

Retirement for All

A Wisconsin Solution to the Retirement Crisis

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Introduction to the 2019 White Paper Update

The retirement crisis has been developing for a long time. In 2013 Protect Our Wisconsin Retirement Security (POWRS) suggested a plan to address these problems based on Wisconsin's highly successful public employee retirement program (the Wisconsin Retirement System). Since that time not much has changed regarding the retirement crisis.

Since 2013 there have been studies and reports further confirming the problems. A few states have moved forward with limited solutions, specifically to address some of the problems with defined contribution or 401(k) retirement savings programs. These are steps in the right direction but do not address the core problems of the retirement crisis. Two recent quotes are illustrative.

“...as soon as 2025, as many as 30 million Americans, many of them originally middle class, will find themselves either poor or “near-poor.”

From “How to Solve the Retirement Crisis: A Politico Working Group Report”

“The great lie is that the 401(k) was capable of replacing the old system of pensions,”

Gerald Facciani former head of the American Society of Pension Actuaries (quoted in the Wall Street Journal)

In 2019 Governor Evers established a task force to look at these issues. This updated white paper is a response to the task force and is primarily addressed to them. POWRS hopes the task force will take a comprehensive look at the crisis and seriously consider *all the options* for addressing the retirement crisis.

Many of the statistics cited in the original white paper are still valid. Where needed updated data and sources have been added.

Executive Summary

Retirement security is declining in America. Reliable experts say that a retirement crisis is developing and that many older Americans will be unable to retire, will have to work longer, or will live out their “golden years” in poverty. This decline in secure, adequate income for seniors will have a negative impact on the economy as a whole, and Wisconsin's economy will not be immune. The problem will not be self-correcting. Direct action is needed to solve the problem.

There are many contributing factors to the crisis: declining wages, exportation of middle class jobs, automation, increasing healthcare, housing, and education costs, inadequate individual savings, a shift in the legal balance between employee and employer rights, and companies defaulting on pension promises. Since 1980, there has been a profound shift in the structure of retirement programs. Guaranteed, defined benefit (DB) company pensions have largely been replaced with individual, defined contribution (DC) retirement savings plans known generally as 401(k)s. The result is a perilous shift in retirement program management from companies to individual employees.

IMPORTANT NOTE: In defined contribution retirement programs, the employer has no responsibility for providing an adequate retirement income. They may, or may not, make contributions to an employee's account. Individual employees are responsible for saving enough, choosing investments, and “managing” their own retirement. DC plans provide no guaranteed retirement income and investment risks and fees are born by individuals. In a defined benefit plan, the employer is responsible for making contributions AND for managing the retirement program to ensure sufficient funds to pay promised benefits. Risks are more evenly shared, and retirement benefits are guaranteed.

In Wisconsin, 88% of employers offer defined contribution plans compared to just 8% that offer defined benefit plans.ⁱ But research shows that individuals who save on their own using defined contribution plans get lower investment returns, pay higher (often hidden) management fees, and have dramatically less at retirement than those with defined benefit retirement plans. Specifically, 75% of 401(k)s have an average balance of \$60,000 with the median account balance less than \$20,000. This means one half of households will end up with virtually no retirement savings and be entirely dependent on Social Security.ⁱⁱ

The potential impact of the retirement crisis on families, local communities, and the state as a whole is significant. The elderly population (age 65 and over) will increase rapidly from 777,500 in 2010 to 1,535,500 in 2040, nearly doubling in 30 years.ⁱⁱⁱ A growing elderly population with greatly reduced income security will pose a serious challenge for Wisconsin. It will impact overall consumer spending and create overwhelming burdens on tax-supported social network programs.

Wisconsin can avoid these concerns by taking lessons from its very successful Wisconsin Retirement System (WRS). The is the retirement trust fund for public employees. It is managed by the Department of Employee Trust Funds (ETF). Rated #1 in the United States, the WRS is a shared risk, defined benefit pension program serving 572,000 active public employees and retirees. In 2019 it had over \$108 billion in assets. The system is fully funded (meaning WRS assets are large enough to cover all expected current and future retirement payments). WRS has provided guaranteed, family-supporting retirement income since 1985.

WRS pensions are paid for with participant contributions and investment earnings from accumulated assets. *No taxpayer dollars pay for retirement annuities.* WRS has never failed to meet an obligation or required a taxpayer bailout. The system is also affordable. Wisconsin state and local government spending for pension contributions were 1.26% of total government spending in 2009.^{iv}

The WRS provides a successful model to create a private sector, defined benefit retirement program that, over time, could ensure that all Wisconsin workers, not just public sector workers, have a secure retirement income. Such a program would not involve any taxpayer obligation. It would utilize the best practices of WRS and the State of Wisconsin Investment Board (SWIB) to create solutions to the retirement crisis. Two program offerings are suggested. One would be a retirement program and trust fund to provide individual pensions. The other would be an individual deferred compensation savings program that would allow voluntary additional retirement savings.

A defined benefit system for private sector and self-employed workers, built on the operating principles and practices of the WRS, could greatly benefit Wisconsin and its thousands of small businesses, 80% of which have fewer than 25 employees. Businesses that are too small to afford quality retirement benefits could now offer them through a state-assisted system. This would enable them to compete more effectively for quality employees. Such an approach could attract more businesses to Wisconsin, helping to rejuvenate the economy. Retirement for all is a “win-win” for Wisconsin business, workers, retirees, economy, and taxpayers.

Retirement for All: A Wisconsin Solution to the Retirement Crisis

The ability to retire with dignity and financial independence was once part of the American Dream. But for many people, a secure retirement is slipping out of reach. Many experts claim we are facing a retirement crisis which will adversely affect individuals, families, communities, and the economy.

Wisconsin is not immune to the negative impact of these national trends, and there is no reason to believe that these trends are naturally self-correcting. Decisive action will be needed to make retirement security for all a reality in Wisconsin. This document examines the looming retirement crisis and proposes solutions based on the Wisconsin experience.

National and State Retirement Crisis Context

No matter where you turn, information abounds on the failing nature of retirement security in America. This “slow-moving train wreck” began in the 1980s with traditional company defined benefit (DB) pensions being replaced by defined contribution (DC) retirement savings plans, commonly called 401(k)s. This change shifted responsibility for adequate retirement savings to the employee. During this time stagnant wages, inadequate individual retirement saving, and companies defaulting on existing pension obligations have contributed to the problem.

IMPORTANT NOTE: In defined contribution retirement programs, the employer has no responsibility for providing an adequate retirement income. They may, or may not, make contributions to an employee’s account. Individual employees are responsible for saving enough, choosing investments, and “managing” their own retirement. DC plans provide no guaranteed retirement income and investment risks and fees are born by individuals. In a defined benefit plan, the employer is responsible for making contributions AND for managing the retirement program to ensure sufficient funds to pay promised benefits. Risks are more evenly shared, and retirement benefits are guaranteed.

In addition to the decline in traditional pensions, efforts are being made to reduce benefits and increase the qualifying age for Social Security. Given that many people will depend exclusively on Social Security benefits for retirement income, such changes will only increase retirement insecurity. As a result, the average American will have to work longer, or not be able to retire at all. Many people will face poverty in old age.

Historically, financial advisers have described retirement security with the “three-legged stool” concept. Social Security benefits, personal savings, and an employer-provided pension are seen as necessary to provide essential diversity. Unfortunately, for a majority of Americans, this “three-legged stool” is now broken. Consider these facts:

- Only 42% of private sector workers age 25 to 64 have pension coverage in their current job.
- Only half of workers have access to a 401(k) plan and only about 30% take advantage of that plan.
- Three-fourths of 401(k)s have an average balance of \$60,000. The median account balance is less than \$20,000.^v
- One-third of households end up entirely dependent on Social Security, and for low wage earners

that portion is 75%.

- Only 21% of private employers offer a defined benefit, guaranteed retirement pension.^{vi}
- By 2025, 30 million Americans, many of them originally middle class, will find themselves either poor or “near-poor.”^{vii}

Let there be no doubt, a significant percentage of future seniors *will not* be entering their “golden” years. They will be entering poverty, largely surviving on a day-to-day basis, unable to handle medical emergencies, unexpected expenses, maintain their homes, or remain financially independent. The financial impact on families, local communities, and the state will be significant as seniors will increasingly need emergency assistance programs that taxpayers must fund.

Seniors and the Wisconsin Economy

Retirement security for all Wisconsin residents is essential to maintaining a vibrant and growing state economy. The ability of the elderly to maintain adequate income and buying power will be important to everyone. Inadequate income will have a ripple effect that will negatively impact Wisconsin and its many small businesses.

Wisconsin's population is relatively stable and growing moderately in comparison to other states. However, the “baby-boomer” generation will dictate our demographic patterns as Wisconsin’s elderly population is projected to double by 2035. Senior citizens were 13 percent of the state’s total population in 2000 and this is expected to rise to 22 percent in 2035.

A national economic study found that defined benefit pension benefits from both the private and public sectors have a significant economic impact, generating 7.1 million American jobs, and \$1.2 trillion in economic output. They supported more than \$189.7 billion in federal, state, local tax revenue.^{viii} This holds true in Wisconsin where the state’s retired population provides significant support and stability to the state economy and its tax base. In 2010 Wisconsin residents received \$14.2 billion dollars in Social Security benefits. This amount was equivalent to 5.8 percent of the state’s annual GDP.^{ix} In addition, Wisconsin's public pension dollars supported more than 40,000 jobs and contributed directly or indirectly more than \$6.3 billion dollars to the Wisconsin economy. Expenditures made in Wisconsin from public and private pension benefits result in large multiplier effects. Every dollar contributed by taxpayers for WRS pension benefits supports \$8.44 in total economic output.^x

It goes without saying that a growing elderly population with greatly reduced income security will not be good for the Wisconsin economy. It has the potential to place new and added burdens on tax supported social network programs, undermine family structures, and even adversely affect the health of retirees.

What about 401K's?

Making people more responsible for their own retirement savings sounds reasonable but it doesn’t work well for a number of reasons. Most people simply don’t save enough in voluntary retirement plans. Many people do not earn enough money to accumulate adequate retirement savings. When people do save they don’t manage their accounts well. Too often they take lump sum withdrawals (with 10% tax penalties) when they change jobs or take emergency withdrawals that never get paid back. In addition market volatility and administrative fees eat up investment gains. The bottom line is people

depending on individual retirement savings too often end up with too little at retirement time.

Defined contribution retirement savings programs (IRA, 401k's, etc.) are a "poor substitute" for a defined benefit pension which provides a fixed payout at retirement. This is the conclusion of many experts including the original creators of the 401k idea. These tax sheltered savings plans were never intended to be the primary source of retirement income. They were intended to be an additional supplement and to provide a tax break for already well off people.^{xi} A typical household approaching retirement has less than two years' worth of income saved for retirement. A Federal Reserve survey found that the median households aged 55–64 had an income of \$55,000 and just \$100,000 saved in a retirement account. Many had no savings at all.^{xii} But these inferior savings programs have become the dominant way for Americans to save for retirement (if they save at all). The replacement of traditional pensions with high risk 401k plans exposes workers to wild swings in the stock market and eats up investment returns with high fees. It has not been good for most people.

Defined contribution savings plans are not traditional pensions with guaranteed retirement income. With defined contribution programs what a person gets at retirement (and how long it lasts) depends entirely on how much they saved and the accumulated investment returns. All the responsibility and risk rests with the individual. The employer may or may not provide a matching contribution but they have no responsibility for the final retirement income, its stability, or its adequacy.

Traditional pensions are defined benefit programs. Employers and employees contribute to the program. All contributions and investment returns are pooled in a trust fund. The program is usually run by a retirement or investment management organization. Retirement benefits are based on the amount contributed to each individual's account, years of service, highest pay, and other program criteria – thus the term "defined benefit." In defined benefit programs the employer is responsible for making contributions on behalf of the employee AND for managing the retirement program to ensure sufficient funds to pay promised benefits. These plans are not perfect and sometimes fail, but for many people they provide stable, guaranteed, lifetime income. Defined benefit company pensions are backed by the federal Pension Benefit Guaranty Corporation.

The major deficiency with defined contribution plans are ALL RISKS are borne by the individual participant. If the markets nose dive so does their "savings." There are no mechanisms for sharing investment risks across all the program participants. Individual savings programs do not leverage economies of scale, or provide the retirement income security available from traditional defined benefit programs. IRAs, 401ks and similar programs make a good ADDITIONAL, third leg for the retirement stool. But they are no substitute for a well managed defined benefit pension.

Defined benefit programs are more efficient, share risk, and provide the ability to guarantee retirement incomes. The stability of the individual monthly retirement check is the result of the overall financial strength of the trust fund and not just the individual account's investment performance. Research has shown that a well run defined benefit retirement program provides a more secure, stable, retirement with lower costs and higher monthly income. A national study finds defined benefit pensions deliver the same retirement income at a 48% lower cost than 401(k)-type defined contribution accounts.^{xiii} They can do this because DB plans 1) pool the longevity risks of large groups of individuals, 2) the trust funds are "ageless" and can maintain a more balance investment portfolio over time, and 3) achieve higher investment returns because of lower costs and fees.

Wisconsin's Unique Pension Approach: An Opportunity

The value of a predictable, adequate income at retirement has long been appreciated by policymakers. Social Security was created in the mid-1930s as testament to the belief that everyone deserves a secure income at age 65 and beyond. Concomitantly, another tradition evolved based in large measure on the need for workers to enjoy a secure retirement. The innovation was a defined benefit (DB) pension system, managed by employers. This system successfully anchored retirement security for working Americans through the 1970s.

In Wisconsin, state and local governments realized the value of such benefits to the individual as well as the state's economy. They created a public pension program which evolved into the Wisconsin Retirement System (WRS), managed by the Department of Employee Trust Funds. The WRS is the result of over 100 years of bipartisan effort to provide retirement security to public servants. The system is a model for the nation and a tremendous asset that serves both retirees and all of the citizens of Wisconsin. The WRS currently serves 572,000 active public employees and retirees. That number represents 12% of Wisconsin's adult population. When families are included, the number rises to about 20% of Wisconsin's population.

In 2019 WRS had over \$108 billion in assets. The Pew Center for the States says Wisconsin was the ONLY state with a "fully funded" retirement system in 2010 and one of 11 states it called "solid performers".^{xiv} In September 2013, Morningstar rated the WRS as 99.9% funded. This means that its assets are large enough to cover all expected current and future retirement payments without relying on taxpayers to ever have to "bail out" the program.

In 2010, WRS paid out \$3.9 billion in retirement payments to 155,000 retirees. The average annual retirement benefit was \$23,800, or about \$1,983 per month. Public employees nationally average \$23,407 per year. Private sector defined benefit pensions average \$20,298 per year.^{xv}

The WRS is good for Wisconsin's economy. In 2006, WRS beneficiaries (86% of whom live in Wisconsin) spent \$4.5 billion, accounting for over 33,000 private sector jobs that paid \$1.7 billion in wages and salaries and over \$730 million in federal, state, and local taxes. In 2010, the WRS invested \$13 billion in Wisconsin companies and companies with Wisconsin employees.^{xvi}

WRS allows employees, at the time of retirement, to make provisions for a surviving spouse to continue receiving the employee's pension after his or her death. WRS also offers term life insurance to employees at fair rates.

Private Sector Pensions in Wisconsin

There are significant differences between public and private sector pensions in Wisconsin. Public employee pensions are marked by stability and provide guaranteed retirement income. This stands in stark contrast to private sector pensions where 88% of employers offer defined contribution plans and just 8% offer defined benefit plans. It is worth noting that benefits provided under WRS are far more generous than those in private sector defined benefit plans. This is due to the excellent management of WRS, its inherent efficiency, shared risk, large numbers of participants, and economies of scale characteristic of DB pensions.

Defined contribution (DC) plans and other retirement savings accounts are good tools for supplemental retirement savings. When combined with Social Security and a defined benefit (DB) employer pension, they provide the third leg of a good retirement program. But DC plans do not make good, stable, retirement pensions by themselves. Research shows that individuals who save on their own using DC plans get lower investment returns, pay higher management fees, and have dramatically less at retirement than defined benefit retirement plans. The median household headed by a person age 60 to 62 with a 401(k) account has less than one-quarter of what is needed to maintain a reasonable standard of living in retirement.^{xvii}

Administrative fees for DC plans eat up savings. According to a Demos study, a two-earner household will pay an average of \$155,000 in 401(k) fees and lost returns over 40 years. Research also shows that DB pension plans have substantially lower administrative costs than DC plans.

Sadly, there has been a fundamental shift in retirement plan options available to American workers. Wage-earners are increasingly forced to take responsibility for their own retirement investments, and yet evidence shows voluntary retirement savings plans don't work well for many people. The simple fact is most people don't know how to invest successfully.^{xviii} Staying the course with consistent, long term investing is the key to saving enough money for a secure retirement. Too many employees don't save enough, don't manage their accounts well, take lump sum withdrawals (with 10% tax penalties) when they change jobs, and take emergency withdrawals that never get paid back.

As if all this isn't bad enough, the income of the ordinary wage earner has stagnated. Many workers do not earn the income necessary to adequately save for retirement. Adjusting for inflation, median income for four-person families in Wisconsin has fallen \$8,500 in the past decade. More than one in five Wisconsin workers, and one in four African American workers, held a poverty-wage job in 2011 (wages under \$10.97 per hour). Just 20 percent of poverty-wage workers participate in their employer-provided pension benefit.^{xix}

A Wisconsin Retirement Solution

How do we avoid the negative impact of the retirement crisis? How do we ensure that all Wisconsin citizens can retire in dignity with adequate income? Providing employers and employees with new and better tools to achieve retirement security is the solution. These tools are modeled on the highly successful Wisconsin Retirement System. A wide body of research finds that people with DB pension income are far better positioned to be self-sufficient in retirement than those without. This is because DB pensions provide a stable monthly retirement benefit that cannot be outlived; they offer optional spousal protections and they do not fluctuate with short term market results.^{xx}

Wisconsin's public retirement program proves it can be done at low cost without placing the taxpayer at risk. State and local government spending for pension contributions in Wisconsin amounted to just 1.26% of total government spending in 2009. Each \$1 in taxpayer contributions to Wisconsin's state and local pension plans supported \$6.22 in total output in the state.^{xxi} Investment returns pay 80% of pension annuities and all operating costs. WRS receives no GPR funding for operations. WRS has never failed to meet any obligation nor required any taxpayer bailout. Even when suffering large investment losses, such as during the 2007-08 economic crisis, the WRS, through its internal risk management features, successfully weathered the crisis.

WRS has specific management and oversight safeguards that account for its success. It is politically isolated with participant oversight. Investment is professionally managed by a separate agency (SWIB). It has mechanisms, such as annual actuarial reviews, to adjust contributions to maintain full funding. It adjusts retirees' annuities to reflect investment gains and losses. It uses a five-year "smoothing" procedure to handle large losses. Most important, it has a fiduciary duty to act in the best interests of retirees and participants. These, and other best practices, make it the best pension system in the nation.

Implementing a Sensible Fix

What has been achieved for public employees can be replicated for private sector employees at no cost to Wisconsin taxpayers. Although there may be some initial start-up costs, investment returns can cover administrative costs as done with the WRS. Wisconsin can have retirement security for all. Here's how with a two-faceted approach:

1. Establish the Wisconsin Retirement Security Fund

Creation of a defined benefit retirement program would enable retirement security for all by establishing a voluntary defined benefit retirement program for the private sector. It would pool contributions from employers and employees and invest the funds in appropriate market securities. Similar to WRS, the fund would harness the power of sound insurance principles, pooled assets, good management, and market forces to create a low cost, high quality, private sector retirement program. Such a program, along with Social Security and tax-deferred savings programs available to employers and employees, can offer the opportunity for all Wisconsin residents to retire with the peace of mind that pension security provides.

This pension program for private sector would be a benefit to Wisconsin businesses, especially those too small to afford quality programs on their own. Many businesses would be able to compete more effectively to attract and keep good employees. Because retirement funds would be held in an independent trust fund (not company accounts) many risks associated with "benefit legacy costs" would be minimized or perhaps eliminated. Retirement security problems associated with company bankruptcies, corporate takeovers, or job turnover and layoffs would be eliminated.

All fund expenses would be paid by contributions and investment income. There would be NO tax support for this program. The program would be managed separately from WRS with NO co-mingling of funds.

2. Wisconsin Individual Retirement Savings Program

Personal savings are an important supplement to pensions and Social Security benefits, making up the "third leg" of the stool. As noted earlier, many people have difficulty generating significant personal savings and they lack fundamental investing skills and discipline.

For several decades, the Department of Employee Trust Funds has offered public employees access to a personal savings program. This is deferred compensation, 403 (b) program. This program allows individual employees to select from a wide range of investments (money market, mutual funds, index

funds, etc.) managed by professionals with investment money automatically taken from paychecks on a tax-delayed basis.

Deferred compensation is a very popular option for public employees and there is certainly no reason why such investment services could not be offered to private sector participants and businesses with a similar program. Investment savings would be held in personal accounts and not mixed in any way with other account holders. Such a program could be extended to private sector employees as a simple IRA or 401(k) program. Lower management fees with skilled investment services would allow private sector employees and businesses to enjoy greater security coupled with improved investment returns.

Conclusion

Creation of a Wisconsin Retirement Security Fund and Individual Retirement Savings Program offers the solution to the challenges posed by an aging population with woefully inadequate retirement prospects. Adoption of the proposal would provide future retirees with stable incomes. It could also be a huge benefit to the overall economy by keeping retirement savings in-state, increasing investment in existing state companies, and attracting new businesses to Wisconsin. Retirement for all is a “win-win” for Wisconsin businesses, workers, retirees, and taxpayers. Do we have the vision to make it happen?

Additional Sources and Suggested Reading

Center of Retirement Research at Boston College, <http://crr.bc.edu/>

National Institute on Retirement Security at <http://www.nirsonline.org/index.php>

Our Ridiculous Approach to Retirement, by Professor Teresa Ghilarducci,
http://www.nytimes.com/2012/07/22/opinion/sunday/our-ridiculous-approach-to-retirement.html?_r=1&

Pew Charitable Trusts research on pensions at
<http://www.pewstates.org/research/featuredcollections/pensions-and-retiree-health-benefits-85899373138>

Retirement Security for All, Secure Choice Pension Plan, National Conference on Public Employee Retirement Systems, <http://www.ncpers.org/retirementsecurity>

When I'm Sixty Four: The Plot Against Pensions and the Plan to Save Them, by Teresa Ghilarducci, Princeton University Press, 2008

Wisconsin Pensionomics: Measuring the Economic Impact of State and Local Pension Plans, National Institute on Retirement Security, 2012,
http://www.nirsonline.org/storage/nirs/documents/factSheetsPreviews/Factsheet_WI.pdf

How to Solve the Retirement Crisis: A Politico Working Group Report, June 7, 2018
<https://www.politico.com/agenda/story/2018/06/07/future-of-prosperity-retirement-report-000663>

Still a Better Bang for the Buck: An Update on the Economic Efficiencies of Defined Benefit Pensions, National Institute on Retirement Security, December 2014, Nari Rhee and William B. Forna, <https://www.nirsonline.org/reports/still-a-better-bang-for-the-buck-an-update-on-the-economic-efficiencies-of-defined-benefit-pensions/>

Pensionomics 2018: Measuring the Economic Impact of DB Pension Expenditures, Wisconsin Key Findings, https://www.nirsonline.org/wp-content/uploads/2018/12/pensionomics2018_wi.pdf

End Notes

The Imbalance Between Public and Private Pensions in Wisconsin, The Badger Institute (former Wisconsin Policy Research Institute), Joan Gucciardi February 2010, Vol. 23, No. 2, <https://www.badgerinstitute.org/Reports/2010/The-Imbalance-Between-Public-and-Private-Pensions-in-Wisconsin.htm>

ⁱⁱ Are 401(k) Plans a Failed Experiment?, Daily Finance web site, Sarah E. Murphy, The Motley Fool, <https://www.fool.com/retirement/general/2012/10/15/are-401k-plans-a-failed-experiment.aspx>

ⁱⁱⁱ Wisconsin's Future Population Projections for the State, Its Counties and Municipalities, 2010 - 2040, Wisconsin Department of Administration, December 2013, https://doa.wi.gov/DIR/FinalProjs2040_Publication.pdf

^{iv} Pensionomics 2009 and 2012, National Institute on Retirement Security, https://www.nirsonline.org/wp-content/uploads/2009/09/nirs_2009_pensionomics_report_final.pdf
<https://www.nirsonline.org/reports/pensionomics-2012-measuring-the-economic-impact-of-db-pension-expenditures>

^v 17 Frightening Facts About Retirement Savings in America, Daily Finance web site, John Reeves, The Motley Fool, Oct 15, 2012, <https://www.fool.com/retirement/general/2012/10/15/17-frightening-facts-about-retirement-savings-in-.aspx>

^{vi} Are 401(k) Plans a Failed Experiment?, Daily Finance web site, Sarah E. Murphy, The Motley Fool, <https://www.fool.com/retirement/general/2012/10/15/are-401k-plans-a-failed-experiment.aspx>

^{vii} How to Solve the Retirement Crisis: A Politico Working Group Report, <https://www.politico.com/agenda/story/2018/06/07/future-of-prosperity-retirement-report-000663>

^{viii} Pensionomics 2016, National Institute on Retirement Security, Jennifer Erin Brown, <https://www.nirsonline.org/reports/pensionomics-2016/>

^{ix} Social Security: 2012 Wisconsin Quick Facts, AARP, https://www.aarp.org/content/dam/aarp/research/surveys_statistics/econ/2012/Social-Security-2012-Wisconsin-Quick-Facts-AARP.pdf

^x Pensionomics 2018: Measuring the Economic Impact of DB Pension Expenditures, Wisconsin Key Findings, https://www.nirsonline.org/wp-content/uploads/2018/12/pensionomics2018_wi.pdf

AARP In the States, Snapshot, Wisconsin Retirement System, https://www.nirsonline.org/wp-content/uploads/2018/01/NRTA_WI-min.pdf

^{xi} A Brief History of the 401(k), Which Changed How Americans Retire, CNBC, Kathleen Elkins, January 4, 2018 <https://www.cnbc.com/2017/01/04/a-brief-history-of-the-401k-which-changed-how-americans-retire.html>

^{xii} Private-sector pension coverage fell by half over two decades, Economic Policy Institute, Monique Morrissey, January 11, 2013 <https://www.epi.org/blog/private-sector-pension-coverage-decline/>

^{xiii} Still a Better Bang for the Buck: An Update on the Economic Efficiencies of Defined Benefit Pensions, National Institute on Retirement Security, December 2014, Nari Rhee and William B. Forna, <https://www.nirsonline.org/reports/still-a-better-bang-for-the-buck-an-update-on-the-economic-efficiencies-of-defined-benefit-pensions/>

^{xiv} The Widening Gap Update Pew Center on the States, June 2012 [https://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2012/pewpensionsupdatepdf.pdf](https://www.pewtrusts.org/~/media/legacy/uploadedfiles/pes_assets/2012/pewpensionsupdatepdf.pdf)

^{xv} Debunking Myths About the Wisconsin Retirement System, POWRS publication, May 2012, <https://www.powrs.org/resources/Debunking%20the%20Myths%20about%20WRS%20%E2%80%9CReform%20%E2%80%9D%20.pdf>

^{xvi} Source: Wisconsin Department of Employee Trust Funds.

^{xvii} Pension and Retirement Security 2011: A Roadmap for Policy Makers, National Institute on Retirement Security, <https://www.nirsonline.org/reports/pensions-and-retirement-security-2011-a-roadmap-for-policy-makers/>

- ^{xviii} Are 401(k) Plans a Failed Experiment?, Daily Finance web site, Sarah E. Murphy, The Motley Fool, <https://www.fool.com/retirement/general/2012/10/15/are-401k-plans-a-failed-experiment.aspx>
- ^{xix} The State of Working Wisconsin 2012, Center on Wisconsin Strategies, www.cows.org/_data/documents/1280.pdf
- ^{xx} Pension and Retirement Security 2011: A Roadmap for Policy Makers, National Institute on Retirement Security. <https://www.nirsonline.org/reports/pensions-and-retirement-security-2011-a-roadmap-for-policy-makers/>
- ^{xxi} NASRA Issue Brief. “State and Local Government Spending on Public Employee Retirement Systems”. National Association of State Retirement Administrators. February 14, 2012.