

HOW DEFINED BENEFITS FOR PUBLIC EMPLOYEES IMPACT THE ALASKA ECONOMY

*By Teresa Ghilarducci, Ph.D., Bernard L. and Irene Schwartz Professor of Economics, The New School for Social Research
New York, New York*

EXECUTIVE SUMMARY

Alaska's economic future depends heavily on the strength and stability of its public workforce, including essential workers such as teachers, healthcare professionals, and public safety employees. These public employees provide critical services that support Alaska's residents' daily lives and bolster private sector operations. Reliable public services like education, transportation, and safety reduce business costs and create an environment conducive to growth and investment.

If Alaska's GDP had grown by the same amount as Wyoming's GDP Alaska's GDP would be \$3 billion higher. Indeed, \$3B more GDP would have yielded more local revenue. The DB plan is not the entire solution to sluggish growth, and the pay system that encourages people to leave teaching or the state is not the sole cause of business and population decline. But DB plans help boost the quality of public service and the decline in public service reduces economic activity.

In 2007, Alaska shifted from a defined benefit (DB) pension system to a defined contribution (DC) system. This shift has negatively impacted the state's public workforce by increasing turnover, reducing public employees' long-term commitment, and weakening the overall quality of public services. Under the DC system, public employees can cash out their retirement savings after just five years of service, leading to a short-term outlook among workers and incentivizing them to leave their jobs sooner. This high turnover has strained the delivery of critical public services and created challenges for recruitment and retention.

DB plans help recruit the right kind of employee by signaling high commitment. In contrast, DC plans signal low commitment because loyalty is not rewarded in DC plans. A DB plan pays for experience. In contrast, 401(k) plans treat public safety workers and teachers like day laborers.

Research consistently shows that DB pension plans, which guarantee retirement benefits based on years of service, provide long-term financial security and incentivize employees to stay in their jobs, and helps with recruitment in teaching, public safety, and other vital public services.

By restoring DB plans, Alaska can reduce turnover, improve public service quality, and support the public and private sectors. This report analyzes how restoring DB pensions would strengthen Alaska's public workforce and drive economic development by improving public services that are essential for private businesses.

This report also examines how public services impact economic growth, explores the importance of high-quality services in offsetting Alaska's geographic and weather-related challenges, and argues for restoring DB pensions as a cost-effective solution to Alaska's workforce challenges.

THE FISCAL CASE FOR A ROBUST PUBLIC WORKFORCE AND DB PLAN

Given all that we know about the economic linkages between good public services and business investment (see below) I estimated a number to quantify how much bigger the state economy would be, and how much tax revenue would have flowed in state revenues if the business climate was better. Business investment triggers more aggregate demand, more employment, and higher private sector wages. No economic model can independently isolate improving public services independent effect on new startups.

If Alaska's GDP had grown by the same amount as Wyoming's Alaska's GDP would be \$3 billion higher. Indeed \$3 B more GDP would have yielded more local revenue. Therefore, the DB plan for state employees generates more positive effects than \$76 million (Ghilarducci 2024) of annual direct savings (by reducing public employee turnover and saving on pension costs) but the additional amount is not possible to quantify. A DB for state workers will help the Alaska economy.

It is not possible to directly link GDP growth with Alaska State fiscal revenue. Lost GDP stemming from poor management of state employees does not directly affect State revenue. Therefore, a proper dynamic model cannot be constructed. But the indirect link is real. Any responsible analysis of the Alaska state economy acknowledges private business needs stable and highly qualified state employees. DB pension plans for state employees promote employment stability, commitment to task, higher productivity, and higher state capacity. There is a significant and positive link between defined benefit pension plans for state employees and the health of the Alaska state economy.

The decline in defined benefit pensions leads to a reduction in state capacity. This, in turn, affects the ability to serve the public and support businesses, which results in a decline in population and a decrease in business activity. The chain reaction continues with a decline in state GDP, followed by a decrease in local property taxes and, ultimately, a deterioration in the quality of life in Alaska.

This report demonstrates the vital link between state capacity and economic growth.

A state not able to attract and retain teachers is a state that will be unattractive for many private sector investors.

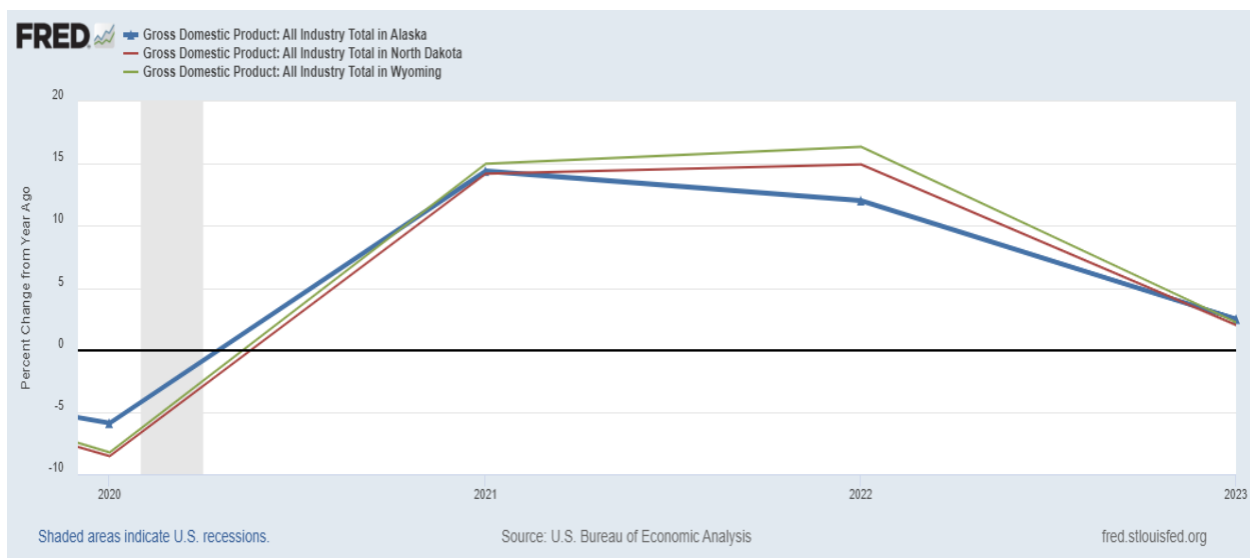
Pension reform aimed at improving the capacity of education and public services signals to business investors that the state welcomes high value-adding and developmental private commercial activity. The state understands that a pension system that encourages outmigration needs to be fixed to make the state attractive for private sector investment. Reinstating the defined benefit pension plan for state employees is proposed to help Alaska's economy by shoring up the quality of public services.

Alaska GDP Lags

Despite all three states' dependence on the energy sector, from 2017 to 2023, Alaska, North Dakota, and Wyoming experienced significant variations in GDP growth. Alaska's GDP declined by 1.02% over this period. North Dakota's average annual growth rate was approximately 1.92% from 2019 to 2023, and Wyoming outperformed both states, showing consistent growth with an average rate of about 2.1% per year from 2019 to 2023.

This means while oil price volatility affected these three similar states Alaska has grown about 27% since 2008 and Wyoming grew by 32%. If Alaska's GDP had grown by the same amount as Wyoming's, its GDP would be \$3 billion higher. (The percentage change in GDP growth from a year ago of the three oil-dependent states, Alaska, Wyoming, and North Dakota are displayed in the table below¹.)

Table 1: Alaska GDP Lags



A larger GDP does not add to state revenues, because of the Alaska “disconnect”² -- it certainly adds to local government capacity. It also helps attract more migrants and the increase in

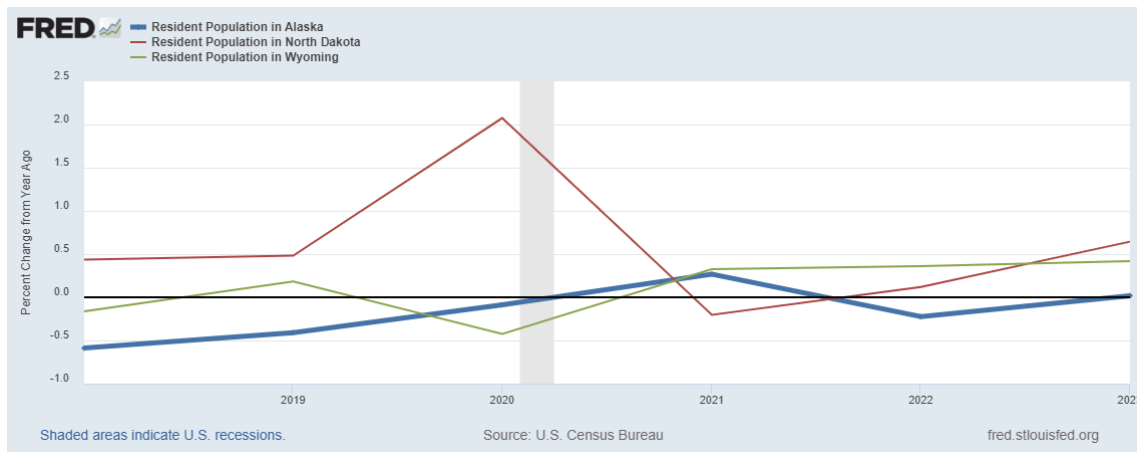
aggregate demand helps workers get higher wages and provides more opportunities. I am confident that the state of Alaska would get more tax revenue from increased economic activity that comes about when Alaska provides a friendly business climate with better public services.

Alaska Population Lags

Between 2013 and 2023, Alaska's population decreased by 0.57%, falling to 733,406, largely due to the outmigration of teachers and young workers, especially in rural areas where high turnover among educators has strained local communities. Alaska experienced significant outmigration, with more people leaving than arriving, marking a prolonged period of negative net migration caused by few new residents.

Comparatively, Alaska's peer states like South Dakota, Wyoming, and Louisiana have faced less pronounced outmigration trends. For example, South Dakota saw positive population growth in this period, partly due to migration inflows, which contrasts to Alaska's stagnation (Brooks, 2023).

Table 2: Alaska's Population Lags



ECONOMIC GROWTH AND PUBLIC SERVICES: THE CRITICAL CONNECTION

Republican Glenn Youngkin, Governor of Virginia explained why Virginia ranked number one in business climate. Not surprisingly goods and services the public sector provides, Youngkin says a state can quickly deliver what companies require to make investment decisions. “These include sites, permitting confidence, workforce development, utilities, and ancillary factors that enable companies to meet their schedules for becoming operational.”

Numerous studies have demonstrated what Youngkin says is right. Public services play a key role in regional economic growth. Quality public services such as education, transportation,

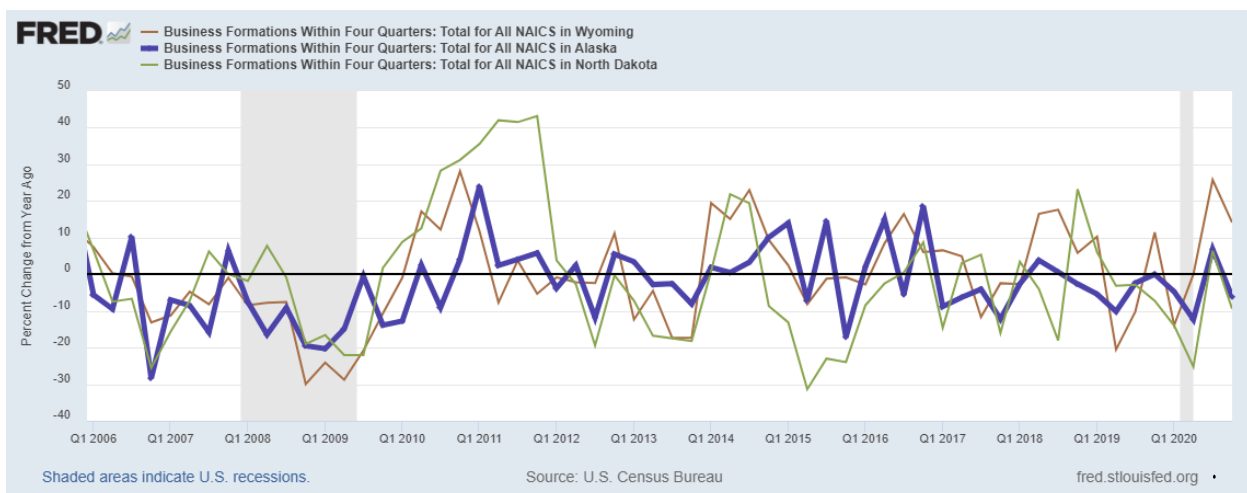
healthcare, and safety provide businesses with essential infrastructure, reduce operational costs, and improve workforce productivity (Bartik, 1991). For Alaska, where geographic isolation and harsh weather can deter both businesses and workers, excellent public services are even more critical to ensuring long-term economic success.

Supply-Side Benefits of Public Services: Reducing Business Costs

Public services are vital for reducing costs for businesses. Public services that are especially useful for private business are high-quality, publicly provided transportation, communication infrastructure, public education, and public safety. Also, the ordinary processing of business permits, if bogged down can discourage private investment.

Business formation may be stymied in Alaska because permits can't be processed in a timely fashion. Evidence that business formation is stymied in Alaska is shown in the laggard record of business formation in Alaska compared to Alaska's peers. See Graph 3 which shows Alaska lagging behind in business formation. The data is from the St. Louis Federal Reserve.

Graph 3: Alaska Falls Behind Peer States in Business Permits



There are many factors determining business formation; easy processes are one of them.

Other public services besides permitting and regulatory processes include public infrastructure businesses need to operate efficiently. For example, a robust public transportation system enables businesses to move goods more easily, while well-maintained roads and ports reduce shipping times and costs. Similarly, well-funded public education systems provide businesses with a steady pipeline of skilled workers, reducing the need for expensive training programs. The connection is straight forward. Businesses benefit from not having to compensate for inadequate public services, such as poor education or safety or transportation.³

Economist Timothy Bartik (1991) highlighted the direct connection between strong public services and regional economic growth. His research showed that regions with better public services, particularly transportation and education—are more attractive to businesses, leading to increased private investment. For Alaska, where businesses often operate in remote and

challenging environments, the importance of quality public services cannot be overstated. Poor infrastructure and public services increase operational risks and costs, making the state less appealing to potential investors.

This issue has become especially pressing in Southeast Alaska, where reductions in ferry services through the Alaska Marine Highway System have had a profound impact on local businesses. Owners like Greg and Donica Jerue, who run J&S Freight in Juneau, have reported increased operational costs and delays due to reduced ferry services. Without reliable transportation, businesses in remote communities such as Kake and Haines face logistical challenges that disrupt supply chains and drive up costs (Schijvens, 2023).

The decline of Alaska's ferry system has had a profound economic impact on the state, driven in part by inconsistent funding and management by the State of Alaska. The shift from a defined benefit (DB) pension system to a defined contribution (DC) system further exacerbated the challenge of staffing critical positions within the marine highway. While not the sole cause of understaffing, the DC system's encouragement of employee turnover has made it harder to retain workers in these vital roles (Alaska Policy Forum 2023).

Education, another critical public service, directly influences the availability of skilled labor for businesses. Harvard economist Edward Glaeser and co-author Albert Saiz (2000) found that regions with high-quality education systems are better able to attract and retain a highly skilled workforce, which is essential for sustaining economic growth. Their research showed that when public schools produce more high school graduates and college-educated workers, local economies experience higher rates of job creation and wage growth.

For Alaska, where industries like oil, gas, and fishing increasingly require a more technically skilled workforce, investment in education is vital for long-term competitiveness. The findings are obvious. Intriguingly and potentially poignant for Alaska's future is that Glaeser stressed the resiliency regions need to grow. Outside shocks, out of Alaska's control – like worldwide changes in fishing and processing – require Alaska to innovate. A skilled workforce is more important than government grants and subsidies for a resilient economy.

The link between public education and workforce readiness is particularly important in Alaska, where teacher turnover rates are among the highest in the country. The Center for Alaska Education Policy Research (CAEPR) found that rural districts often lose between 20% and 33% of their teachers each year, leading to instability in the classroom and declining student performance (DeFeo et al., 2017). Addressing these challenges requires improving teacher retention, which can be achieved by restoring DB pension plans. These plans would provide financial security and incentivize long-term commitment from teachers, reducing turnover and stabilizing the education system.

Demand-Side Pathways: Shaping Economic Expectations

In addition to reducing business costs, public services influence the expectations and behaviors of residents, creating demand for local goods and services. Quality public services enhance the overall quality of life, which makes regions more attractive for both residents and businesses. For

example, regions with well-funded healthcare systems and public safety services provide residents with the security and stability they need to invest in their communities. This, in turn, encourages businesses to invest and grow.

Public employees themselves also generate demand for local businesses by spending their earnings within the state. A well-compensated public workforce contributes to the local economy by purchasing goods and services, buying homes, and supporting local businesses. Moreover, retirees who remain in the state continue to contribute economically through their pension income. By contrast, high turnover and outmigration among public employees reduce demand and deprive local economies of essential spending power.

A particularly relevant example is the oil and gas industry, which creates demand in a surprising sector – computer services. A dollar increase in natural extraction creates almost a dollar increase in the demand for high tech services. Transportation and business services are also needed, and those sectors require a stable, educated workforce to operate effectively. Without robust public services, including education, healthcare, and transportation, it becomes increasingly difficult to attract and retain skilled workers in these sectors. If Alaska’s public services continue to deteriorate, industries that are critical to the state’s economy will face labor shortages and reduced productivity (Fisher, 1997).

THE BUSINESS CASE FOR A ROBUST PUBLIC WORKFORCE

Alaska’s business community is acutely aware of the connection between high-quality public services and economic growth. Business leaders have repeatedly expressed concerns about the state’s declining public services and the impact these issues have on their ability to attract and retain skilled workers.

Jenna Wright, CEO of the Anchorage Economic Development Corporation (AEDC), has publicly emphasized that the low quality of Alaska’s public education system is one of the primary obstacles to attracting skilled professionals to the state. Wright argued that without improvements in public education, Anchorage and the rest of the state will struggle to compete with other cities that offer better schools and infrastructure (Wright, 2024). This sentiment is widely shared by business leaders across the state, who recognize that attracting talent is essential for economic growth, particularly in high-tech industries and healthcare.

The Alaska Statewide Mentor Project found that high teacher turnover—particularly in rural areas—has had a devastating impact on the quality of education in the state. In some rural districts, as many as one in three teachers leave their jobs every year. This instability in the classroom negatively affects student achievement and contributes to high dropout rates, both of which have long-term implications for the state’s labor market (DeFeo et al., 2017). Addressing these challenges requires reducing turnover and stabilizing the public workforce—goals that can be achieved through the restoration of DB pension plans.

Public transportation is another key area where Alaska's business community has expressed concerns. Cuts to the Alaska Marine Highway System have left many businesses in Southeast Alaska struggling to manage supply chains and increased operational costs. Business owners like Greg and Donica Jerue, whose company relies on the ferry system to transport goods, have seen their trucks idled for extended periods due to service reductions. This has caused severe delays and increased costs for businesses that rely on the ferry system to move goods and services across the state (Schijvens, 2023).

COUNTERING ALASKA'S WEATHER AND HIGH COST OF LIVING WITH EXCELLENT PUBLIC SERVICES

Alaska's geographic challenges, including its remoteness and harsh weather, create significant barriers to economic development and population retention. The state has experienced steady outmigration over the past decade, with more than 75,000 people leaving between 2012 and 2022 (Alaska Department of Labor, 2022). The reasons for this outmigration are complex, but one key factor is the difficulty of living and working in such a remote and often isolated environment.

Public services, however, can play a critical role in offsetting the negative effects of Alaska's geography. High-quality public services, particularly in education, healthcare, and transportation, make the state more livable and attractive for both residents and businesses. By ensuring that residents have access to reliable services, the state can encourage people to stay and invest in their communities, even in the face of challenging weather and remote locations.

In their influential study, Glaeser and Saiz (2000) demonstrated that regions with excellent public services are better able to retain residents, even in areas with less favorable climates or geographic disadvantages. Their research showed that public services like education and healthcare can make up for deficiencies in weather and geographic location by providing residents with the support they need to build successful, long-term lives in the region. For Alaska, this means that investing in public services can help counteract the state's natural disadvantages and reduce the outmigration that has plagued the state for over a decade.

Alaska's public services must also play a role in attracting new residents. With industries like oil and gas increasingly dependent on skilled workers, the state must ensure that it can offer a high quality of life to attract professionals from other regions. The Alaska Chamber of Commerce has repeatedly emphasized the importance of attracting a highly skilled workforce to the state's economy. However, without strong public services, including high-quality schools and reliable healthcare, the state will struggle to compete with other regions that offer better amenities and infrastructure (Glaeser & Saiz, 2000).

Furthermore, the weather and remoteness of Alaska increase the importance of a stable public transportation system. Cuts to ferry services have left many of these communities isolated and vulnerable to supply chain disruptions. Restoring ferry services and investing in public transportation would not only reduce operational costs for businesses but also make life more manageable for residents in remote areas (Schijvens, 2023).

HOW DB PENSIONS IMPROVE RETENTION AND REDUCE TURNOVER

One of the primary issues facing Alaska's public workforce is high turnover, particularly in sectors like education, healthcare, and public safety. Since the state's switch to a DC retirement system in 2007, employees have been able to cash out their retirement savings after just five years of service. This feature encourages short-term employment, as workers have little incentive to stay in their jobs long-term.

By contrast, DB pension plans provide financial security over the long term, incentivizing employees to remain in their positions throughout their careers. Under a DB plan, retirement benefits accrue over time, meaning that the longer an employee stays, the more valuable their pension becomes. This structure creates a strong incentive for employees to remain committed to their jobs. A study by Naff and Crum (2000) found that public employees with access to DB pensions were significantly less likely to leave their jobs compared to those with DC plans because the value of the pension increases with tenure. This loyalty reward structure helps reduce turnover and stabilizes the public workforce.

In Alaska, the negative impact of high turnover is particularly evident in education. The Center for Alaska Education Policy Research found that rural districts, which already face significant challenges in recruiting and retaining teachers, experience some of the highest turnover rates in the country. This constant churn of teachers undermines the quality of education, as schools must continually spend resources recruiting and training new staff (DeFeo et al., 2017). The lack of DB pension plans exacerbates this issue, as teachers have no long-term incentive to stay in Alaska, especially given the high cost of living and the lack of Social Security benefits.

Restoring DB pensions would provide teachers, as well as other public employees, with the long-term financial security they need to remain in their jobs. This would reduce turnover, improve morale (Naff and Crum 2000), and lead to better public service delivery across the state. For Alaska's businesses, this would mean access to a more stable and skilled workforce, particularly in industries that rely on public education to provide the next generation of workers.

THE COST-EFFECTIVENESS OF DB PENSIONS

My previous report revealed the direct cost saving of \$76 million per year if the DB plan was restored. The savings came about from reducing hiring and training costs and earning higher rates of return due to a transition back to a DB plan. This was a conservative estimate because the wider economic impacts beyond just those cost savings were not calculated. This report finds considerable evidence that the defined benefit pension plan would increase the quality of public services, and the quality of public services attracts private commercial business activity. Commercial business activity improves the quality of life in Alaska.

To repeat some of the findings in the previous report, Alaska could reduce costly and sporadic efforts to attract workers in the form of bonuses and other one-time incentives that spike costs. Since DC plans are more expensive to administer than DB plans, Alaska saves investment costs

with a DB plan. DB Plans earn higher returns.⁴ Earning a higher risk and fee-adjusted rate of return in a DB plan compared to a DC plan is a cost savings of \$14M per year.⁵

While some opponents of DB pensions argue that they are too costly for states to maintain, research has shown that DB plans are often more cost-effective than DC plans over the long term. Although DB pensions require an upfront investment, they lead to long-term savings by reducing turnover, increasing employee productivity, and lowering administrative costs.

DB pension plans typically provide higher investment returns than DC plans, due to their ability to pool resources and invest in diversified portfolios. DB plans also benefit from lower administrative costs, as they are managed by professional investment firms that can take advantage of economies of scale. In contrast, DC plans often have higher administrative costs and lower investment returns, which can erode retirement savings over time.

In Alaska, the cost of high turnover is particularly significant. The state spends millions of dollars each year recruiting and training new public employees, particularly in education and public safety. These costs could be significantly reduced by restoring DB pensions, which would incentivize employees to stay in their jobs for longer periods and save the state money on recruitment and training, while also improving the quality of public services.

Furthermore, DB pensions provide long-term financial security for retirees, reducing the likelihood that they, or their family members, will need to rely on public assistance programs in retirement. We already know that retirement insecurity creates an intergenerational transfer of financial fragility and stress.

Family care is a big deal, especially for extended families in Black and Hispanic communities. New research at The New School (available by request) shows about 6 – 18% of elders receive care from a grandchild. Mothers are more likely to receive care from their daughters—43% of mothers compared to just 19% of men because men are much more likely to receive care from their spouse than women are—60% versus 29%. Family care has a palpable impact on younger family caregivers' ability to work and save for retirement -- daily caregiving significantly reduces labor force participation and does intergenerational damage.

Retirees who receive DB pensions are less likely to lean on their family members for financial support and need Medicaid, food stamps, or other public support. In this way, DB pensions not only provide economic stability for retirees but also create long-term savings for the state.

OPPONENTS OF DB PLANS

DB funding can be erratic, and Alaska had a bad experience with unstable funding obligations in the mid-2000s. The reform bill creates funding rules that will avoid the kind of funding instability from the past. The proposal to reinstate a version of the defined benefit pension has funding safeguards for the State of Alaska.

The proposed pension reform under Alaska Senate Bill 88 (SB 88) seeks to stabilize how the state funds its defined benefit (DB) obligations, making them more predictable for the Alaska treasury. The past bad experience was caused by Alaska assuming the pension funds would generate very high returns. This allowed the state to contribute relatively low amounts to the fund each year. However, when those expected high returns did not materialize, Alaska had to inject significant sums to maintain the fiscal health of its DB plans, leading the state to shift to a defined contribution (DC) system in 2006, which promised more immediate stability in funding.

The downside of the DC system was predicted, based on decades of economic research, and did indeed come later in the form of unstable public employment. Employee turnover in the Alaska DB is lower than under the DC plan: 70% of those leaving Teachers Retirement System (Alaska) and 63% of those leaving Public Employee Retirement System DB plans were retiring or dying, not quitting. Meanwhile, only 1% leaving the DC plans were doing so because they were retiring, 99% quit to take jobs elsewhere (Doonan 2023).

High public employee turnover creates costs of training and replacement and diminishes the capacity of the state to provide basic services for private business.

SB88⁶ seeks to stabilize DB funding with improved safeguards, potentially attracting higher-quality workers while satisfying credit rating agencies concerned with the state's ability to meet its financial obligations. SB88 provides safeguards like adjustable employee contribution rates (8-10%) to ensure financial stability (Alaska Senate 2024).

Opponents of DB pensions for Alaska public sector workers often argue that DB plans were financially unsustainable, particularly in states facing budget shortfalls. However, this argument overlooks the long-term savings generated by DB plans. Research shows DB pensions boost employee productivity *and* lower administrative costs, all of which reduce state spending (NIRS, 2014).

Finally, some critics argue that DB pensions are outdated and do not reflect the modern, mobile workforce. However, public sector employees, particularly those in education, public safety, and healthcare, are more likely to remain in their jobs for longer periods. And almost every family in the United States is concerned about their retirement security. People often get pushed out of their jobs before age 60, making the specter of funding retirement with voluntary savings precarious. DB pensions align with the needs of public employment, where long-term commitment is essential for delivering high-quality public services.

CONCLUSION

The economic future of Alaska depends on the strength and stability of its public workforce. Public employees provide essential services that support businesses, reduce operational costs, and improve the quality of life for residents. However, the switch from DB pensions to a DC savings plan in 2007 has led to high turnover, reduced service quality, and increased costs for recruitment and training.

Restoring DB pensions would provide long-term financial security for public employees, reducing turnover and improving the quality of public services. For Alaska's businesses to thrive, they need a stable and dependable public workforce, supported by high-quality public services. By investing in its public workforce, Alaska can create the conditions necessary for long-term economic growth and prosperity.

The decision to restore DB pensions is not just about improving compensation for public employees, it is about ensuring the future stability and success of Alaska's economy. By providing financial security to public employees, the state can improve public service delivery and create a more favorable environment for private sector growth. This, in turn, will help attract new residents, retain skilled workers, and create a strong foundation for Alaska's economic future. There is a business case for public employee pensions.

REFERENCES

Acemoglu, D., García-Jimeno, C., & Robinson, J. A. (2015). State capacity and economic development: A network approach. *American Economic Review*, 105(8), 2364-2409.

Alaska Senate (2024). "Press release: Senate Passes Legislation Establishing a Defined Benefits Retirement System for Public Employees and Teachers" https://alaskasenate.org/press/013124_press_release.htm

Alaska Policy Forum. 2023. "Revisiting a Report: Alternative Approaches to the Alaska Marine Highway System." <https://alaskapolicyforum.org/2023/01/revisiting-a-report-alternative-approaches-to-the-alaska-marine-highway-system/>

Alaska Business Magazine. (2021, December 7). Marine highway plan includes new ferry. <https://www.akbizmag.com/industry/transportation/marine-highway-plan-includes-new-ferry/>

Alaska Business Magazine. (2023, August 2). Streamlined state regulations adopted for nuclear microreactors. <https://www.akbizmag.com/industry/energy/streamlined-state-regulations-adopted-for-nuclear-microreactors/>

Alaska Business Magazine. (2024, March). New workforce plan to meet Alaska workforce shortages. <https://www.akbizmag.com/industry/education/new-workforce-plan-to-meet-alaska-workforce-shortages/>

Alaska Policy Forum. (2021, August 30). Research & commentary: Analyses of Alaska's dismal public school system highlight the need for education choice in the Last Frontier. <https://alaskapolicyforum.org/2021/08/education-dismal-public-school-system/>

Alaska Policy Forum. (2021, August 30). Teacher turnover in Alaska: Causes and solutions. <https://alaskapolicyforum.org/2021/08/education-dismal-public-school-system/>

Alaska Public Media. (2024, January 31). Workforce woes? Invest in Anchorage's quality of life, experts say. <https://www.alaskapublic.org/2024/01/31/workforce-woes-invest-in-anchorage-quality-of-life-experts-say>

Alaska, State of. (2024). Profile of the state workforce. <https://doa.alaska.gov/dop/fileadmin/StatewidePlanning/pdf/workforceProfile/dopannualreport.pdf>

Alaska Statewide Mentor Project. (2023). Overview: Teacher turnover in Alaska. University of Alaska. <https://www.alaska.edu/asmp/overview.php>

Bartik, T. J. (1991). *Who benefits from state and local economic development policies?* W.E. Upjohn Institute for Employment Research.

Boix, C. (2001). Democracy, development, and the public sector. *American Journal of Political Science*.

Brown, K., & Yoshioka, T. (2003). Organizational commitment: Clarifying the concept and simplifying the existing construct typology. *Journal of Vocational Behavior*, 63(3), 474-494.

Brooks, James. 2023 "Alaska's population rose slightly in 2022, but more people continue to leave than arrive" Alaska Beacon. January 5.

Bureau of Labor Statistics, U.S. (2023). Are employers able to hire? A study of the post-pandemic labor market. *Monthly Labor Review*.

Bureau of Economic Analysis, Gross Domestic Product: All Industry Total in Alaska [AKNQGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/AKNQGSP>, September 25, 2024.

DeFeo, D. J., Tran, T., Hirshberg, D., Cope, D., & Cravez, P. (2017). *The cost of teacher turnover in Alaska*. Center for Alaska Education Policy Research. <http://hdl.handle.net/11122/7815>

Doonan, D. (2023). Alaska Teacher Recruitment and Retention Study. *National Institute on Retirement Security*. Accessed September 27, 2024. <https://www.nirsonline.org/reports/alaskareport/>

Duffy-Deno, K., & Eberts, R. (1989). Public infrastructure and regional economic development: A simultaneous equations approach. *Federal Reserve Bank of Cleveland*. <https://www.clevelandfed.org/researchgate>

Finan, F., Olken, B. A., & Pande, R. (2015). The personnel economics of the state. *National Bureau of Economic Research*.

Fisher, R. C. (1997). The effects of state and local public services on economic development. *New England Economic Review*. <https://www.bostonfed.org/-/media/Documents/neer/neer297d.pdf>

Glaeser, E. L., & Saiz, A. (2004). The rise of the skilled city. *Brookings-Wharton Papers on Urban Affairs*, 5, 47-94.

Hsieh, J. (2024, January 31). Workforce woes? Invest in Anchorage's quality of life, experts say. *Alaska Public Media*. <https://www.alaskapublic.org/2024/01/31/workforce-woes-invest-in-anchorage-quality-of-life-experts-say>

McWhirter, C. (2023, June 1). States Lacking DB Plans Face a Challenge Retaining Workers. *PLANSponsor*. Retrieved from <https://www.plansponsor.com/states-lacking-db-plans-face-challenge-retaining-workers/>

Naff, K. C., & Crum, J. (2000). Working for America: Does public service motivation make a difference? *Review of Public Personnel Administration*, 20(1), 5-17.

Osborne, S. P., Radnor, Z., & Nasi, G. (2013). A new theory for public service management? Toward a (public) service-dominant approach. *American Review of Public Administration*, 43(2), 135-158.

Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, 50(3), 367-373.

Resneck, J. (2019, November). Southeast Alaska supply chains breaking down as ferry service gap enters second week. *Alaska Public Media*. <https://www.alaskapublic.org/2019/11/14/southeast-alaska-supply-chains-breaking-down-as-ferry-service-gap-enters-second-week/>

Schijvens, M. (2023, June). Survey: Optimism of Southeast Alaska businesses down this year, but still second-highest since 2010. *Juneau Empire*. <https://www.juneauempire.com/news/survey-optimism-of-southeast-alaska-businesses-down-this-year-but-still-second-highest-since-2010/>

Sabbatini, M. (2023, May 11). Bill reviving public employees pension system advances to Senate floor. *Juneau Empire*. Retrieved from <https://www.juneauempire.com/news/bill-reviving-public-employees-pension-system-advances-to-senate-floor/> (This report covers Ghilarducci's report that is not available online which is Ghilarducci, T. (2023, May 10). *Testimony on the Benefits of Restoring Defined Benefit Plans for Alaska's Public Employees*. Presented to the Alaska State Legislature Senate Finance Committee.

Youngkin, Glen quoted in *Site Selection* 2022. <https://siteselection.com/issues/2022/nov/the-2022-business-climate-rankings.cfm>

ENDNOTES

¹ The source for the graph is found at the Bureau of Economic Analysis and the table was constructed by the tool available at the Saint Louis Federal Reserve Bank.

² Alaska's unique reliance on the Permanent Fund for state revenue creates a disconnect between economic activity and state financial benefits. Unlike other states that generate revenue through taxes on businesses and income, increased economic activity in Alaska—such as more business investment and employment growth—does not directly translate to higher state revenues. This system means that while the economy may expand, the state's financial gains remain relatively insulated from this growth, limiting its ability to reinvest in essential services and infrastructure.

³ As Fisher (1997) writes “Bartik (1991) identifies three ways in which public services might influence economic growth or development through an impact on business inputs. Public services may be an unpriced input to production; expansion of public services may reduce the prices paid by business for those services; and some public services may work to reduce the cost of private inputs used by business. Examples seem obvious. Public highways provide an input (usually unpriced) to many businesses; expansion of public airports may reduce the full price business must pay for air transport; and public education may reduce quality adjusted prices of labor by increasing the supply of workers of a given quality (either by increasing average skills everywhere or by attracting additional workers to a specific location). In all of these cases, the idea is that the public input reduces production costs directly or increases the productivity of a private input and thus increases output. The underlying model is one in which firms are passive recipients of public services.”

⁴ In an April 26, 2023, presentation of the Reason Foundation presentation to the Alaska legislature they drastically underestimated future rates of return for Alaska’s PERS and TRS pension funds. Their complex analysis predicted a return rate of 5% and 8%. The State of Alaska announced in 2024 in the press release of the Department of Revenue Wednesday, August 21, 2024 (Anchorage, AK) – The Treasury Division of the Alaska Department of Revenue closed a strong fiscal year 2024 with overall gains of \$4.6 billion across the State’s Retirement System of \$43B -- the defined benefit retirement systems rate of return was 9% for this past year.

⁵ DB assets are pooled and professionally managed. Pooling allows for lower fees and for professional money managers to adopt an optimal portfolio of diversified assets-- buildings, stock, bonds, etc. Individuals who direct their own 401(k) – type plan, pay higher fees and react idiosyncratically to market changes and asset choices. DB plans earn a conservative .7 percentage point higher return than DC plans, for example, if DC plans earn 6% then DB assets likely earn 6.7% Total DC account balances are over \$2 billion. The recent performance of the Alaska DB plans in 2023 emphasize the cost savings to the state for switching over.

⁶ Alaska Senate Bill 88 (SB88) is described in multiple legislative documents. SB88 (including fiscal notes and presentations) Alaska State Legislature website <https://www.akleg.gov/basis/Bill/Detail/33?Root=Sb88>