirees’ annual cost of living increases. All told, these “sustainability fixes” successfully shaved over $9 billion from the total amount of unfunded liabilities while reducing the assumed rate of return on investments from 8.5% to a more realistic 7.5%.

**Q: So case closed, right?**

Not really. These necessary and important efforts did nothing to address the underlying issues: the flaws which created these unfunded liabilities in the first place. For example:

- Minnesota’s pension systems are still designed so that existing liabilities grow by 7.5% per year, every year, regardless of economic conditions.
- The state has not set contribution levels high enough to prevent unfunded liabilities from growing even if reality ends up exactly matching all the other assumptions about the future these plans make.
- The 7.5% investment return assumption is, according to the state’s actuaries, still considered high and will need to be reviewed annually for reasonability.

Remember, the real problem is not the billions of unfunded pension liabilities but having a system that makes huge deficits both possible and probable.

**Q: Well then, what should be the goal of a real “solution”?**

That’s a great question! Any real solution has to address the interests of everyone who has a stake in the pension system: employees, retirees, governments and taxpayers. The goal should be to create a fiscally responsible retirement system that offers genuine retirement security for public employees while also significantly reducing the risks governments and taxpayers face by sponsoring the system.

**Q: What is “genuine retirement security”?**

Retirement planners generally identify three pillars of retirement security:

- Contributions to retirement accounts that are large enough to generate adequate retirement income
- Professionally managed, low fee investment options
- Protection against the possibility of outliving your retirement assets

**Q: OK, how do we start?**

Unfortunately, it begins with the toughest thing to swallow – an economically honest reporting of current pension conditions. What does that mean? Public pension plans would value liabilities using a discount rate that reflects what it could take to fund these promises without assuming risk. At the same time, plans would calculate their
annual required contributions based on eliminating any unfunded liabilities over the
time the average current worker has until retirement. Together, this would capture a
much more accurate and true representation of the cost of our pension promises.

Simply put, we’ll never achieve a “real solution” described above by hiding chronic,
systemic underfunding and making our pension promises look a lot cheaper than they
really are.

Q: What would the implications of these changes be?

On paper, this would more than double the amount of unfunded liabilities being
reported with similar consequences for annual required contributions. This would not
necessarily change actual state and local government funding practices or investment
strategies. Never forget that state lawmakers make the call on how government funds
these promises – regardless of what any numbers say on paper. But a more accurate
representation of economic reality is the first step toward any real solution.

Q: Suppose we made these reporting changes and decided to make our funding
policies more responsive to them. What are the options if we want to keep offering
a defined benefit pension?

Well, “pay more” is certainly one alternative, but that’s likely a non-starter given the
big implications increased contributions have on both employee pocketbooks and
government budgets – even if they’re phased in over a long period of time. Plus,
“paying more” would create a big fairness problem for current and future public
employees who would start paying a lot more into the system to deal with this
(suddenly much larger) pension shortfall while earning the same benefits as retirees
who paid a lot less into the system.

One way to reduce the costs of the “pay more” option would be to permanently
eliminate the cost-of-living benefit increases. In that case employees would assume
the responsibility for maintaining their pension’s purchasing power through their own
investment efforts. It’s worth noting that Minnesota’s public employees can invest in
the Minnesota Deferred Compensation Plan (MNDCP), which is marketed as “a
smart and easy way to supplement retirement income from your Minnesota public
pension and Social Security benefits.” Over 86,000 Minnesota public employees
have about $6.4 billion in retirement assets invested in this program. Some
government employers offer partial contribution matches.

Another option would be to lower the rate at which pension benefits accumulate
moving forward. Think back to Part 1 and our discussion of how a “multiplier” is
part of the benefit calculation. Reducing the multiplier for all future years of public
service would fully protect all benefits already earned in past years of service (as
courts have required) but reduce additional pension benefits public employees earn in
the future.

This option would essentially concede that we can’t provide our current level of
promised benefits in an affordable and sustainable manner. For those already in the
system it would clearly be “paying the same (or more) for less.” It would reduce the
size of future benefits, and especially for the lowest wage public employees result in
more exposure to retirement income adequacy. But the system is currently designed
to work with Social Security to replace close to 100% of career employees’ peak income. There is some room to ratchet these benefits back without jeopardizing protection against senior income insecurity.

It’s important to recognize that back in 1975 the multiplier for Minnesota’s public pensions was much more modest. For the three big statewide plans, the multiplier was 1% for the first ten years of service and 1.5% for years after that. Over time, policymakers have increased that multiplier, making the benefit more generous, paid for in part by higher contributions but mostly by relying on higher investment return expectations and taking on greater amounts of investment risk.

**Q:** You emphasized that reducing taxpayer risk and exposure is a critical element of any solution. Is there a way to build shared pension risk between public sector employees and taxpayers into the system?

Yes, and that is the primary argument for another reform alternative called “hybrid plans.” The idea behind a hybrid plan is to provide a more modest DB pension (which provides a guaranteed stream of income) but supplement that with a DC plan.

There are a number of possible hybrid designs and approaches. One is the “cap-and-stack” approach, which caps the salary that can go toward a DB pension. Employees can contribute additional money to the DC element that is “stacked” on top. The cap gives employees with very modest earnings the complete protection of the defined pension plan but prevents taxpayers from backstopping pension benefits that guarantee income streams that go far beyond protections against senior poverty and income insecurity.

A different approach is used by Wisconsin’s well-regarded Wisconsin Retirement System. Wisconsin provides employees with a DB pension but adjusts retirees’ benefits annually based on how the investments funding the benefits have performed. A base benefit is protected but employees have some discretion with respect to how annual benefit adjustments are received depending on the risk the retiree chooses to assume. Importantly, these annual benefit adjustments not only go up but also can get cut in years following poor investment performance.

Taxpayers, through state and local governments, currently bear all the risk if pension plans fail to meet their investment return expectations. Hybrid plans build risk sharing into the pension system, addressing one of the major concerns about traditional DB plans.

**Q:** Are there other approaches to consider?

Many argue the best way to create a sound, sustainable and fair retirement savings program is to stop promising a benefit and start promising a savings rate. The prime example is a cash balance plan.

**Q:** How does that work?

A cash balance plan is a DB plan, but doesn’t base benefits on a formula based on years of service and a salary amount. Instead, this kind of pension offers benefits as a lump sum or “cash balance” in an employee’s account. Employees and employers make mandatory contributions into the account. The pension system manages the
investments and guarantees the employee an annual investment return on his or her funds – usually tied to high-quality government bond yields. When an employee reaches retirement age, the pension plan provides him or her with a lifetime income stream based on the size of the retirement account. (Or if the individual chooses, it can be taken as a lump sum.)

As a result, cash balance plans address all three pillars of retirement security – adequate contributions, low-cost professional management, and lifetime income streams. Cash balance plans reduce taxpayers’ risk by establishing a guaranteed investment return lower than the 7.5% return which our current plans effectively promise. However, taxpayers still bear some risk because these lower guaranteed investment returns must still be met and the lifetime income streams promised to retirees have to be priced correctly. If investment returns fall short or annuities are not priced correctly, losses are created that have to be addressed.

**Q: What about the ordinary defined contribution plan? Can we use this to support real retirement security?**

DC plans successfully shift all risk onto employees and away from plan sponsors – in this case, governments and taxpayers. But as many have noted, DC plans often fail miserably in providing real retirement security. Employees’ contributions may be inadequate, and commercial investment products often have high costs and administrative fees. Since employees are responsible for managing DC plans themselves, they generally end up with lower investment returns than DB plans, who hire professional money managers. If DC plan owners want to use the plan assets to purchase a lifetime income stream to protect against running out of money in retirement, the annuity products offered commercially are often very expensive. Finally, an extended period of poor investment returns can have a lasting impact on how much an employee has in his or her DB plan at retirement, especially if they happen near the end of someone’s career when they can’t take advantage of a rebound in investment markets. All these issues can expose taxpayers to a different form of risk – higher health and human service spending to support income insecure retirees.

However, many experts argue the DB vs. DC debate is really a false choice. These experts argue that there are ways to design the desirable features we want a retirement plan to have – features that enable genuine retirement security – into a DC plan.

One example is a collective DC plan. Collective DC plans “pool” contributions to address investment risk. When economic growth is especially strong, individual accounts won’t include all the investment gains. Instead, the plan will have some gains separately and award them in particularly poor investment years. Thus, the good economic times provide some insurance for the bad.

Collective DC plans effectively offer the professional money management and annuity options that government’s current DB plans enjoy. Employees would continue access to all the low cost, professional management that the State Board of Investment provides. (Wouldn’t anyone welcome the chance to have their DC plan managed by someone who has returned 8.7% on average over the last 30 years?) Likewise, as with cash balance plans, government could annuitize employees’ DC balances far more cost effectively than those employees could in the private sector.
Q: It sounds like there are lots of options to consider.

Yes. All have their advantages and all can be designed to support related policy interests like incentivizing employee retention.

Q: So how would reform be implemented?

Generally speaking, pension reform that changes the design of the system will create what is called a “two-tier system.” Current employees continue under the old system (the “first tier”) which is closed to new hires. Pension benefits for new government employees are provided under the new system (the “second tier”).

Q: Wait a minute. I remember hearing somewhere that closing our existing retirement plans would cost the state billions of dollars. Don’t these costs outweigh the benefits of any reform?

Your memory is right on. In 2011, the three pension plans that offer statewide benefits jointly published a study looking at different retirement plan designs. As part of this report, the pension plans commissioned actuaries to estimate the cost of closing their existing DB plans. The actuarial estimates of transition costs at $2.76 billion over a decade for all three statewide systems. That commonly cited cost estimate typically stops any reform discussion in its tracks.

According to the report, costs increase during a transition period because once a plan is closed to new members any unfunded liabilities remaining in the existing DB plan must be paid off over a shorter timeframe. But as with anything that has to do with pensions, things are never as straightforward and simple as they first seem to be.

First of all, the claim that these benefits must be paid off sooner is simply incorrect. That idea is based on an interpretation of an outdated accounting standard. In fact, GASB has made it clear that it has no authority, and never has had authority, to dictate how governments fund their pensions – which includes how they deal with unfunded liabilities.

Second, that nearly $3 billion transition cost estimate assumed the state would completely close its DB plans and put a pure DC plan in its place. If lawmakers reformed the system into a hybrid plan instead, the (lower) DB would still exist and contributions would continue to support it, dramatically reducing any reported transition costs.

The term “transition cost” is a bit misleading because it implies creating additional cost. Closing a plan doesn’t create new pension obligations. It can only alter the timing of when existing obligations get paid.

Q: OK, but should unfunded liabilities be paid off faster if a pension fund is closed to new members?

As we discussed, sound pension policy requires each generation to pay for its own pension costs instead of pushing them to future taxpayers. That’s the core idea behind the notion of transition cost – since contributions dry up over time in a fund that has been closed, the payoff of unfunded liabilities needs to speed up to avoid kicking the can to future taxpayers. And that requires more money up front.
But remember policymakers are already transferring obligations in these pension plans to future taxpayers. It’s really tough to square up the concerns about pension reform saddling future taxpayers with today’s pension costs when our current pension practices are already doing an exceptional job of that.

For starters, instead of paying off unfunded liabilities like a mortgage in equal installments over a set period of years, we use a method that reduces current costs but pushes a larger portion of the responsibility into the future, creating a set of balloon payments over the final years of the payoff period, increasing the total cost of pension debt in the process. And, as we highlighted earlier, we also reset the payoff periods for unfunded liabilities which also moves some of the tab for services being delivered today onto future taxpayers.

Closing a plan shuts off contributions, and if a plan is closed while underfunded, it guarantees money will be needed down the road to meet these promises. But any transition costs estimates must be weighed against the long term costs of the status quo. If benefits are truly unsustainable, transition cost estimates that look high today might seem like a bargain 20 years down the road.

There are many reasons to approach closing pension funds very carefully and thoughtfully, but transition costs should not get in the way of any needed reforms.

_Q: So what’s stopping us from moving forward?_

It all gets back to the basics: you can’t fix a problem until you recognize and admit it.
V. What You Can Do

In some states, public pension mismanagement has created a true fiscal crisis. In contrast, Minnesota’s pension management and governance practices have prevented many of the really serious problems plaguing other states from occurring here. And when our public pensions needed attention, lawmakers and pension stakeholders stepped up to the plate with sustainability measures. These measures have materially improved the pension plans’ financial conditions.

But there’s still a problem. The same fundamental system flaws creating problems in other states also apply here: practices and policies that

- mask the true costs of our pension promises,
- encourage underfunding,
- transfer large amounts of current pension liabilities to future taxpayers, and
- incentivize taking on large amounts of investment risk – risk borne 100% by taxpayers because the courts have ruled that pension promises must be kept.

The sustainability measures lawmakers have passed in recent years don’t do nearly enough to address these core issues.

The good news is that we can fix these problems. As we’ve outlined, we can pursue actions and reform options that can deliver on the twin goals of offering public employees a high-quality, secure retirement while reducing long-term risks to taxpayers and government services.

Reform isn’t just the fiscally responsible thing to do – reform can work to our competitive advantage. Pension obligations are now starting to trigger tax increases and put pressure on public service delivery across the country. These are expected to get worse with time. As a result, when companies decide where to expand, pension debt is sure to become an increasingly important consideration. Smart reforms provide Minnesota the opportunity to further distinguish itself from other states and add another source of competitive advantage to our already long list.

What can you do?

**Stay Informed** – This topic may be as dry as burnt toast but the consequences are very real. Minnesota is fortunate to have some very good media reporting on pension issues. When you see an article on public pensions be sure to take the time to read it. And follow us as we continue to monitor developments.

**Engage With Your Elected Officials** – The biggest challenge when making changes to pensions is that the consequences of both action and inaction occur outside of two-year budget and election cycles. Not only is the topic arcane and difficult to understand, but lawmakers always have more pressing fiscal issues and electoral concerns on their minds.

It’s important to let them know you are concerned about this and that you expect them to give serious attention to this issue. Lawmakers need to hear from all the pension stakeholders, and that includes you, too! After all, your elected officials can’t respond to your concerns if they never hear them to begin with.
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