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To: Donny Olson, Co-Chair, Senate Finance  
Cc: Members of the Alaska Senate Finance Committee  
From: Teresa Ghilarducci, Ph.D.  
Re: Fiscal and Economic Impact of SB 88  
Date: January 16, 2024

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**Executive Summary: Defined Benefit Plans And Alaska Public Employees**

Alaska faces severe staffing shortages in teaching, public safety, and vital public services. The main cause of these shortages is high turnover, closely followed by limited recruitment. Cost savings from reinstating a defined benefit (DB) retirement plan for Alaska public employees would primarily be achieved by reducing turnover and secondarily by enhancing financial returns.

A defined benefit plan significantly decreases turnover, and a dollar invested in a DB plan yields a higher rate of return compared to a dollar contributed to the currently designed defined contribution (DC) plan.<sup>1</sup> The initial costs of reinstating a DB plan must be properly discounted and netted against the benefits of a DB plan.

For Alaska, the most conservative – and incomplete -- estimated cost savings created by switching to a DB plan is \$76M per year. This estimate is incomplete because it does not include direct employer contribution cost savings and the indirect, but real, gains to attracting private investment and economic development stemming from better public services. Nor does it include the indirect, but real, gains to higher quality teaching, police and fire, and other public services.

The reinstatement of a defined benefit retirement (DB) plan for public employees could lead to substantial and sustained benefits in raising the quality of Alaska public services and making the state an attractive place to live and invest.

*In sum: the costs of reinstating a defined benefit retirement plan should be weighed against its benefits.*

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**Alaska's High Public Employment Turnover And Its Causes**

Most states report increasing difficulties in attracting and retaining workers in vital professions in education, public health, and public safety. The problem of attracting and retaining firefighters, police officers, and teachers are especially acute in Alaska.<sup>2</sup>

The high turnover rate and associated costs in the ranks of Alaska's public employment are caused by several factors, yet chief causes are connected to the change in the Alaska State pension system in 2006 when Alaska departed from the standard U.S. and global public employment practices by replacing the traditional pension system for public employees with a 401(k)-type individual account plan.

Unlike defined benefit plans (DB), which are designed to attract employees to a profession and escalate pay for medium and long-term employees, the 2006 experiment with a defined contribution (DC), or 401(k) -design, allows individuals to take out their retirement savings from the state or cash them out after five years.

In public safety, the estimated annual cost of lost returns on training costs – assuming only a 1% turnover rate due to low pay and pensions – is over \$4 million.<sup>3</sup> However, the estimate is far too low. Alaska public safety agencies are reporting up to 6% non-retirement separation rates. In public education, a 2017 University of Alaska Institute of Socio-Economic Research report quantified an annual loss of \$20 million in teacher recruitment and retention costs, or over \$20,431.08 per teacher.<sup>4</sup>

The total costs of turnover cannot be ignored when assessing the benefits of a new DB plan. Actuaries from Buck Consultants in a letter to Director Ajay Desai, acknowledged their cost assessment of the SB88-proposed-DB plan was incomplete without cost savings from reducing turnover being acknowledged.<sup>5</sup>

Cheiron Consulting report, also in 2023, reported an SB88–DB plan would save the State costs because current contributions in the DC plan are more than a future DB plan. The cost advantages of a DB plan would even be higher.

Both actuarial reports do not consider 1) direct savings in hiring and training costs; 2) direct savings from a higher return and less risky return on DB assets compared to DC assets; 3) indirect, but real, savings from improved productivity from reduced turnover; 4) indirect, but real, economic activity induced by more reliable public safety, public education, and public services.

The direct cost savings from switching to a DB plan is estimated with the most conservative assumptions of \$76M per year, which consists of the direct cost savings stemming from reducing hiring and training costs of \$62M per year, and the direct cost savings to earning a higher rate of return of \$14M. <sup>6</sup>

Switching to a modified defined benefit plan in Alaska could save taxpayers significant costs and improve the quality of life. Changing from a DC to a DB plan would lower the costs related to employee turnover and, more importantly, improve public services by keeping experienced and productive workers.

Further, it is important to keep public employee vacancy rates low. Public employees play a vital role in a state's infrastructure, contributing to regional economic growth by delivering high-quality public services. Quality infrastructure, in turn, supports regional economic development. Unexplained deaths in prisons; classrooms with no teachers; and public ferries moored for lack of staff impede growth and well-being.

Alaska public employee turnover increased noticeably after the 2006 pension reform when mid-career employees for the State of Alaska could transport their accumulated value without any more service or penalty. Wolfgang Junge, DOT&PF Central Region Director says of this period,

*Our ability to retain employees, really much longer than four or five years anymore, and no more than ten years became largely impacted by trends and portability of those benefits.”<sup>7</sup>*

James Harris, Alaska’s 2017 Teacher of the Year, moved to Washington State citing the poor retirement system,

*Unfortunately, the retirement system in Alaska, it was set up in a way that there was just absolutely no way for me to retire with any kind of dignity”<sup>8</sup>*

## **The High Cost of Turnover and The Main Benefits of Reduced Turnover**

The costs of employee turnover are especially high for employers who depend on experienced and engaged employees. When an employee leaves, the returns on training and hiring walk out the door. There are many benefits to increasing commitment and longevity on the job. Here are several major benefits of reducing employee turnover:

Lower employee turnover generally reduces employer costs of recruitment and hiring by extending the period of amortization of those costs.

The benefits of lower employee turnover are underappreciated because the benefits are not easily measured but are easily felt. Lower employee turnover raises the average level of productivity in careers where experience is associated with higher levels of productivity -- -- most public services are in this category. In other words, churn lowers average productivity.

Reduced turnover raises average productivity levels. Why does experience raise productivity? Employees with longer tenures often possess institutional knowledge and skills that are valuable to the organization. High turnover leads to knowledge loss.

In 2022 Alaska Correctional Officers' representative, Randy McLellan, testified to the Alaska Legislature that the agency's severe staffing crisis was partly due to ending the DB retirement plan in 2006. McLellan said older officers can work in Alaska and afford to retire, but after getting trained, the younger officers cannot so they leave. That means big losses for experienced workers.

*Every time the DOC loses an experienced officer, we're forced to backfill that position with an inexperienced recruit." - Randy McLellan*

The total costs of turnover cannot be ignored when assessing the benefits of a new DB plan. Actuaries from Buck Consultants in a letter to Ajay Desai, acknowledged their cost assessment of the SB88-proposed-DB plan was incomplete without cost savings from reducing turnover being acknowledged.<sup>9</sup>

Cheiron Consulting report, also in 2023, reported an SB88-DB plan would *reduce costs* for the Alaska Treasury because current DC costs are higher than the proposed DB contribution. Cheiron also computes SB88's cost savings without considering the significant savings from reducing turnover. The actuarial reports do not consider 1) direct savings in hiring and training costs; 2) direct savings from a higher return and less risky return on DB assets compared to DC assets; 3) indirect, but real, savings from improved productivity from reduced turnover; 4) indirect, but real, economic activity induced by more reliable public safety, public education, and public services.

Higher retention can raise morale, engagement, and peer-on-the-job mentoring. Remaining workers are burdened by having to adjust to new employees likely to leave.

Lower turnover lowers the direct administrative costs of processing resignations, conducting exit interviews, and managing paperwork related to employee departures.

Lower turnover in public employment improves relationships with the taxpayer who are the ultimate customers of the public services, public safety, and teaching. Newly-appointed leaders— a new police and fire chief, education superintendent, and even Governor – can do better if employees in police, fire, and education, etc. are experienced and not newbies.

Lowering turnover requires a host of factors often particular to an occupation and concerns cash pay, training, and good management. But all the research shows, including the recent Buck report on the costs of a DB plan,<sup>10</sup> acknowledges, that DB plans lower turnover. The perceived value of a DB pension as a valuable long-term benefit comes from reputation and knowledge. Knowing about former employees, like ones with financial security in retirement, can positively influence how one perceives their overall compensation package. For example, if teachers know retired teachers who are financially comfortable that produces goodwill, motivation, and commitment.

## **DB Plans Help Recruit Committed Employees**

DB plans help recruit new workers as part of an attractive and competitive compensation offer.

Many factors determine whether people view an occupation as a good career. Employment security matters to workers. In choosing a job employees look for signals that employers are committed to their employees. The form in which retirement benefits are delivered is a key way employers signal commitment.

A 401(k)-type plan pays the same amount (relative to pay) to a long-standing employee as to a recent arrival. That long-standing employees get no premium from a DC plan projects the message that the employer has a low commitment to a longstanding employee. In contrast, defined benefit pension plans – whose value increases the longer an employee stays attached to the employer (and profession) -- are highly effective tools to signal to potential employees that they care about experienced workers.<sup>11</sup>

Alaska has not been able to encourage its residents to be teachers, which signals a chronic supply problem. Three-fourths of Alaskan teachers were from out of state; in contrast, students in New Jersey and New York are attracted to the profession. These states have some of the highest-paid teachers in the nation and strong defined benefit pension plans (with retiree health benefits).

These states issued effectively no initial teaching credentials to teachers with credentials from out of their state and were able to attract their residents into the profession. Teaching is a good job in New York and New Jersey.<sup>12</sup> A large part of the attraction in New York and New Jersey for teachers are the generous DB benefits, retiree health plans, and Social Security.

## **Defined Benefit Plans Help Retain Productive Employees**

As mentioned above, retention is a key factor in increasing the productivity of teachers, public safety officers, and most other employees in public service and DB plans are key factors in increasing retention.

Teaching is a good example because the research is extensive and excellent, for a profession in which retention is an especially important factor in delivering effective education. Studies of teacher effectiveness and productivity converge on the finding that teaching effectiveness (or in the language of an economist, “productivity”) grows with teacher experience.

The key finding is that teacher productivity levels peak at about 15 – 20 years and decline after about 30-35 years. (I am using a range estimating the years of experience needed to achieve peak performance because measuring teacher effectiveness is complex. The rates of return on productivity for every year of experience – “experience -productivity profiles” -- are approximate).<sup>13</sup> Offering a retirement plan whose value peaks at 5 years is wholly inappropriate for this type of employment. A successful private company would not survive this misalignment with compensation and needs of the employer and customers.

We also have good data on public safety experience-productivity profiles.

The productivity profiles of public safety (police and fire) are similar, experience and training lead to better performance.<sup>14</sup> Police productivity is enhanced by longer-serving police officers. Rookies make mistakes. For both police and teaching decreasing turnover has enormous benefits in the form of highly productive workers, who not only deliver good teaching and policy work but who are also available to demonstrate and teach good practices to new employees.

The following quote from an experienced police officer in a guide for ‘rookies,’ illustrates the role of experience,

*Too many young police officers want to move on and up before they really have a good foundation. They think that because they have graduated from the academy and completed the field training program, they know the job. I think that most veteran officers would agree with the statement, ‘They have only begun to know the job.’ The lack of a solid foundation will come to hurt these new officers in the long run. - Paul Verrecchia, Chief of Police/Director of Public Safety at College of Charleston<sup>15</sup>*

The high benefits of retention must be weighed against the cost of a new DB plan. The cost of retention may include more pay and transition costs of switching to a defined benefit plan from the current DC plan. The benefits come from having enough and more experienced Alaskan public employees.

In short, the cost of retention with a DB plan must be weighed against the benefits of retention.<sup>16</sup> Since a DB plan helps provide experienced workers the *rate of return* of a DB benefit plan is positive productivity, lower turnover costs (more below), and workers available to train new employees.

More evidence that defined benefit plans decrease employee turnover follows. Buck Consulting Company found the cost to Alaska of converting from a DC design to a DB pension design is primarily caused by a predictable increase in job tenure and decreased turnover. Buck recognizes, with its expertise, that DB plans reduce turnover.<sup>17</sup> Reducing turnover is precisely the goal of a strategic compensation arrangement for a state needing the most efficient ways to attract and retain public safety and teaching professionals.

Economic research shows that “public trust” is a vital element of good police work. Public trust is also important in determining the quality of fire services and education. The public trust in police officers, teachers, and firefighters rises when these workers have long-standing relationships with local systems and populations. Therefore, low turnover, more experience, and longer job tenure significantly increase productivity in these professions.

The combination of pay and benefits is called the “composition of compensation” and refers to how an employer balances cash, tenure-weighted benefits – employee benefits whose value increases with years of experience, for example, vacations and DB pensions.

Aligning compensation and benefits with productivity is consistent with the principles of strategic human resource management. Integrating HR practices with overall organizational goals – in the public sector the goals are experienced employees with knowledge of Alaska and the human needs of people living there and to optimize employee pay and benefits to maximize their productivity.

Organizations strive to design compensation packages that are competitive in the labor market and tailored to the specific needs and characteristics of their workforce, special factors of the job, skill, and, importantly what the school, public health, and safety are trying to achieve. A good compensation package structure attracts, motivates, and retains the right talent, to help the employer succeed.<sup>18</sup>

Tenure-weighted benefits significantly increase tenure on the job. Conservative economists from the University of Chicago and Columbia University developed the field of “Strategic Personal Management or Strategic Human Resources.” The late Professor Edward Lazear is the economist most recently associated with this concept and he served as President George Bush’s Chair of the Council of Economic Advisors.<sup>19</sup> Lazear argued DB plans help retain workers.

Economist Stuart Dorsey and colleagues have also shown that defined-benefit pensions lead to more training, which leads to higher productivity.<sup>20</sup> Economists Stephen Woodbury and Richard Ippolito<sup>21</sup> arguing the structure of employee benefits must match the personnel goals of an organization. The DB plans help meet the goals of employers who want a low-turnover and high-commitment workplace. In contrast, if an employer wants essentially day labor (new workers every day) -- all cash -- and a form of cash which is represented by a 401(k) contribution would be the optimal composition of compensation.

In other words, the research finds a DB plan is best in a situation where an employer needs a trusted and experienced worker, in part because the kind of work the person does is not easily monitored and quality is not measured hour by hour, day by day. A DB plan pays for experience. 401(k) plans, in contrast, treat public safety workers and teachers like day laborers. Occupations requiring public trust and complex learning are occupations that need institutions that encourage experiences and low turnover.

### **Experienced Public Employees Create Spillover Benefits To Entire Economy**

Lower levels of turnover mean more experienced teachers, public safety employees, and others. An experienced public sector workforce boosts the quality – and thus the public’s perception of that quality – of Alaska’s education and public services. When more Americans, including incumbent Alaskans, view Alaska as a good place to educate children and pursue a career, Alaska’s private investment, population, and economy will grow.

In sum, DB pension plans reduce public employee turnover. More experienced public employees provide better public services. Better public services spill over to improve the economic dynamics of the state.

In Alaska, a DB plan for Alaska state employees will improve overall economic growth. DC plans for Alaska public employees likely suppress Alaskan state and regional economic growth.<sup>22</sup> The pathway of causation is that DC plans reduce public employee loyalty and productivity. This lack of trust shifts voters away from supporting resources that help boost innovation in the public sector. Also, private capital steers away from areas with low education quality.

DB plans also boost a state’s income and wealth equity. When inequality gets too high inequality can impede economic growth. The predominance of DC pension plans increases income and

wealth inequality in a region and boosts poverty rates. How do DC plans create more inequality? DC plans produce inadequate balances mostly because of cash-outs before retirement. Also, DC plans, compared to DB plans, are managed by amateur individuals choosing their own investments from a host of sometimes high-fee and high-risk options. Unsophisticated investors in DC plans garner a lower return than those who have professional money management in a DB plan. Workers with DB plans garner lower risk and fee adjusted returns on their pension dollars.

A 2023 Congressional Budget Office 2023 study<sup>23</sup> finds that between 1989 and 2019, the shift from defined benefit to defined contribution plans accounted for about 20% of the increase in inequality – measured by the Gini Coefficient. According to a 2019 Federal Reserve study<sup>24</sup> the national shift to DC plans away from DB plans was associated with the share of retirement wealth going to the bottom 50% of Americans greatly reduced.

Nations with the lowest share of seniors receiving public pension income had the highest levels of income inequality.<sup>25</sup> U.C. Berkeley researcher Nari Rhee linked public defined benefit pension plans to a more equal distribution of retirement income and defined contribution plans to more inequality. DB plans play an outsized role in securing retirement income for women and nonwhite workers.<sup>26</sup>

### **DBs Earn Higher Rates of Return Than DCs**

Moreover, reinstating a modified defined benefit plan will bring considerable savings to the Alaska Treasury because a DB dollar earns a higher rate of return than a dollar contributed to a DC plan.<sup>27</sup> DC plans earn a lower return for each dollar Alaskan taxpayers pay for public employee pensions. DB assets are pooled and professionally managed. Pooling allows for lower fees and for professional money managers to adopt an optimal portfolio. Individuals who direct their own 401(k) – type plan, pay higher fees and react idiosyncratically to market changes and asset choices. Therefore, DB plans earn a higher risk-and-fee-adjusted rate of return than an individual DC account.

### **Mistakes in Assessing the Costs of SB 88 – DB Conversion from DC to DB**

Healthcare costs will not increase under SB88. The assertion that public safety workers will early retire if a DB plan is implemented and immediately access healthcare benefits and increasing costs is wrong. Public safety workers must use their accrued HRA account funds to pay for health plan insurance premiums until they are 65 years of age and eligible for Medicare.<sup>28</sup>

Contribution costs will fall with SB88. For PERS, SB 88 replaces a 5% DCR employer contribution with a lower 4.13% DB employer contribution, and for TRS SB 88 replaces a 7% DC employer contribution with a lower 6.93% employer contribution.<sup>29</sup>

Transition costs from a DC to a DB should be discounted. The Buck report<sup>30</sup> projects “\$1.2 billion in future unfunded liability” to be paid off by 2039. The present value of that money should have been discussed, which is less than one-half of that amount, \$682.58 million.<sup>31</sup>

### **Alaska Public Employee Compensation Should Align With the Goals and Values of Alaska**

High rates of accidents and illnesses in Alaska’s prisons, high rates of school dropouts, poorly performing public transit, and other disintegrating public services conflict with the State of Alaska’s mission to provide a flourishing place for its residents to thrive and work.

Another important goal of Alaska state government is efficiency. State government is obliged to manage public goods and services with efficiency, and to get the maximum productivity for the least costs. No successful employer would keep a compensation package that did not meet its goals.

Alaska needs to change the composition of compensation for public employees in order to reduce turnover and attract committed workers. By reconfiguring pay and employee benefits Alaska can save money by lowering vacancy rates, lowering turnover, increasing productivity, and increasing the quality and quantity of public service delivery. Doing so will help Alaska deliver on the mission of providing quality public services and stop the collapse of nearly every public service agency.

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## ENDNOTES

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<sup>1</sup> Munnell et. al. (2015), Rhee and Fornia (2014).

<sup>2</sup> There are many references to shortages in Alaska public services. I refer the reader to the recent reports supporting Governor Dunleavy’s order to drop requirements for many state jobs in order to boost the number of applicants for state employment. *The Hill*, (2023).

<sup>3</sup> In public safety, the estimated annual cost of lost returns on training costs – assuming only a 1% turnover rate due to low pay and pensions – is over \$4 million. I need the citation for this fact.

<sup>4</sup> DeFeo et. al (2017).

<sup>5</sup> “The study does not include other costs/savings that may be incurred/realized by employers outside of the DB and DCR plans (e.g., costs associated with potential anti-selection issues that may arise when individuals are presented with a choice between the DB and DCR plans, or savings in recruitment and training costs due to expected higher retention under the DB plans). The study also does not assume any subsequent changes in asset allocation or investment strategy that might support a different investment return assumption. “ Buck, pg. 5, 2023.

<sup>6</sup> A turnover rate of 6% for 30,000 employees with an average annual salary of about \$69,000 per year yields an annual loss of \$124 million. Reducing the turnover by half would result in substantial savings, \$62M. 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.

<sup>7</sup> Quote from Alaska State Senator Cathy Giessel’s presentation on SB 88 on March 13, 2023, Senate Labor And Commerce Committee.

<sup>8</sup> A high school teacher, Corrine Marks, also cited the loss of defined benefits as a main reason so many teachers are leaving Alaska, she said, “I’ve had more teachers come and go just here in Juneau, which is an easy place to stay, comparatively, right? Because they have nothing holding them here.” Stremple (2021).

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<sup>9</sup> “The study does not include other costs/savings that may be incurred/realized by employers outside of the DB and DCR plans (e.g., costs associated with potential anti-selection issues that may arise when individuals are presented with a choice between the DB and DCR plans, or savings in recruitment and training costs due to expected higher retention under the DB plans). The study also does not assume any subsequent changes in asset allocation or investment strategy that might support a different investment return assumption. “ Buck, pg. 5, 2023.

10 Buck Report, 2023.

11 “DB retirement plans penalize mobility because vesting and retirement eligibility depend on in-plan service years, (Backes et al. (2016) and Costrell and Podgursky (2010). The DB plan benefits the long-stayer because an average of the final salary determines the ultimate value and lowers the benefit for workers who switch plans mid-career. Dongwoo et. al (2017).

12 Alaska Governor Dunleavy’s Education Task Force produced the Department of Education and Early Development (DEED) Teacher Recruitment and Retention and Sutcher et. al. (2019). <https://www.juneauempire.com/news/alaskas-teachers-are-leaving-at-much-higher-than-the-national-average-heres-whats-being-done-about-it/>.

13 Chingos and Peterson, (2011). Lewin et. al, (2011) and Ghilarducci (2011).

14 Owens and Bocar (2021).

15 Policy Guide. 2011. “A rookie’s guide to becoming a top cop Veterans share their best advice for new cops looking for an edge. Accessed January 10, 2024. January 18, 2011

16 Schuck and Rabe (2018).

17 Buck (2023) recognizes, with its expertise, that DB plans reduce turnover.

18 Jeffrey Pfeffer (1998)

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22 National Conference on Public Employee Retirement (2015). And an unpublished and forthcoming study by Michael Kahn at the National Council of Public Employee Retirement. Systems (NCPERS) compiled studies on the effect of DC plans on inequality.

23 Karamcheva and Perez-Zetune (2023).

24 Sabelhaus and Henriques (2019).

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26 Rhee (2023).

27 Munnell et. al. (2015). and Rhee and Fornia (2014).

28 Public safety workers must use their accrued HRA account funds to pay for health plan insurance premiums until they are 65 years of age and eligible for Medicare.

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29 Contribution costs will fall with SB88. For PERS, SB 88 replaces a 5% DCR employer contribution with a lower 4.13% DB employer contribution, and for TRS SB 88 replaces a 7% DC employer contribution with a lower 6.93% employer contribution. Cheiron 2023.

30 Buck 2023.

31  $PV = FV / (1+r)^n$ : (PV is the present value; FV is the future value (the amount to be paid); r is the discount rate per period; n is the number of periods). The present value of \$1.2 billion to be paid over 14 years at a 4% discount rate is approximately \$682.58 million.