REPORT OF THE
COMPENSATION POLICIES TASK FORCE

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Executive Summary

Few issues are as emotional or important for the fiscal health and performance of Ventura City government as the policies guiding employee compensation. As a full-service city government, the City provides a range of vital services to every resident and business. Most of those are directly provided by City employees which translates into nearly 70% of the cost of government paying for the staff who deliver those services. These professionals provide either direct front-line service to the public (such as police officers, building inspectors and wastewater treatment operators) or perform critical support services (such as accountants, computer specialists and vehicle mechanics.)

Compared to other public employees in similar jobs in our area, Ventura employees are generally paid at or below the average. Yet they generally produce outstanding results in comparison to other agencies. What concerns many citizens, however, is the perception that public agencies provide higher pay, greater job security and more generous benefits and pensions than those working in the private and non-profit sectors. Faced with deep budget cuts, they question whether Ventura can afford to continue to try to match the pay and benefits currently offered by comparable public agencies. Here are some key facts:

- Perceptions aside, Ventura city employees' salaries have generally tracked with the overall private sector labor market. During the period 2001-2008, average salaries and wages rose an average 4.37% annually compared to the overall regional labor market increase of 4.29%.

- Pension plans for Ventura employees are in line with those offered by other public agencies in California. While the 2008 commitment to provide Ventura firefighters a 3%@55 formula was locally controversial, 93% of firefighters statewide are already covered by a formula equal to or greater than that. The Ventura Police formula of 3 @50 covers more than 81% of public safety employees statewide. All remaining Ventura employee pensions are calculated using the 2@55 standard. Statewide 96% of general employees work under a formula equal or greater than that – 62% have a higher benefit formula.

- Ventura does not offer post-retirement medical benefits. A State of California compensation study showed these costly benefits are provided by 86% of the cities they surveyed.

- The most pressing issue is the rising cost of public pensions generally. Riding the dot.com and stock market booms of the last fifteen years provided a windfall for public agencies and enabled CalPERS (the State plan covering most public employees in California) to offer enhanced pension formulas. CalPERS projects that by 2016, total pension contributions will rise to 30% of salary for general employees and 46% for public safety employees.

- While such costs do not appear to be sustainable, these pension formulas are "vested" for all existing employees. Reducing the adverse impact on public services will require greater cost sharing with employees, the introduction of a lower tier for new hires and/or the replacement of current plans through negotiation with current employees.

The Task Force, made up of Councilmembers, knowledgeable citizens and City employees, took a hard look at these realities and challenges. The Task Force did not come to conclusions or make recommendations. Instead, this report outlines some agreed on facts and lays out differing perspectives and alternatives for the City Council and community to consider going forward.

While not coming to agreement on new recommendations, the Task Force unanimously affirmed the Council's current Compensation Policies. This reflected recognition that in recent years the Council has clearly adopted new efforts to keep public pay and benefits more closely in line with the private and non-profit sector labor markets. For example, the Policies state:

> The City's practice is to compensate staff in accordance with the City's financial condition. The City will seek to keep staffing levels and compensation at levels that can be sustained within fiscally prudent projections of revenue capacity and adequate operating contingency reserves. To ensure that the labor pool is broadened to allow Ventura to compete despite the high cost of living and housing in the area, job postings and recruitment efforts will be broadened to encourage applicants from the non-profit and private sectors to apply and receive serious consideration based on talent and potential to effectively perform essential job functions rather than be evaluated primarily on skills and experience that are solely acquired in local government employment.

While generally affirming the City's approach to regular pay and benefit, the Task Force spent considerable time on the growing concerns over the costs of CalPERS pensions.

This again is not unique to Ventura. There is growing national concern about the ability of the national economy and local tax bases to meet the growing pension obligations taken on by the public sector. The exceptional investment performance of CalPERS over the previous thirty years led to higher pension formulas that may not be sustainable over the next thirty years. Ventura must face this looming challenge.

Opinions diverge on the gravity and urgency of the challenge – and what steps Ventura should take to address it. However, given the faltering performance returns of CalPERS in recent years due to the international economic crisis, the projections of CalPERS and independent analysts point to steadily rising pension costs. This will force ever more difficult choices about our ability to deliver quality services to the community.

What is also clear, however, is that the pension commitments made to current employees cannot be unilaterally altered or reduced. That provides few short-term alternatives to rising pension costs. Savings from any new approach to pensions will only come from newly hired future employees – at a time when local government is shrinking and there are very few new hires. There is opportunity for employees to help pay for the rising costs of pension commitments – but that can only be done through collective bargaining for the vast majority of Ventura employees who are represented by unions.

The Task Force hopes and believes that the Council and the community would benefit from a much fuller understanding of the facts and perspectives on employee compensation. Additional study and analysis are required. Emotion and exaggeration stand in the way of sensible solutions. We hope our report begins to provide needed background for future policy and decision-making.

Introduction

If there was a general consensus of the Task Force, it was that City of Ventura employees are hard working, dedicated and doing a tremendous job despite shrinking resources. While the public may complain about abuses in the government sector in general, Ventura's employees are not overpaid compared to other public agencies. While current pension benefits differ from those generally offered in the private sector, they are in line with those offered statewide by public agencies and have not been subject to the abuses reported elsewhere. The issues addressed about employees manipulating an "enhanced salary base" simply do not exist in Ventura. Furthermore, Ventura's pension systems do not have health insurance as a component, which has been perceived as a problem for other agencies.

The City Council directed the Task Force to review the City's policies for establishing competitive and sustainable salary and benefits, particularly retirement benefits. The Task Force focused on exploring facts and differing perspectives on these issues. The Task Force did not look at specific salaries and benefits or how to calculate what those benefits cost. That is the job of the City Council.

This report is NOT a result of negotiations with City unions. While all of the City unions are represented on the Task Force, there has been no attempt to have any of them set positions that would bind them in negotiations.

Background

Enduring the most severe economic reckoning since the Great Depression, the City of Ventura faces stark choices. We are not alone – the State of California faces a seemingly insoluble fiscal deficit, which it has repeatedly sought to lessen by diverting funds from local government. Virtually every city, county and school district in California has had to tighten its belt. Many cities, large and small, have confronted wrenching crises -- sparking deep cutbacks, union concessions and even, in the case of Vallejo, resort to bankruptcy courts.

Rather than drift into such dire straits, since March 2008, the City of Ventura has been pro-active in pursuit of "living within our means." At that time, we first undertook immediate cost-cutting strategies. In the fall of 2008, the City Council adopted a set of Operating Principles (attached) that guided a fundamental overhaul of our budget. Using our "Budgeting for Outcomes" process, General Fund expenses were reduced for Fiscal Year 2009/10 General Fund budget by $11 million (from $96 to $85 million.) Subsequently, the City Manager and Chief Financial Officer have identified the need to reduce spending by another $4 million, primarily due to steeper revenue declines.

In the year ahead, revenue projections do not offer prospect of improvement. Jay Panzica, the City's Chief Financial Officer, has made us aware of the fact that our sources of revenue are continuing to decline, with the latest forecast predicting General Fund revenue of just under $81 million for the next two years. This is going to require further hard choices that include further reduction of services; continuation of the voluntary reductions in pay taken by all city employees; and/or reinventing services to reduce costs.

Because nearly two-thirds of our General Fund expenses go for the personnel costs of delivering services, the City Council clearly identified the importance of re-examining our staffing levels and compensation costs. The City Manager proposed and achieved a reduction in payroll costs of at

least 5% over the 15 months that included the final quarter of FY 2008/9 and the entire FY 2009/10 budget year. This was supported by the City's eight union bargaining units and is currently in effect.

Forty jobs were eliminated (out of approximately 650) in this year's budget and another 40 have been left vacant to hold down costs this year. The City has significantly fewer employees today than it did twenty years ago, when Ventura had both a smaller population and far fewer State and Federal mandated responsibilities, such as storm water clean up and compliance with the Americans With Disabilities Act.

In July 2009, the Council voted to set up a Compensation Policies Task Force to "collaboratively address the challenge of maintaining both sustainable and competitive wages in difficult times." The Task Force mission from the City Council covered three specific issues and challenges:

- Re-examining how to determine "competitive" compensation levels
- Reducing the rising cost of retiree pensions
- Seeking a feasible method for adjusting compensation during recessions

The Task Force, made up of public members, City Council members and the City's union and non-union employee representatives began meeting September 8 and held public meetings through March 16th of this year.

Not surprisingly, the Task Force began with expressions of widely diverging viewpoints, reflecting our community's diversity. Some from the Council and public members started from the perspective that public employee compensation has outpaced pay and benefits in the private sector and must be scaled back, particularly in the area of pensions. The employee representatives questioned these assumptions and noted that Ventura has consistently lagged other public agencies in compensation. It was important to undertake a full-scale review of the key issues of compensation and pension plans to better understand the "problems" before turning to solutions.

Compensation: Re-Examining "Competitive" Formulas

The issue of compensation is an emotional one, particularly in this economic downturn. Wall Street bonuses and CEO salaries have dominated headlines. Public employee compensation has also been a focus of renewed attention, particularly here in California, given the State's fiscal situation and the widely publicized problems of several local governments.

Public attitudes toward public employees color any thoughtful examination of the City's compensation policies.

In the wake of a major fire, "Thank you firefighters!" hand-lettered signs and spray-painted sheets proliferate on our hillsides. While code enforcement inspectors and motorcycle cops may not be beloved, there is recognition by many that public employees fulfill important jobs serving our communities. But in these times of deep economic distress, the relative security and pay policies of the public sector provoke fierce resentment against virtually any public sector employees and especially the unions that represent them.

It is often difficult to distinguish the situation in Ventura from the much larger debate over government going on in our State and nation. But it is important to separate reality from perception.

Fact-finding

To put the compensation issue in perspective in the City of Ventura, the Task Force embarked on fact-finding about the City's pay, benefits and pensions. Here are some of the key findings:

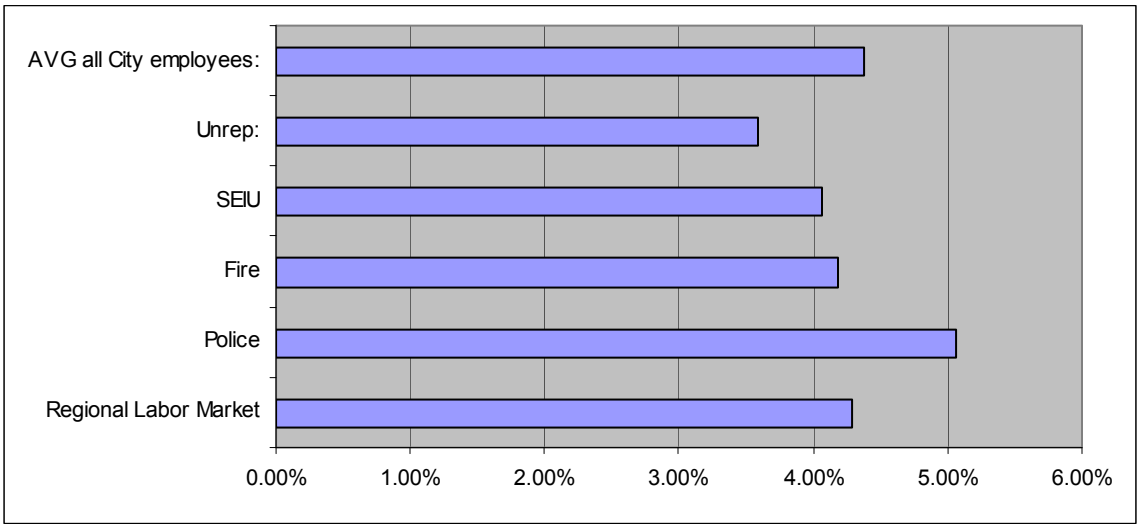
1. Pay and benefits: Relative to comparable cities (both nearby and cities of similar size throughout California), pay, benefits and pensions for the City of Ventura tend to be average to below average. This is true across the board. In fact, although the City's current compensation policies seek generally an "average" compensation package relative to comparable cities, pay, benefits and pensions usually lag other agencies.

2. Medical benefits: Unlike most public and many private employers, the City of Ventura has not significantly raised its contribution to employee medical benefits despite significant annual premium increases. The City's contribution toward employees' health benefits varies by bargaining unit. On average the monthly City contribution is only $638. Family coverage for our two lowest cost HMO options start at $935 a month. Preferred provider plans average 50-90% higher than the HMO options. In no instance can an employee currently cover himself or herself and another dependent or a full family with the City's contribution towards health benefits.

3. Post-retirement medical benefits: This is one of the fastest growing liabilities facing government agencies in California. The City of Ventura does not and never has offered post-retirement employee health care coverage. According to a massive study done by a commission set up by Governor Schwarzenegger, these benefits are offered by 86% of the cities they surveyed.

4. Private sector comparison: There are no strict "apples to apples" comparisons between City of Ventura compensation levels and the larger workforce. As a rough guide for the last decade, the regional labor market of all occupations rose 4.29% annually from 2001-2008. The average change in wages for various City of Ventura employee units during the same period was as follows:

Regional Labor Market	**4.29%**
Police	**5.06%**
Fire	**4.19%**
SEIU	**4.07%**
Unrepresented	**3.59%**
AVG all City employees:	**4.37%**

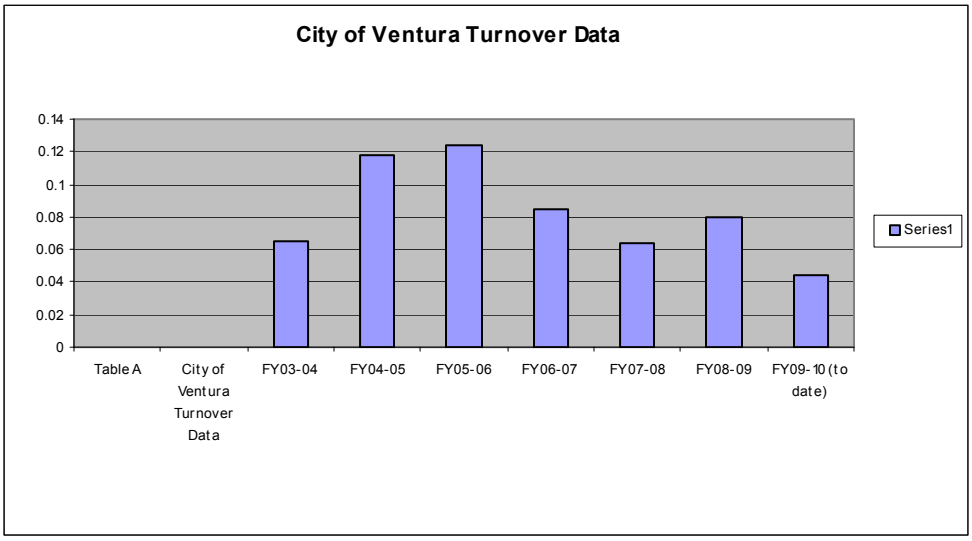


5. Retention and attraction: The City of Ventura strives to provide an excellent level of services to the community. Although not the only factors, competitive salaries and benefits are major factors in attracting and retaining high quality staff. This is particularly important in those jobs where specific qualifications or credentials are legally required.

6. Turn-over rates: Employee loss to other jobs (or retirement) from Ventura have generally tracked with the economy, rising significantly prior to the current recession and falling in the current labor market (see Table A.)

Table A

FY 03-04	**6.55%**
FY 04-05	**11.84%**
FY 05-06	**12.41%**
FY 06-07	**8.52%**
FY 07-08	**6.39%**
FY 08-09	**7.99%**
FY 09-10 (to date)	**4.42%**



These and other facts do not, however, conclusively address the question of what is the labor market for Ventura city employees. Our current Compensation Policies stress the need to be "fiscally prudent":

- The City's practice is to compensate staff in accordance with the City's financial condition. The City will seek to keep staffing levels and compensation at levels that can be sustained within fiscally prudent projections of revenue capacity and adequate operating contingency reserves.

Given the magnitude of reductions in ongoing city revenues, the City Council faces hard choices about how to balance service and staff reductions against adjustments in current compensation. The current labor market is characterized by levels of unemployment and underemployment that are unprecedented in the lives of current workers. How long this will persist in unknown and unknowable, but mainstream economists forecast an extended period of weak demand for labor. Concerns about retention are upended in this situation: far fewer workers will be tempted to leave current jobs and far fewer jobs will be available. Although Ventura city

unions cooperated in agreeing to 5% or greater temporary reduction in compensation, their willingness to accept ongoing reductions is open to question – and collective bargaining. Pay cuts obviously affect morale and are a threat to long-term competitiveness. Yet the availability of lower cost labor through new hires; contracting out; or non-regular employees will call into question the cost-effectiveness of our current compensation levels.

Part of the answer may lie in looking more broadly at retention and employee satisfaction considerations beyond compensation. Our current Compensation Guidelines (which is included in this Report as Attachment One) already stress this:

- The City's compensation program should ensure that the City has the ability to compete for the highest quality of talents and skills available, recognizing that our strongest competitive advantages will not be the highest pay, but rather a combination of competitive compensation, fiscal stability, training opportunities, an empowered and positive work environment, career growth potential and high morale based on our core values and ethical principles.

An additional important consideration is that Ventura is a desirable place to live and work.

City Manager Rick Cole provided the Task Force a comprehensive overview of an organizational vision that builds on the city's "People Strategy" that was developed when turn-over was undermining our ability to retain outstanding performers. Although the labor market has changed, he warned that "We cannot decouple ourselves from a competitive marketplace – but we can distinguish ourselves within it." He cited such hallmarks of "an empowered and positive work environment" as pride in work, opportunity to make a difference, family-friendly workplace, flexibility and innovation.

The Task Force members supported strengthening Ventura's attractiveness as an "employer of choice" based on a positive culture beyond financial rewards. Patagonia, one of Ventura's largest private employers, is often cited as an example of a great place to work, based on its distinctive work environment. Translating this to the public sector would build on the City's existing efforts to encourage wellness, offer flex time schedules, promote career development and other "People Strategy" elements. More than a laundry list of specifics, however, the City, from its citizens, to its staff, to the Council, would establish a mentality of nurturing and developing its employees.. It was acknowledged that such a strategic and comprehensive effort would take planning, time, sensitivity, and concentration with a focus on building a superior reputation of the City of Ventura being a great place to work without reference to compensation.

Task Force Perspectives on Re-Examining "Competitive" Formulas

Some on the Task Force believe that the City, and ultimately government at all levels, must follow the lead of private industry and promote a far more fluid approach to "competitive compensation" based on what talent is available in the labor market at any given time.

Others on the Task Force believe that this underestimates the importance of skills, qualifications and credentials possessed in many specialized jobs in local government and undermines the stability and morale of an organization built around long-term retention of staff.

Ultimately, the members of the Task Force voted unanimously for retaining the City's current compensation policy, including the overall goal of attracting a quality work force through "a combination of competitive compensation, fiscal stability, training opportunities, an empowered and positive work environment, career growth potential and high morale based on our core values and ethical principles." To implement the broad intent of those policies to look beyond purely monetary formulas the Council should direct staff to collect and analyze data that would, to the extent feasible, give better measurements of the consequences of the decisions made under those guidelines. For example, the Council may want staff to collect concrete data that shows how Ventura compares to its listed Labor Markets on issues in addition to overall compensation and benefits such as retention over periods of time, ability to attract lateral hires.

Pensions: Protecting Existing Obligations and Reducing Long Term Costs

For nearly 80 years, California State and local governments have offered "defined benefit" retirement plans to their employees, which provide a guaranteed annual pension based upon retirement age, years of service and the retiree's salary level. But public focus has recently centered on these pensions due to a convergence of the downturn in the economy; enhancements to those plans in recent years; longer life spans; and the near disappearance of such "defined benefit" pensions from private sector employment.

Retirement benefits for Ventura city employees are offered through the California Public Employees' Retirement System (CalPERS) which holds more than $200 billion in assets. Currently, 4.1 million Californians — 11 percent of the population — participate in one of the public employee pension systems, including around one million who currently receive benefit

payments. Most of these are part of either CalPERS or the State Teachers' Retirement System (STRS.) The plans offered by these huge agencies generally provide an annual cost-of-living adjustment to maintain purchasing power over time.

Ventura's provides retirement benefits under three formulas: 3% at 50 for sworn police personnel; 2% at 50 for Firefighters (scheduled to go to 3% at 55 on July 1, 2010) and 2% at 55 for all other full-time employees. This allows a police officer to retire at the maximum benefit of 90% of their pay (defined by the single highest one-year of earnings, not including overtime) after age 50 if they have at least 30 years of service. Firefighters also have a maximum initial pension of 90% of their highest year of earnings, but would have to work until after age 55 to achieve it with at least 30 years of service. Other staff reaching at least 30 years of service at age 55 could retire with 60% of their highest year of earnings.

How does Ventura's formulas compare to other public agencies? Of those covered by CalPERS, 81% of statewide public safety employees are covered by the same formula as Ventura's Police. For our firefighters, 99% of statewide public safety employees have an equal or higher formula than the current one offered by Ventura and 93% are covered by a formula equal to or better than the enhancement scheduled for July 1. Of non-safety employees covered by CalPERS, 96% of statewide general employees are covered by the 2 @ 55% formula or higher (62% are covered by higher formulas.) It is important to note several facts regarding these plans:

1. PERS Employer contribution rates: Ventura currently contributes 9.266% of salary for Miscellaneous employees and 29.306% for Safety employees. Rates will increase in FY 10/11 to 10.309% for Misc. and decrease to 28.721% for Safety. Excluding any changes in benefits, rates will increase in FY 11/12 to 12.0% for Misc. and 31.0% for Safety.

2. Pension costs: While future contributions to employee pensions are currently high and rising, over time these rates have varied greatly. (Ventura's history of pension contribution rates is attached.) In retrospect, when contribution rates were low, it would have been more prudent for cities to have anticipated higher rates and put aside operating reserves accordingly.

3. City bears cost: Ventura, as with most cities, also pays the employees' share of the Defined Benefit Contribution Program costs (except for Fire Management staff who pay their own

share.) This came as a negotiated benefit in lieu of salary increases.

4. Rates to rise: It is anticipated that PERS Employer contribution rates will continue to increase over the next three years with a leveling off of rates going forward from there.

5. Ventura employees not covered by Social Security: As public pensions traditionally have been an alternative for retirement security, neither the City nor its employees participate and pay into the Social Security system.

6. Firefighter pensions: Ventura's current firefighter pension formula remains below that of every single other department our size or larger in the entire State of California. Moving from the 2% @ 50 to 3% @ 55 formula for Ventura firefighters was originally ratified by a 4-3 Council vote in August 2008. Implementation was originally scheduled for July 2009, but as part of the budget-balancing concessions made by all unions and unrepresented staff, this was postponed another year, until July 2010. The first-year cost of this change was to be 5.2 per cent of salary or $573,000.

7. Average pensions: While public attention has been focused on long-time managers retiring with six figure pensions, the average current pension of Ventura is for all of Ventura's police and fire retirees is $38,131 a year. The average civilian pension is $14,391. This number, however, will continue to rise as future retirees end their service at higher salaries and in some cases with retirement benefits calculated at higher multiples than those already retired.

8. Pension liability: CalPERS holds more than $312 million in assets to cover the City of Ventura’s future pension liabilities. The total liabilities are estimated at approximately $48 million more.

9. Defined Benefit vs. Defined Contribution Retirement Options: Defined Benefit programs are becoming increasingly less sustainable and are an issue of statewide concern and reform effort. Defined Benefit Retirement Programs require the employer to assume all risk. Defined Contribution Retirement Programs are not necessarily less beneficial for the employee,

however under Defined Contribution Retirement programs it is the employee who bears the risk on the ultimate value of the retirement benefit. This risk can be mitigated by annuities that guarantee a base return on the money invested.

Over the years, local and State government retirement costs have risen and fallen based on two principal factors: (1) the investment returns of the various systems; and (2) the level of benefit payments provided to employees.

Over decades, CalPERS has justified its 7.75% future earnings assumptions. But this robust return is based on a long boom in the United States economy, riding out recessions and coming back stronger. Currently, both CalPERS and the State teacher pension system CalSTRS are re-examining that assumption and may revise it downward later this year. The last two stock market booms have been characterized as bubbles. The explosive growth of the "dot.com" bubble so inflated CalPERS returns that in the year 2000, the employer contribution rate for pensions dropped to 0%.

As that boom was peaking in 1999, the California Legislature enacted dramatic benefit enhancement options for State and local employers. These enhanced plans spread rapidly, quite often by way of the collective bargaining process, typically to retain employees and at times, at a shared cost with the employees. When the retirement systems suffered serious investment losses in the early part of this decade, these losses combined with the benefit enhancements to cause dramatic increases in employer contribution rates.

These losses led to calls for pension reform at the time, but those concerns were muted by the recovery of markets and a return to robust CalPERS investment earnings. But the stock market crash in 2008 wiped out a quarter of the CalPERS investment fund. While some of those losses have since been recouped, the depth of that loss will force CalPERS to increase member rates in the years ahead. Ron Seeling, the CalPERS Chief Actuary, has warned that total pension costs may rise to 25 percent of pay for non-safety employees and 40 to 50 percent for police and firefighters and are "unsustainable" at such levels.

With little prospect of either major new sources of revenue, nor rapid growth in existing revenues, Ventura is among those "full service" cities most directly affected (in the case of newer cities, many services are provided either by contract with public or private entities or are separately provided by special districts insulating those cities from directly paying for increased personnel pension costs, e.g. Thousand Oaks contracts for police services

with the Ventura County Sheriff and fire as well as parks and recreation services are provided by special districts.) In the absence of robust revenue growth, funding the expected increase in pension costs would have to come from offsetting service and staffing reductions.

Carrying the cost of these obligations is the primary reason that over the past two decades, defined benefit pensions have become increasingly rare in the private sector. The great majority of private employers offer "defined contribution" plans where the employer contribution is a fixed dollar amount and the benefits are based on contributions and investment earnings. Given their structure and limitations (per IRS regulations), these defined contribution plans put the great majority of investment planning and market risk on the employee. Each individual is tasked with building sufficient retirement assets to provide for their need (and those of immediate family members) after retirement. In periods of high market volatility, investors suffer the consequences of market losses in contrast with those with defined benefit pension plans. Another advantage of Defined Benefit plans to employees are the lower fees based on the pooling of all investments. However, there exists an increasingly vocal sentiment that State and local government workers should not be entitled to pension plans that deliver more reliable retirement income than is available to the majority of taxpayers. (A more detailed comparison and analysis of "defined benefit" and "defined contribution" retirement plans is provided later in this report.)

While full-service cities like Ventura are particularly vulnerable to rising pension costs, the problem is of statewide concern. However, there has been little legislative activity aimed at statewide pension reform in the past five years. Although a number of ballot measures have been proposed, none has yet gone before the voters. One such proposal was the Public Benefits Reform Act, which was filed with the California Attorney General but did not qualify for the ballot. It would have limited public Defined Benefit Plans at various levels from 1.8% (for non-safety) to 2.3% (for police and fire) of the last three years average salary, with a maximum of 75% of that average and the age of retirement at various levels from 58 to 67. In the absence of statewide action on the issue, a number of regional city manager groups have called for reform at the regional level, with cities joining together to embrace common principles and in some cases specific formulas for pension reform. While there has been talk of such an effort in Ventura County, none has yet gone forward.

Unfortunately, the Task Force found there is no simple answer to the pension cost challenge at the local level:

1. Courts have consistently ruled that existing pensions are "vested" and cannot be retroactively reduced. Thus, without the agreement of employees supported by adequate consideration

pension obligations for existing retirees and current employees cannot be reduced. Reductions in benefit formulas can only be applied to future employees and with little prospect of adding many new employees in a weak economy, short-term savings through benefit reductions are not achievable.

2. If a move away from "defined benefit" to a strictly "defined contribution" formulas were adopted, the City of Ventura would have to opt out of CalPERS for its current employees, forcing an unprecedented and potentially costly withdrawal. At the request of the Task Force, staff requested that CalPERS provide a cost analysis for withdrawing from the system. CalPERS estimates this will be available in September.

3. Creating a two-tier pension plan with a lower benefit level under a "defined contribution" plan provides relatively modest cost savings over even a long time horizon and could make Ventura less competitive in filling new jobs.

For these reasons, the Task Force points to the efforts of statewide and regional reform. The League of California Cities has prepared a policy paper with both guiding principles and specific recommendations (Attachment Two to this Report.) Recognizing that statewide reform may not be feasible or forthcoming under current conditions, a number of regional City Manager groups have undertaken to tackle these challenges, primarily at the County level, including San Mateo County (Attachment Three to this Report), Marin County and San Diego County. City Managers in Ventura have begun such discussions. The goal would be to ensure that reform does not put individual jurisdictions at a competitive disadvantage.

Comparison of Defined Benefit Vs Defined Contribution

Many on the Task Force were not persuaded of the need to even consider the City of Ventura departing from the time-tested CalPERS Defined Benefit approach to public retirement benefits common to virtually every public agency in California. They believe that the group favoring Defined Contribution Plans simply do not have sufficient data to come to that conclusion. However, in the interest of providing a better understanding of the two approaches, Task Force Co-Vice Chair Bart Bleuel used the charge given the Task Force as the basis for comparing and contrasting Defined Benefit and Defined Contribution plans. Task Force Co-Vice Chair Randy Hinton provided a hypothetical example of how a defined contribution plan might actually outperform a defined benefit plan. Several on the Task Force object to including in this report scenarios that have not been subjected to

rigorous actuarial scrutiny, particularly since such rigorous scrutiny of actuarial assumptions is one area on which all members of the Task Force are in agreement.

Task Force Perspectives on Protecting Existing Obligations and Reducing Long Term Costs

Some on the Task Force believe that the City, and ultimately government at all levels, must follow the lead of private industry and divest itself of Defined Benefit Plans. Under the current structure this may be very difficult, if not impossible, if the CalPERS price for doing that is prohibitively high. Those of this belief would encourage the Council to do what it can to reduce to the extent possible the effects of DB Plans, and to lobby for a statewide solution to eliminate them in any community desiring to do so. These folks contend that DB Plans worked when times were different. In today's environment of higher compensation ratios, younger retirement ages and longer life expectancies, DB Plans have become prohibitively expensive – unsustainable. This perspective is spelled out in a recent report from the Pacific Research Institute "Pension Intervention: Reforming California's Employees Public Retirement System". See Attachment Twelve.

Others on the Task Force believe that this solution is either too drastic, and/or is based on insufficient data. They point out that the individually-managed DC plans may have higher fees and that some pension studies have shown that individual plans tend to have lower returns due to a lack of sustained attention and professional support regarding the allocation of investments. They believe that the group favoring DC Plans simply do not have sufficient data to come to the conclusion that DB plans should be replaced. It would require a much more thorough and rigorous financial, actuarial and legal analysis to assess whether and how a Defined Contribution or hybrid approach could be negotiated and implemented -- or whether a good balance could be reached in the DB Plan arena without the draconian dumping of Defined Benefit Plans as the continuing standard. Such an undertaking is beyond the means and scope of this Task Force. These perspectives are outlined in greater detail in Attachments 5, 7, 10 and 11 from the Ventura Police Officers Association, the Ventura Fire Management Association, and the Ventura Police Management Association (Wharton Report and A Better Bang for the Buck Report).

Still others on the Task Force believe that this is an inappropriate forum to make recommendations, one way or another, but rather those decisions should be handled through the collective bargaining process.

ATTACHMENT ONE:
CITY COUNCIL COMPENSATION GUIDELINES AND INTERESTS

INTRODUCTION

The City's compensation program should be designed to attract and retain a talented and skilled staff dedicated to the highest standards of public service. It should foster a team concept within the organization, recognizing the importance of a satisfied, productive, and cohesive workforce. In implementing this program, the following guidelines will be considered, based upon the financial capacity of the City.

COMPENSATION PHILOSOPHY

The City's compensation philosophy and interest is to establish and maintain a compensation structure designed to be both competitive and fair. Structures and ranges will be reviewed and updated as necessary based on an evaluation of the City's ability to pay, relevant market place survey data, internal relationships, and equity among various groups of employees.

In setting salaries and benefits, the collective bargaining process will be used to meet and confer with recognized represented employee groups.

IMPLEMENTATION

The City's compensation program will be implemented in accordance with the following guidelines:

1. FISCALLY PRUDENT

The City's practice is to compensate staff in accordance with the City's financial condition. The City will seek to keep staffing levels and compensation at levels that can be sustained within fiscally prudent projections of revenue capacity and adequate operating contingency reserves.

2. ATTRACT AND RETAIN QUALITY EMPLOYEES

The City's compensation program should ensure that the City has the ability to compete for the highest quality of talents and skills available, recognizing that our strongest competitive advantages will not be the highest pay, but rather a combination of competitive compensation, fiscal stability, training opportunities, an empowered and positive work environment, career growth potential and high morale based on our core values and ethical principles.

To ensure that the labor pool is broadened to allow Ventura to compete despite the high cost of living and housing in the area, job postings and recruitment efforts will be broadened to encourage applicants from the non-profit and private sectors to apply and receive serious consideration based on talent and potential to effectively perform essential job functions rather than be evaluated primarily on skills and experience that are solely acquired in local government employment.

3. LABOR MARKET

The City's practice is to survey appropriate comparable organizations in relevant labor markets in all sectors that include public, private and non-profit:

A. Relevant government agencies include:

- **City of Camarillo**
- **City of Oxnard**
- **City of Santa Barbara**
- **City of Simi Valley**
- **City of Thousand Oaks**
- **Ventura County**
- **Appropriate special districts**

B. Relevant private and not-profit Ventura County organizations where comparable job classes exist.

C. For jobs where local government experience is a significant advantage, the regional market of Southern California cities that are similar to Ventura in population, service structure, and complexity.

D. For those jobs, particularly in certain management roles, where local government experience is essential, the statewide market of cities that are similar to Ventura in population, service structure and complexity.

4. COMPETITIVE POSITION

If fiscally prudent it is the City's objective to compensate employees at rates generally consistent with the middle of the labor market as measured by the combination of the mean and the median.

A. For labor, trades, general and confidential units, the primary market will include the local labor market.

B. For fire and police units, the primary market will include the local labor market.

C. For supervisory and professional unit the market will include both the local labor market and the regional market.

D. For management and executive units, the market will include the local labor market, the regional market, and the statewide market.

E. In addition to the labor market survey data referenced above, in order to address unique compensation concerns, the City and/or recognized employee representatives may, at their discretion, collect and present supplemental market survey data in the context of the meet and confer process.

5. MEASUREMENT OF COMPETITIVE POSITION

Competitive position will be calculated utilizing total cash compensation which includes base salary plus cash add-ons to base salary including PERS pick-up, incentive pay, optional benefit, deferred compensation, etc. In addition, the City will also consider health and retirement benefits, leave benefits, and reimbursement policies.

6. INTERNAL ALIGNMENT

A. Consideration will be given to both labor market survey data and internal relationships in establishing salary ranges. When establishing internal relationships, priority will be given to:

B. Appropriate differential between superior and subordinate classes

C. Appropriate differentials among classes in the same class series (i.e. planning)

D. Relationships among related class series (e.g., planning, inspection services, and engineering)

E. Relationships across unrelated class series.

7. MIX OF BASE SALARY, TOTAL CASH AND BENEFITS

The City's practice is to provide a mix of base salary, total cash and benefits that is generally competitive with the labor market. When

evaluating benefits, the City will consider both the cost and the content of the benefits.

8. PAY ADMINISTRATION

Individual compensation adjustments within the salary range for executive, management, supervisory and professional employees will be based on (1) fiscal prudence (2) performance, and (3) pay structure adjustments. Compensation adjustments for represented employees and confidential employees will be made in accordance with the appropriate memorandum of understanding and/or salary resolution.

9. COLLECTIVE BARGAINING

The City's practice is to honor the integrity of the collective bargaining process through good faith negotiations. It is understood that these negotiations will take place exclusively through the recognized representatives of the City and the representatives of the appropriate bargaining unit.

10. SHARING OF COMPENSATION SURVEY INFORMATION

Consistent with the City's commitment to an open and collaborative relationship with employees, the compensation survey data collected pursuant to this program will be shared with unrepresented employees, or the appropriate recognized employee representatives.

11-97: new policy
01-17-01: Deleted City of Escondido from labor market
04-04-06: Revised policy to include appropriate private and non-profit comparisons where applicable

f/salary Issues/Salary/Coun-Comp-Policy/04-06 Comp Policy.doc

LABOR MARKETS

January 17, 2001
SUPPLEMENT TO
CITY COUNCIL COMPENSATION GUIDELINES AND INTERESTS

LABOR, TRADES, GENERAL, CONFIDENTIAL UNITS

CITY OF CAMARILLO
CITY OF OXNARD
CITY OF SANTA BARBARA
CITY OF SIMI VALLEY
CITY OF THOUSAND OAKS
SANTA BARBARA COUNTY
VENTURA COUNTY

CONEJO VALLEY PARKS AND RECREATION DISTRICT
PLEASANT VALLEY RECREATION AND PARK DISTRICT
CASITAS MUNICIPAL WATER DISTRICT
LAS VIRGENES MWD
VENTURA COUNTY REGIONAL SANITATION DISTRICT

FIRE UNIT

CITY OF OXNARD
CITY OF SANTA BARBARA
SANTA BARBARA COUNTY
VENTURA COUNTY

POLICE UNIT

CITY OF OXNARD
CITY OF SANTA BARBARA
CITY OF SIMI VALLEY
SANTA BARBARA COUNTY
VENTURA COUNTY

LABOR MARKETS

January 17, 2001
PAGE 2

SUPERVISORY-ADMINISTRATIVE-PROFESSIONAL UNIT and MANAGEMENT UNIT

CITY OF CAMARILLO
CITY OF OXNARD
CITY OF SANTA BARBARA
CITY OF SIMI VALLEY
CITY OF THOUSAND OAKS
SANTA BARBARA COUNTY
VENTURA COUNTY

CONEJO VALLEY PARKS AND RECREATION DISTRICT
PLEASANT VALLEY RECREATION AND PARK DISTRICT
CASITAS MUNICIPAL WATER DISTRICT
LAS VIRGENES MWD
VENTURA COUNTY REGIONAL SANITATION DISTRICT

CITY OF BURBANK
CITY OF COSTA MESA
CITY OF IRVINE
CITY OF REDONDO BEACH
CITY OF SANTA MONICA
CITY OF CARLSBAD
CITY OF NEWPORT BEACH

LABOR MARKETS

January 17, 2001
PAGE 3

EXECUTIVE UNIT

CITY OF CAMARILLO
CITY OF OXNARD
CITY OF SANTA BARBARA
CITY OF SIMI VALLEY
CITY OF THOUSAND OAKS
SANTA BARBARA COUNTY
VENTURA COUNTY

CONEJO VALLEY PARKS AND RECREATION DISTRICT
PLEASANT VALLEY RECREATION AND PARK DISTRICT
CASITAS MUNICIPAL WATER DISTRICT
LAS VIRGENES MWD
VENTURA COUNTY REGIONAL SANITATION DISTRICT

CITY OF BURBANK
CITY OF COSTA MESA
CITY OF IRVINE
CITY OF REDONDO BEACH
CITY OF SANTA MONICA
CITY OF CARLSBAD
CITY OF NEWPORT BEACH

CITY OF PALO ALTO
CITY OF SAN MATEO
CITY OF SUNNYVALE
CITY OF CONCORD
CITY OF WALNUT CREEK

01-17-01Deleted City of Escondido

ATTACHMENT TWO:
DRAFT CALIFORNIA LEAGUE OF CITIES PENSION REFORM PRINCIPLES (NOVEMBER 2009)

- The primary goal of a public pension program should be to provide a full-career employee with pension benefits which when combined with private savings maintain the employee's standard of living in retirement.

- The proper level of public pension benefits should be set with the goal of providing a fair and adequate benefit for employees and fiscally sustainable contributions for employers and the taxpayers. The practice of employers picking up the employee contributions should become the exception versus the normal protocol, so that investment risks are equitably shared.

- Public pension benefits should be supported with proper actuarial work to justify pension levels. The Legislature and cities should reject any and all attempts to establish pension benefits that bear no relation to proper actuarial assumptions and work.

- Pension benefits should be viewed in the context of an overall compensation structure whose goal is the recruitment and retention of qualified employees in public sector jobs. In recognition of competitive market forces, any change in the structure of retirement benefits must be evaluated in concert with other adjustments in compensation necessary to continue to attract and retain an experienced and qualified workforce.

- The reciprocity of pension benefits within the public sector should be maintained to ensure recruitment and retention of skilled public employees, particularly in light of the retirement of the post World War II "Baby Boom" generation, which will result in unprecedented demand for public sector employees.

- Perceived abuses of the current defined benefit retirement programs need to be addressed. Benefit plans, which result in retirement benefits that exceed the levels established as appropriate to maintain employees' standard of living, should be reformed. It is in the interest of all public employees, employers, and taxpayers that retirement programs are fair, economically sustainable, and provide for adequate benefits for all career public employees, without providing excessive benefits for a select few.

- The obligation to properly manage public pension systems is a fiduciary responsibility that is shared by CalPERS, employers, and employees. This joint responsibility is necessary to provide quality services while ensuring long-term fiscal stability. These parties need to be held responsible to ensure a high level of protection against mismanagement of public resources that could jeopardize a community's ability to maintain services and provide fair compensation for its workforce.

- Charter cities with independent pension systems should retain the constitutional discretion to manage and fund such pension plans.

Principles: Public pension benefit plans in combination with private savings should:

- Allow career employees to maintain their standard of living post-retirement.

- Be designed with consideration of age at retirement, length of service, compensation level, and applicability of Social Security.

- Be supported with proper actuarial work to justify pension levels. The Legislature and cities should reject any and all attempts to establish pension benefits that bear no relation to proper actuarial assumptions and work.

Recommendations

- Maintain the defined benefit plan as the central pension plan for public employees in California.

- Rollback/repeal public retirement plans that provide benefits in excess of levels required to maintain a fair, standard of living[1] that are not financially sustainable and may have no actuarial justification to pre-1999 levels for new hires after a date certain. The new and exclusive benefit formulas to achieve these goals of fiscal sustainability should be:

    1. **Safety Employees:** 2% @ 55 formula, offset by 50% of anticipated Social Security benefits for miscellaneous

[1] This should be determined in accordance with a CalPERS 2001 target replacement benefit study and/or the Aon Georgia State Replacement Ration Study (6th update since 1988).

employees with Social Security coverage. Safety employees retain the current cap on retirement at 90% of final compensation.

2. **Miscellaneous Employees (Non-Safety):** 2% @ 60 formula, offset by 50% of anticipated Social Security benefits for miscellaneous employees with Social Security coverage.

The above formulas would incorporate:

- "Three-Year-Average" for "final compensation" calculation. All "Highest Final Year" compensation calculations would be repealed for newly-hired employees.

- Current employees shall participate in the funding of the pensions in all cities. This reform will generate immediate budgetary savings to cities to the extent that existing employees participate in paying for their own retirement.

- Provide alternatives to a Defined benefit plan for job classifications not intended for career public service employment.

- Eliminate options to purchase service credits for time not spent in direct public service, sometimes known as "air time."

- Statewide legislation should give employers great flexibility to determine when a part-time employee is entitled to public pension benefits. The current hourly threshold in CalPERS is too low.

Rate Volatility

Principles

- Responsible fiscal planning suggests the need to "manage" volatility in Defined benefit plan contribution rates.

- Public agency retirement contribution rates, over time, should be constructed to stay within reasonable ranges around the historical "normal cost" of public pension plans in California. Sound actuarial methods should be adopted to limit contribution volatility, while maintaining a sound funding policy.

Recommendations

- Establish “reserve” funding for public pension systems that will help smooth the volatility of pension benefit costs. Plan surpluses are to be retained within plan assets, but should be reserved for amortization of future unfunded liabilities, and should not be used to offset plans’ normal cost contribution rates.

Shared Risk

Principles

- Currently, in most local jurisdictions, employers shoulder the burden of rate volatility risk – both positive and negative. This principle should be carefully examined with the intent of better spreading the risk of rate volatility among both employers and employees.

- Negotiated labor agreements containing language whereby employers “pick-up” employees’ retirement contributions should become the exception versus the norm to provide better cost sharing between the employer and employees.

Recommendations

- When employer contribution rates exceed the “normal costs” threshold, employees should be expected to take some of the financial responsibility for those excessive increases.

Disability Retirement

Principles

- Retirement-eligible employees who are injured in the workplace should be entitled to full disability retirement benefits; disability retirement benefits should, however, be tied to the individual’s employability and be structured so as to encourage return to work, where applicable.

- A larger disability reform measure should be considered outside of the scope of general pension reform.

Recommendations

- Full tax-exempt disability retirement should be retained for employees who are injured and cannot work in any capacity.

- Reform the disability pension provisions of public retirement systems to restrict benefits when a public employee can continue to work at the same or similar job after sustaining a work-related injury.

- Employees eligible for disability retirement should be first afforded applicable service retirement benefits, and THEN provided disability retirement benefits up to applicable “cap” on total retirement benefits.

Portability of Plan Benefits

Principles

- Reciprocity of public agency retirement benefits is critical to recruitment of qualified, experienced, public sector employees.

- Limiting portability of retirement plan benefits to non-public sector employment helps in the retention of senior and management level employees.

Recommendations

- Any pension reform package should retain transferability of retirement benefits across public sector employers. No employee currently in a defined benefit plan should be required to involuntarily give up a defined benefit formula before retirement.

Tiered Plans

Principles

- Pension benefits promised to current employees are considered vested rights as determined by the California Supreme Court. Thus, they cannot be reduced or eliminated unless traded for something of equal or greater value. Accordingly, there is little ability to affect pension benefit levels for current employees. New employees can be offered different levels of pension benefits.

- Agencies should strive to avoid multi-tiered compensation structures where there are large discrepancies in benefits accruing to employees. In addition to having adverse impacts on recruitment

and employee morale, multi-tiered approaches can raise issues of comparable worth and equity.

- Each city has an obligation to meet and confer in good faith to reach agreement with its respective bargaining units. Such pension changes can be negotiated and then legislated at the local level.

Recommendations

- A second tier of pension benefits should be negotiated for newly hired city employees after a date certain, such as July 2010.

- Any pension reform measure should seek to minimize disparity between current and prospective public agency employees by adjustment of total compensation, including making additional defined compensation options (457 or 401(k) plans) available.

Management Oversight

Principles

- The obligation to properly manage public pension systems is a fiduciary responsibility that is shared by CalPERS, employers, and employees. This joint responsibility is necessary to provide quality services while ensuring long-term fiscal stability. These parties need to be held responsible to ensure a high level of protection against mismanagement of public resources that could jeopardize a community's ability to maintain services and provide fair compensation for its workforce.

Recommendations

- Public agencies that do not make the Annual Required Contribution under GASB 27 should be made subject to appropriate oversight.

- The membership of the Public Employees' Retirement System Board should be changed to achieve a better balance of public agency representatives.

Support for Regional Pension Reform Efforts

Principles

- The League of California Cities supports comprehensive Statewide pension reform consistent with the principles and recommendations set forth within.

- Until such time as that is possible, regional efforts to reform pension offerings are to be encouraged as good fiscal stewardship.

Recommendation

- Support regional efforts for pension reform consistent with the principles and recommendation set forth in this report.

Conclusion

Defined benefit retirement plans have been the traditional approach for over 70 years in California and have produced fair and sustainable retirement benefits that have been central to recruiting and retaining quality public employees. However, public pension costs are becoming unsustainable and benefits are out of alignment with the private sector generating public resentment toward local government employees and retirees.

Statewide reform is preferable, but regional efforts should be encouraged and supported until a statewide solution is found. Defined benefit plans should be retained as the central component of public pension systems in California. However, benefit levels should be rolled back to pre-1999 levels for new employees and current employees should participate in funding their pensions. In this way, public pensions will become financially sustainable.

ATTACHMENT THREE:
SAN MATEO COUNTY REGIONAL PENSION REFORM PAPER

San Mateo County
City Managers Association

Policy Statement on Local Government Retirement Benefits

Background

For more than 70 years, the State of California and local governments have offered a "defined benefit" retirement plan to employees. This system provides a guaranteed annual pension based upon retirement age, salary, and years of service. Most, but not all, municipalities in California are part of the Public Employees' Retirement System (PERS).

Over the years, local government retirement costs have risen and fallen based on two key factors: investment returns and the level of benefit payments provided to employees. In the late 1990's the California legislature enacted significant benefit enhancements for public employees in the PERS system that were optional for participating local governments. At that time, some retirement plans were deemed to be "super funded" and many local governments adopted benefit enhancement plans. For example, most public safety personnel are on the "3% @ 50" plan, which provides a pension benefit of up to 90% of salary after 30 years of service as early as age 50.

When the retirement system suffered serious investment losses in the early part of this decade, these losses, combined with newly approved benefit enhancements, caused dramatic increases in employer contribution rates. Cities in our two counties have seen the percentage of their General Fund budget dedicated to PERS costs increase while their retirement liability funding had decreased from over the past decade. For example, in Mountain View, General Fund PERS costs have gone from $2.8 million in FY00 to $7.7 million in FY10; in San Bruno, it has gone from $240,000 to $4 million. Daly City's percent of the General Fund budget spent on retirement benefits has increased from 4.3% to 10.4% between FY00 and FY10; in Belmont, it has gone from .5% to 11.4%. And Campbell has seen its public safety retirement system fall from 122% funded to 70% funded over ten years.

In the past five years, a number of proposals have been introduced to reform or dramatically revise the public pension system in California. In 2004, a task force of the League of California Cities began an extensive study of the defined benefit system and proposed reforms. In 2005, the League board of directors accepted a report on pension reform from the task force as an initial assessment and for consideration in the ongoing debate of this issue. The report included a number of "general principles" and specific reform recommendations. To date, no concrete action has been taken by the legislature.

ATTACHMENT FOUR:
DEFINED BENEFIT VS. DEFINED CONTRIBUTION PENSION PLANS
By Co-Vice Chairs Bart Bleuel and Randy Hinton

The following is Co-Vice Chair Bleuel's summary of Defined Benefit and Defined Contribution Plans organized around the Compensation Policies Task Force Mission and Purposes (quoted in bold below) along with a scenario for potential return on investment in a Defined Contribution Plan prepared by Co-Vice Chair Randy Hinton

"REDUCE LONG-TERM PENSION COSTS TO TAXPAYERS" and "ENSURING THAT LONG TERM COSTS ARE MANAGEABLE[2]":

DEFINED BENEFIT PLANS:

The city can reduce the cost to taxpayers under a DB Plan by adopting some or all of the following:

a. Increase the age for full retirement.
b. Decrease the multiple of pay at full retirement.
c. Cap the maximum percentage of service pay.
d. Increase the number of years of service pay which is averaged to determine retirement pay.
e. Increase the number of years of required service before retirement rights are vested.
f. Increase the required employee contribution.
g. Limit or eliminate COLA adjustments during retirement.
h. Require in contracts the ability to change the benefits,

However, because DB Plans are subject to Actuarial Characteristics (see below), the long term cost of any DB Plan cannot attain the degree of precision available to DC Plans. All actuarial calculations rely upon assumptions which may change over time.

As long as Ventura's DB Plan is with CalPERS there will be minimum requirements that must be observed. They are:

- For miscellaneous employees the minimum plan is 2%@60 (vs. the current 2%@55)
- For safety employees the minimum is 2%@55 (vs. the current 3%@50 for police, 2%@50 for Fire.)

[2] Some members of the Task Force have stated their preference that Ventura not take action now, but rather wait until other cities act, and at least until we see if the proposed Public Benefits Reform Act qualifies for the ballot and is passed. Others feel that the sooner the Council gets its arms around these issues, the more manageable the long term costs will become. There will always be a reason to put these decisions off to another day. The only delay that is necessary is that of obtaining from CalPERS the amount and terms for a buy out of the current pension benefits.

In any event, if any two-tiered DB Plan is adopted, regardless of the limits set, the Council must do the math!

DEFINED CONTRIBUTION PLANS:

Defined Contribution Plans are controlled by the Council as a definitive calculation each year along with salary and other benefits. More specifically, under a DC Plan the following (referred to in this paper as "Actuarial Characteristics") are irrelevant to the contribution by the city to its employees' pensions:

i. Vagaries of the Market[3]
j. Age at retirement
k. Life expectancies[4]
l. Pay rate of retirees after retirement
m. Set contributions based on past contracts (if properly structured)
n. COLAs after retirement
o. Other actuarial calculations.

Under a DC Plan the Council knows the exact cost from year to year for the overall employee compensation, including pensions, and there are no future surprises on account of assumptions proving to be untrue. As opposed to the requirements of a DB Plan, the DC Plan does not require this year's cost to fund a retirement figure that will mature years from now.

"EMPLOYEE CONTRIBUTION TOWARD PENSION COSTS"

[3] The current projection by CalPERS of 29% to 30% contribution levels is premised on a 7.75% annual return on investments. In the current markets, that is relatively optimistic for a fund that should be invested conservatively. If this investment level cannot be sustained, the cost to the City will be increased.

[4] A spreadsheet is attached to give a very basic, crude example of a possible effect of an incorrect assumption about life expectancy when actuarial calculations are made to predict funding of Defined Benefit Plans. In essence it shows that an error in the assumption of life expectancy can require additional funding for 100 retired persons in the range of $46,000,000 if the error is 5 years, $95,750,000 if the error is 10 years, $149,250,000 if the error is 15 years, and 209,500,000 if the error is 20 years. Even if the additional funding is spread over decades, the effect would be a substantial increase in the percentage of pay statistic which is already predicted to be over 30% in two years. And this is for just one erroneous assumption – life expectancy.

DEFINED BENEFIT PLAN:

It has been suggested that one detriment to the current DB Plan is that the employee has no stake in the downsides. Currently if the Plan costs increase, only the City is affected. The benefit to the employee is unaffected. Having the employees contribute on a percentage basis does allow the employee to share,

It has been suggested that any contribution by the lower paid employees is regressive because those employees need all they make just to get by. The proposed Public Employees Benefits Reform Act, if it qualifies for the ballot and passes, will require at least some contribution in a DB Plan by employees, regardless of need. There is nothing that would prevent the Council from requiring contributions on a sliding scale based on different salaries.

Note that there is also nothing that would prevent the Council from coupling a DB Plan with social security.

DEFINED CONTRIBUTION PLAN:

While not a requirement, traditionally Defined Contribution Plans are funded by matching contributions of no more than a 50-50 match, and usually with a maximum contribution level by the employer based on either a percentage of pay or a specific dollar amount. This encourages the employee to take responsibility for his or her own retirement levels with a savings incentive, and at the same time allows the employer to control the amounts contributed to a specific dollar range each year.

As with DB Plans, there is nothing that would prevent the Council from arranging scaled contributions and coupling with Social Security. It is common with DC Plans that they be coupled with Social Security.

"ABILITY TO ATTRACT AND RETAIN QUALITY EMPLOYEES":

p. Attracting New Employees

In today's environment, it is not likely the city can continue to attract high quality employees by offering substandard wages with the lure of a more competitive retirement package. Some on the Task Force believe that the newly hired employee is more interested in salary and other current benefits than the ultimate retirement package.

DEFINED BENEFIT PLAN:

In order to stay in the CalPERS plan new hires are going to have to have specified minimums (such as 1.5 times years of service, times an average of the last 3 years' service salary at age 65). If the Council decides to stay with a DB Plan it is unknown what it can negotiate as a minimum. The question, then, is, will that leave the Council with any flexibility at all to offer better salaries and other non-pension benefits, let alone adequate city services? The numbers may change some, but the dilemma of DB Plans, with increasing salaries, lower retirement ages and increasing life expectancies could continue to be a sustainability problem. I.E., if you put too many of your total compensation eggs in the pension basket, you don't have enough left to offer attractive benefits in other areas of compensation.

Nevertheless, DB Plans are the current standard and any city offering anything different could be suspect to new hires.

DEFINED CONTRIBUTION PLANS:

In the DC Plan the Actuarial Characteristics are not relevant and the city can tailor a salary package which is attractive today, while still offering an adequate pension system that will not be at risk of future surprises. The flexibility is much greater than with a DB Plan, which in turn should enable the city to design a compensation package that would be very attractive to new hires. I.E., If you can control your pension costs, you have more room for other compensation elements.

Employee Perceptions

BOTH PLANS:

The primary traditional downside to a DC Plan over a DB Plan is that it puts the risk of the market on the employee. Although financial products available today provide for a hedge against the downside of this risk through insurance, the DC Plan could provide less retirement benefits to the employee than a DB Plan on account of market performance. There is also an opportunity that it could provide more. In any event, the employee has more control over the investments in the DC Plan.

Attachment Eight provides an analysis of how a DC Plan may benefit employees under specific assumptions.

Even though insurance products can be provided to assure a minimum rate of return, DC Plans are traditionally dependent upon hypothetical market assumptions, whereas a DB Plan promises a specific monthly amount based on last years' pay. It is reasonable to assume that the incoming employee may feel more comfortable with the latter and be more skeptical of the DC Plan.

Retention:

BOTH PLANS:

One of the risks of a DC Plan is that as employees get closer to retirement they may be lured to another city with a DB Plan. They can take whatever is vested in the DC Plan with them, and, if they have sufficient years of service available to them, they may be able to qualify for an attractive DB Plan elsewhere.

The assumption here is that the DB Plan will pay more than the DC Plan. That is not necessarily true, and a DC Plan coupled with Social Security should compete well with a DB Plan, at least for the first 15 years for pay brackets of $50,000 or less. Also, the same risk would be present if Ventura's DB plan paid less than another city's.

Through a discussion resulting from a presentation by City Manager, Rick Cole, the Task force considered the proposition that defections may well be reduced significantly if the City of Ventura were to become a superior employer. If the City can get its pension costs under control, it will be able to be more functional in providing basic and even enhanced public services. The premise is that if an employee has the advantage of living and working in the community with an employer who concentrates on the non-monetary advantages to its employees, and where the employee can truly be proud of the services rendered to a more satisfied community, then that employee will be less likely to defect to another City, even if the pension benefits were more attractive.

Lateral Hires:

BOTH PLANS:

If Ventura offers only a DC Plan, is it going to be possible to hire seasoned employees from another city with a DB Plan? The same issue is presented if Ventura offers only a DB Plan that pays less at retirement than another city's Plan. The desired employee is going to have to be satisfied that the salary plus DC contributions and other benefits are going to be enough to offset the loss of a continued accrual toward the DB Plan pay being lost by the move. There is nothing that precludes paying more into the DC Plan (up to IRS allowances) for one targeted employee than others. Nevertheless, lateral hires are always going to be difficult if neighboring communities continue to engage in unsustainable plans.

"AVOID BEING TIED TO THE DECISIONS OF OTHER GOVERNMENTAL AGENCIES":

BOTH PLANS

The Council will always have the duty to pay a fair wage. What other agencies are paying will be a part of that analysis. Nevertheless, it is very dangerous for cities to continue down the current leap frog path. As mentioned in other portions of this paper, the Council has the option of adopting a flexible fair compensation package that is consistent with maintaining adequate (dare we say superior) services to its citizens and concentrates on non-compensation employee benefits. This appears to be more easily accomplished through a DC Plan. These same principles apply to setting limits to a DB Plan that are less than those offered by other cities. While the Council has to keep one eye on what other cities are doing, it should concentrate on the overall service affordable.

"HOW DO WE FACILITATE RECESSIONARY PERIODS?"

DEFINED BENEFIT PLANS:

Once DB Plans are in motion the city is dependent on the effects of Actuarial Characteristics. Even if the city retains in each contract the ability to adjust the amount and rate of contributions, the adjustments do not take effect for years (even decades). This makes it very difficult to adjust contemporaneously with recessionary periods.

DEFINED CONTRIBUTIONS PLANS:

Getting rid of the Actuarial Characteristics gives the Council control that can be calculated with precision from year to year. The city should place in each contract the ability to change the package in future contracts so that a specific percentage or dollar amount offered in one year does not become vested for future years. The city should also build into the calculations sufficient reserves to ride through minor recessions. Finally, the Council needs to be responsible to the analysis of just what the calculations mean and anticipate the recessionary periods whenever possible.

HYBRID PLAN

One impediment to adopting a pure DC Plan is that under the current rules it will require the City to buy out of the current CalPERS plan. City Staff has requested a buy out figure from CalPERS, but it is not available at the time this Report is written. If the cost of that buy out is prohibitive, the City will be required to offer its new hires some form of DB Plan. AND, there may be other reasons the Council decides to maintain a DB Plan, at least on some minimal level.

One solution may be to adopt a hybrid plan for new hires. One such structure could be a DB Plan at minimum levels (e.g., 1.5% at 65 with a 70% maximum) with a DC Plan as a supplement – perhaps coupled with Social Security. The math is beyond the scope of this paper, but must be an integral part of the Council's analysis.

Summary

If a CalPERS buyout of the current plans is financially feasible, the Council has a means of ensuring future predictability, control and sustainability of its 2nd Tier pension plans under a system that will allow the Council to base total compensation upon the calculations of all benefits year by year without the vagaries and risks of the Actuarial Characteristics. That is by creating a 2nd Tier with a total DC Plan.

The easier path is to stay with a DB Plan. This avoids the buy-out with CalPERS, probably makes negotiations with the unions easier and less complicated, and maintains traditional concepts. Leaving CalPERS would make working for Ventura potentially less attractive to those currently in the system covering the vast majority of local government agencies in California. However, the Council still must make the DB Plan sustainable. This is much more difficult than with the DC Plan. To do this, the Council must get involved with the math under actuarial assumptions, and then establish probabilities.

ATTACHMENT FIVE:
Policy Statement on the Compensation Policies Task Force

VENTURA POLICE OFFICERS' ASSOCIATION

P.O. Box 5130 • Ventura, California 93005-5130 • 805-339-4496

For more than 70 years, the State of California and local governments have offered a "defined benefit" (DB) retirement plan to employees. Most, but not all, municipalities in California are part of the Public Employees' Retirement System (PERS). This system provides a guaranteed annual pension based upon retirement age, salary, and years of service. PERS also provides for a medical retirement for public safety members who are injured in the line of duty and can no longer perform the physical duties of their profession. When officers are killed in the line of duty protecting their communities, there is a survival benefit for the officers' grieving widow and children. Ventura has been lucky over the years and only one officer has been killed in the line of duty, Sergeant Darlon "Dee" Dowell.

Ventura has not been lucky when it comes to officers injured performing their duties. The Ventura Police Department with 128 sworn employees, officer through chief ranks, averages several injured members a month. Over the past two decades, dozens of these dedicated officers have been so severely injured that they were unable to return to their chosen profession and were medically retired. This is why the current average annual retirement for a Ventura sworn safety member is $38,131. The retired officer does not receive any city money to pay for health insurance, which is currently about $18,000 a year for a married couple. The remainder $20,000 covers everything else from mortgage payments and taxes to food and medical co-payments. Ventura city employees are ineligible for social security, so their PERS retirement is all they have earned. As you can see, Ventura police officers are not making a killing risking their lives, bodies and the potential for great physical harm for their community.

In fact, Ventura police officers have constantly been paid below the local labor market the Ventura City Council Compensation Policy determined. Ventura compares with Oxnard, Simi Valley, Santa Barbara City and County, and Ventura County. The Policy also provides for Ventura officers to have compensation rates between the mean and median as measured by the City. Over the past several decades, the city has tried to reach this level, but by the end of each contract, Ventura police officers have been 5-14% below the comparable job market. As a result of the constant lower salary, the city negotiated an increase in the PERS retirement formula in 2000. This increased the formula known as 2%@50 to 3%@50. (2%@50 is actually 2.7%@55.) The cities of Oxnard, Santa Barbara, and even Santa Paula

along with Santa Barbara County have 3%@50. Simi Valley has 3%@55 along with Port Hueneme. Ventura County is not in PERS, but has a 1937 act retirement system that allows for a higher retirement benefit using the 2%@50 formula. Ventura police officers have a similar retirement benefit as 86% of other safety agencies throughout California. What makes Ventura police officers different than their fellow officers in the area is they voluntarily, and in the middle of a valid contract, reduced their compensation by 5%, leading the way for the other city employee groups to follow. We could not do furloughs due to critical staffing issues as other city workers chose. We have also actively participated in the Compensation Policies Task Force since its beginning, and suggested, along with city council members, several issues that could decrease city expenses to no avail. We are also different from other city employees because a large percent of our employees have been lateral officers from other law enforcement agencies.

Some non-employee members on the Task Force believe Ventura should change their retirement benefit from a defined benefit to a defined contribution (DC). A change this drastic will end lateral officers from ever coming to Ventura again. There is a significant training savings by hiring lateral officers; the most recent cost to train a new officer is about $150,000. There is a multi-million dollar liability that the city has to pay over 10 years for all the current employees if it left PERS. The city is still responsible for paying the retirement costs for all the current and retired employees. Also, by creating a 2-tier system, lateral officers will not choose to move to a lower tier, so Ventura will be spending a lot more money training new officers. New officers usually don't reach their potential productivity until about 5 years on the job. Also, a DC plan only allows for a severely injured officer who medically retires, and a spouse and children of an officer killed on-duty, to receive what is in the DC account. So, the bottom line is hiring and training cost will go up with the less-efficient new officers.

A final area of discussion is that from 1980-2000, the average Ventura PERS employer safety rate was 16%, with a high of 27% in 1981 to a low of 0% in 1999 while the PERS formula was 2%@50. In 2000, the formula increased to 3% @ 50 and police officers paid the employees' 9% contribution for 3 years as agreed upon. In lieu of a salary increase in 2003, due to being severely underpaid, the 9% employee pick-up was phased out over 3 years. One has to remember that in 1997, the City enhanced the formula for non-safety employees from 2%@60 to 2%@55 with no employee paying a penny. If the city desires to create a 2-tier system for police, then a 2-tier system for other city employees should be fair and prudent. Also, PERS has rebounded to over $200 billion in assets since the fall began and will continue to make gains.

In summary, the below Board of Directors of the Ventura Police Officers' Association believe we are not responsible for the worse economic

downturn in our lifetime and by the lack of a sustainable local economy, but will work with the city to assist in any way that is mutually beneficial.

Respectfully,

John Snowling, President
Derek Donswyk, Treasurer
Sarah Starr, Director
Frank Padilla, Director
Al Davis, Vice-President
Thomas Higgins, Secretary
Rick Payne, Director
Matt Thompson, Director

Attachment Six:
Ventura City Fire Management Association Review of Draft Committee Report and Comments

VENTURA FIRE
MANAGEMENT ASSOCIATION

DATE: March 15, 2010

TO: Compensation Task Force Committee Chair, Ed McCombs and Co-Vice Chairs, Randy Hinton and Bart Bleuel

FROM: Luis Espinosa, Ventura City Fire Management Association (VFMA) President

SUBJECT: Review of Draft Committee Report and Comments

I first of all want to thank each of you on behalf of the Ventura Fire Management Association for your willingness to dedicate your time and talents to this committee process. Although I have not been a part of the committee as an official representative until recently, I was able to attend one of the meetings late last fall as an alternate and have great appreciation for the collective efforts and diversity among the committee members.

I do not think anyone disputes, at this point, that there are fiscal challenges that lie ahead for the city in meeting their employee pay and benefit obligations due to the anticipated rise in pension costs resulting from the severe economic recession and investment losses over the past two years. I appreciate that the report draft attempts to provide perspective, clarity, and fact-based assessments to what has been an emotional and sometimes divisive subject, often aided by a misinformed media and groups who are intent on attacking government employees for the sake of political expediency.

Just as it would be destructive to blame elected officials at the state and local level who ultimately are charged with the responsibility of authorizing and approving the pay levels of all government workers, I would agree that finger pointing and vilifying government workers does little to solve problems and meet the challenges we now face. From my own perspective, I'm disturbed to see that even the city firefighters have been the target of criticism for having secured an enhanced retirement benefit in their most recent employment contract with the city, in light of the fact it is a less expensive plan than what has been afforded to city Police officers for the past decade.

When we consider the history of how we got here, as it relates to pension benefits, most of the focus has been on the improvement of public safety benefit formulas brought on by the state legislature and Governor Gray Davis in 1999 under SB 400, followed by non-safety employee enhancements enacted in 2001 under AB 616. The California Highway Patrol was the first to be awarded the benefit enhancement and over the course of the next ten years, most all government agencies throughout the state of California enhanced the pension benefits for their employees.

In fact, the city, in awarding the benefit enhancement to the firefighters, were acting quite reasonably by being mindful that the city police officers, along with most all other state agencies were already receiving a retirement enhancement, in addition to having an understanding and appreciation for the recruitment and retention challenges that continues to plague the fire department given its high entrance standards and enhanced paramedic service delivery system, which is unparalleled throughout the county.

The fire and fire management units had hoped for many years to be brought in line with the pension benefit program given to the Ventura Police Officers. Not simply as a matter of economics but as a matter of professional respect and appreciation. But with the recession of the early 2000's, the post 9/11 economic impacts, the electricity crisis, and continuing state money grabs, this public safety pension disparity persisted for almost 10 years.

The city finally responded in 2008 just after the most recent economic boom and just before the global financial meltdown that became known as the worst recession since the great depression.

What may add some perspective to the firefighter pension enhancement concerns is to consider what the overall cost savings were to the city for almost 10 years of paying the firefighters under the old formula. It should also be noted that comparatively speaking, firefighter compensation has also continued to lag behind the surrounding agencies and comparative cities.

Yet, I can proudly state that regardless of the pension disparity during that time, the firefighters and fire managers nevertheless performed admirably, professionally, and continued to improve and enhance the services they provided to the community.

I appreciate that the report points out that the city does not and has not had the obligation of paying any retirement health care benefits to its employees, even as the state and other local agencies continue to do so. The report also notes that the city's medical benefits paid to active employees has not had "significant" increases despite the enormous rise in health care premium costs. In fact, the medical benefits have remained unchanged for

some time, which has seen health care premiums continue to take an extremely large bite out of disposable wages.

My greatest concern with the report is how the pension considerations and alternatives are characterized in the section “Pensions: Protecting existing obligations and reducing long-term costs”. I’m not entirely certain if this report, when submitted to council, is intended to represent a consensus opinion of the committee. If that is the case, I would recommend a rewrite of this section.

It appears to me that this section is written with the intent to make a strong argument in favor of considering a change to a defined contribution pension program for new hires. In doing so, it leaves out many important considerations and draws conclusions without any supportive data.

While it is true that defined benefit retirement programs declined a great deal in the private sector, the public sector, including the federal government, continue to offer employees defined benefit retirement programs.

It’s important to consider that while government workers, in the current economic climate and job market, may be increasingly vulnerable to pension criticism and envy, we should not lose sight that these are people who have great dedication and desire to serve their communities. These defined benefit pension programs established many years ago had the practical effect of attracting talented people from the job market pool into government service with the added benefit of keeping them there for 30 years or more.

I would caution any radical consideration of making changes to defined benefit programs even if the temptation may be great among those looking to rein in employment costs. Even the League of California Cities developed a “White Paper” in 2005 after forming a task force and employing the services of Georgia State University, known as a renowned actuarial school, to analyze the issue of public pension benefits and local government compensation packages.

At the top of the recommendations list, clearly written was, “Defined benefit plans have been a great recruitment/retention tool for local government workforces and should be retained”.
The task force report appears to make an attempt to advocate the benefits of defined contribution pension programs as if it will provide comparable retirement security while reducing or eliminating the financial risk to the employer.

This simplistic characterization ignores all the potential problems that could be associated with such a program. Studies demonstrate that for any given dollar invested, defined benefit programs will consistently out-perform defined contribution programs. Leaving the investment and market performance decisions to the individual, rather than professional investment managers, can have very negative long-term security consequences.

What would be disastrous is the scenario of having public safety workers/firefighters, continuing to work years longer than they should because of retirement security problems, which would greatly endanger themselves and the public, given the strenuous and safety aspects of the job.

Defined contribution programs also are known to carry high administrative costs. Any change or tiered retirement program could also result in the increased cost to the existing defined benefit program due to the limiting and closing of the pool of workers within the program. I'm certainly no expert on the subject and anyone can learn more about pros and cons by talking to retirement experts, CalPERS, or simply googling "defined benefit vs defined contribution" pensions.

The only point I want to make here is that the report should not advocate or support any change to the existing defined benefit program without the proper research, analysis, and data included to support such a change. If we are going to advocate a position merely as an opinion or argument in support, then we should probably do likewise by including an argument against, as is done during the ballot initiative process. That would allow council a fair 360 degree view of the issues to consider.

In conclusion, I want to acknowledge that I appreciate and understand the fiscal challenges presented by the current state of economics. I think all employee groups have demonstrated a willingness to work cooperatively with the city as evidenced by the voluntary salary reductions incurred these past 15 months.

Perhaps seeking added employee contributions to PERS to offset the increased retirement costs would be the most reasonable approach to address the pension increase concerns. The Fire Management group, as pointed out in the report, is presently paying their 9% share of employee contributions. However, even a two tiered system should be approached with caution, given the fact that, as the report points out, Ventura's workers are on average paid less than other agencies, have no paid retirement medical benefits, have not had any increases to active employee medical benefits, and have certainly struggled with firefighter recruitment efforts.

Ventura Firefighters may have been among the last to improve pension benefits in the state, but we should not be the first to rush to change this important recruitment tool. As seen with the national health care debate, heat and rhetoric should not be allowed to replace honest discussion and true problem solving. It's understandable that fear and panic can govern decision-making in the current political climate. But estimates of the pension costs rising into the 40 to 50 percent range are based on worst-case scenarios with no investment return gains and similar losses as we have seen, which were truly unprecedented since the great depression. We have already been witnessing a year- long market turnaround, even if strong job creation and full market recovery may be slow in its progression.

I appreciate the opportunity to express and submit my comments. Please include them as an attachment with the council report.

Respectfully,

Luis Espinosa, President
Ventura Fire Management Association

Attachment Seven: PERS Employee Rate History

PERS Employee Rate History

Year	Miscellaneous	Safety
7/1/1978	9.619%	21.373%
7/1/1979	10.985%	24.026%
7/1/1980	10.722%	26.798%
7/1/1981	11.071%	27.324%
7/1/1982	10.451%	23.760%
7/1/1983	11.752%	24.317%
7/1/1984	11.662%	24.661%
7/1/1985	11.324%	24.048%
7/1/1986	8.731%	21.203%
7/1/1987	6.572%	17.495%
7/1/1988	5.231%	12.834%
7/1/1989	5.135%	12.866%
7/1/1990	5.241%	14.491%
7/1/1991	6.718%	18.572%
7/1/1992	6.718%	18.572%
9/1/1992	5.300%	17.147%
1/1/1993	4.827%	17.215%
7/1/1993	5.9979%	17.215%
7/1/1994	5.407%	11.543%
7/1/1995	5.407%	11.401%
7/1/1996	2.760%	10.981%
7/1/1997	10.507%	5.060%
7/1/1998	0%	6.180%
7/1/1999	0%	0%
7/1/2000	0%	2.256%
8/19/2000	0%	7.248%
7/1/2001	0%	8.018%
7/1/2002	0%	5.694%
7/1/2003	0%	18.423%
7/1/2004	3.776%	31.437%
7/1/2005	9.132%	34.661%
7/1/2006	9.152%	26.983%
7/1/2007	9.278%	28.224%
7/1/2008	9.419%	28.661%
7/1/2009	9.268%	29.306%

NOTES:

Jul-91 **Safety rate includes the increase due to single highest year for Police combined with single highest year formula for Fire (unfunded liability) amortized to 2000. Actuarial valuation completed 04/90 indicated a 2.249% (amortized to 2000). The unfunded liability 6/30/91 per PERS was $3,357,818 due to changes for single highest year. Separately the valuations indicated a 2.531% increase for single highest year for Police and 1.533% increase for Fire.**

Jul-97 **Miscellaneous rate of 10.507% included an increase of 4.3% as payment towards unfunded liability for 2% @ 55 within three years (amortized to 2000). Ongoing rate increase for 2% @ 55 is 1.38%.**

Aug-00 **Safety rate increased from 2.256% to 7.248% with implementation of 3% @ 50 for Police & Police Management.**

Oct-01 **Miscellaneous single highest year - no rate increase.**

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Attachment Eight:
MetLife Hypothetical Illustration

MetLife®

Hypothetical Illustration of

MetLife Investors USA Insurance Company
Variable Annuity Series L(04)

Exclusively prepared for:
Valued Client

Presented By:
Randolph Hinton
United Planners Financial Services of America
300 Esplanade Dr
Ste 520
Oxnard, California 93036
(805) 604-2620

Prepared On:
11/18/2009

• Not FDIC Insured	• Not a Deposit	• May Go Down in Value
• Not Insured by Any Federal Government Agency		• Not Guaranteed by Any Bank

This illustration is not complete unless all pages, as noted below, are included.
Please read the Important Disclosures at the beginning of this report.

MetLife®

Important Disclosures Regarding Variable Annuity Series L(04)

The MetLife Investors Series L(04) is a flexible premium deferred variable annuity that offers multiple investment options and, depending on the state in which the contract is issued, a fixed account. The fixed account is not described in this illustration. This annuity is designed for long-term savings and retirement and provides the opportunity to obtain a stream of income payments for life. This is an illustration and not a contract. The purpose of this illustration is to demonstrate how the performance of the underlying investment options may affect contract values and death benefits over an extended period of time. This illustration is based on a hypothetical rate of return and is not intended to serve as a projection or prediction of future investment returns. It illustrates how much the contract would be worth, and how much the various features of the Guaranteed Minimum Income Benefit Plus (GMIB Plus) would be worth, if elected, at the end of each year if: (1) the product was offered and the investor purchased the annuity on the initial payment date; (2) the investor had made the annual contributions or withdrawals as shown; and (3) the investment grew at the hypothetical rate of return noted. The GMIB Plus is one of several optional living benefits available under this contract. For more information about the Series L(04) contract, the GMIB Plus rider and other optional benefit riders please refer to the prospectus and marketing material.

The value of a variable annuity will fluctuate up and down, based on the current performance of the underlying investment options, and the investor may experience a gain or loss. Actual investment results will be more or less than those shown and will depend on a number of factors, including the choices and investment experience of the eligible variable investment options and frequency of contributions.

The values illustrated in this hypothetical illustration include the deduction of all applicable fees and charges as follows: Mortality and Expense and Administration Charge 1.60%, GMIB Plus 1.00% of the Income Base, annual contract fee $30 [waived for accounts over $50,000], withdrawal charges declining from 7% to 0% over a full 4 year period for each purchase payment and weighted average of the investment management fees (after expense reimbursements), operating expenses and applicable 12b-1 fees of the assets of the underlying investment options at the end of the prior calendar year. The weighted average for investment option expenses used in this illustration is 0.94%. Please refer to the prospectuses for the product and underlying investment portfolios for full details on contract features, risks, charges, expenses, fees as well as the investment objectives, risks and policies of the underlying portfolios. Certain optional riders have allocation and transfer restrictions and may be subject to additional charges.

Table of Weighted-Average Portfolio Expenses

Portfolio	Percent of Assets	Portfolio Expense as of December 31, 2008	Asset-Weighted Portfolio Expense
American Funds Balanced Allocation Portfolio	3.20%	1.05%	0.03%
American Funds Bond Portfolio	0.24%	1.05%	0.00%
American Funds Growth Allocation Portfolio	4.68%	1.03%	0.05%
American Funds Growth Portfolio	0.48%	0.98%	0.00%
American Funds International Portfolio	0.42%	1.17%	0.00%
American Funds Moderate Allocation Portfolio	2.01%	1.07%	0.02%
Barclays Capital Aggregate Bond Index Portfolio	0.00%	0.58%	0.00%
BlackRock High Yield Portfolio	0.04%	0.94%	0.00%
BlackRock Money Market Portfolio	3.61%	0.58%	0.02%
Clarion Global Real Estate Portfolio	0.26%	0.93%	0.00%
Davis Venture Value Portfolio	1.61%	0.84%	0.01%
Harris Oakmark International Portfolio	1.01%	1.10%	0.01%
Jennison Growth Portfolio	0.53%	0.92%	0.00%
Lazard Mid Cap Portfolio	0.28%	0.99%	0.00%
Legg Mason Partners Aggressive Growth Portfolio	0.22%	0.90%	0.00%
Legg Mason Value Equity Portfolio	0.10%	0.92%	0.00%
Loomis Sayles Global Markets Portfolio	0.36%	0.98%	0.00%
Lord Abbett Bond Debenture Portfolio	0.75%	0.78%	0.01%
Lord Abbett Growth and Income Portfolio	1.05%	0.78%	0.01%
Lord Abbett Mid Cap Value Portfolio	0.09%	1.00%	0.00%
Met/AIM Small Cap Growth Portfolio	0.42%	1.14%	0.00%
Met/Artisan Mid Cap Value Portfolio	0.60%	1.10%	0.01%
Met/Dimensional International Small Company Portfolio	0.00%	1.40%	0.00%
Met/Franklin Mutual Shares Portfolio	0.12%	1.15%	0.00%
Met/Franklin Templeton Founding Strategy Portfolio	1.92%	1.19%	0.02%
Met/Templeton International Bond Portfolio	0.00%	1.10%	0.00%

MetLife®

Important Disclosures Regarding Variable Annuity Series L(04)

Portfolio	Percent of Assets	Portfolio Expense as of December 31, 2008	Asset-Weighted Portfolio Expense
MetLife Aggressive Strategy Portfolio	1.42%	1.09%	0.02%
MetLife Balanced Strategy Portfolio	23.03%	0.98%	0.23%
MetLife Defensive Strategy Portfolio	5.87%	0.95%	0.06%
MetLife Growth Strategy Portfolio	28.42%	1.02%	0.29%
MetLife Mid Cap Stock Index Portfolio	0.00%	0.62%	0.00%
MetLife Moderate Strategy Portfolio	9.60%	0.95%	0.09%
MetLife Stock Index Portfolio	0.57%	0.53%	0.00%
MFS® Emerging Markets Equity Portfolio	0.23%	1.38%	0.00%
MFS® Research International Portfolio	0.90%	1.01%	0.01%
Morgan Stanley EAFE® Index Portfolio	0.00%	0.72%	0.00%
PIMCO Inflation Protected Bond Portfolio	1.23%	0.78%	0.01%
PIMCO Total Return Portfolio	2.05%	0.78%	0.02%
Pioneer Fund Portfolio	0.00%	1.24%	0.00%
Rainier Large Cap Equity Portfolio	0.20%	0.95%	0.00%
RCM Technology Portfolio	0.15%	1.22%	0.00%
Russell 2000® Index Portfolio	0.00%	0.62%	0.00%
SSgA Growth and Income ETF Portfolio	0.04%	0.83%	0.00%
SSgA Growth ETF Portfolio	0.01%	0.84%	0.00%
T. Rowe Price Mid Cap Growth Portfolio	0.72%	1.03%	0.01%
Third Avenue Small Cap Value Portfolio	0.93%	1.02%	0.01%
Turner Mid Cap Growth Portfolio	0.17%	1.07%	0.00%
Van Eck Global Natural Resources Portfolio	0.00%	1.28%	0.00%
Van Kampen Comstock Portfolio	0.18%	0.86%	0.00%
Western Asset Management U.S. Government Portfolio	0.28%	0.77%	0.00%
		Weighted Average Fee	**0.94%**

An investment in the Money Market Portfolio is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Portfolio seeks to preserve the value of your investment at $100 per share, it is possible to lose money by investing in the Portfolio.

The effects of income and penalty taxes have not been reflected in this illustration. Withdrawals of taxable amounts will be subject to ordinary income tax. If the taxpayer has not attained age 59½ at the time of the distribution, the portion of the withdrawal that is subject to income tax may also be subject to a 10% Federal income tax penalty. A withdrawal in excess of the contract's free withdrawal amount may be subject to a withdrawal charge of up to 7.00%. The amount of the withdrawal charge declines to 0% over 4 full years for each purchase payment. Please read the prospectus for further information.

For any tax qualified account, e.g. IRA, the tax deferred growth feature is already provided by the tax qualified retirement plan. Therefore, if you are buying a variable annuity to fund a qualified retirement plan, you should do so for the variable annuity's features and benefits other than tax deferral. In such cases tax deferral is not an additional benefit of the variable annuity. The tax treatment of death benefit proceeds of an annuity contract differs from the tax treatment of death benefit proceeds of a life insurance policy. Annuity death benefit proceeds are generally taxed at the beneficiary's ordinary income tax rate while life insurance death benefit proceeds are generally income tax free. See your tax advisor.

For qualified contracts, taking required minimum distributions prior to exercising the GMIB Plus may reduce the rider's benefit. See the prospectus for more details.

The Withdrawal Value for any point in time is an amount equal to the Account Value less any withdrawal charge (contingent deferred sales charge) if applicable. The Withdrawal Value does not reflect the impact of income taxes or the 10% Federal income tax penalty for withdrawals made prior to age 59½.

The Account Value for any point in time is an amount equal to the sum of each Accumulation Unit Value multiplied by the number of Units allocated to the Contract for each investment option. This value will fluctuate due to the investment performance of the selected variable investment option(s). The Account Value reflects the deduction of all charges except the withdrawal charge. It does not reflect the impact of income taxes or the 10% Federal income tax penalty for withdrawals made prior to age 59½.

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Important Disclosures Regarding Variable Annuity Series L(04)

A standard illustration using the arithmetic average of the expenses of all underlying portfolios is attached to the product prospectus. All numbers illustrated throughout this report have been rounded to the nearest dollar.

This material must be preceded or accompanied by a prospectus for the Series L(04) variable annuity issued by MetLife Investors USA Insurance Company. Prospectuses for the investment portfolios are available from your financial professional. The contract prospectus contains information about the contract's features, risks, charges and expenses. The investment objectives, risks and policies of the investment options, as well as other information about the investment options, are described in their respective prospectuses. Please read the prospectuses and consider this information carefully before investing. Product availability and features may vary by state. Please refer to the contract prospectus for more complete details regarding the living and death benefits.

Variable annuities are long-term investments designed for retirement purposes. MetLife Investors variable annuities have limitations, exclusions, charges, termination provisions and terms for keeping them in force. There is no guarantee that any of the variable investment options in this product will meet their stated goals or objectives. The account value is subject to market fluctuations and investment risk so that, when withdrawn, it may be worth more or less than its original value. All product guarantees, including optional benefits, are based on the claims-paying ability and financial strength of the issuing insurance company. Please contact your financial professional for complete details.

Withdrawals of taxable amounts are subject to ordinary income tax and if made before age 59½, may be subject to a 10% Federal income tax penalty. Withdrawals will reduce the living and death benefits and account value. Withdrawals may be subject to withdrawal charges.

Pursuant to IRS Circular 230, MetLife is providing you with the following notification: The information contained in this document is not intended to (and cannot) be used by anyone to avoid IRS penalties. This document supports the promotion and marketing of insurance products. You should seek advice based on your particular circumstances from an independent tax advisor.

MetLife, its agents, and representatives may not give legal or tax advice. Any discussion of taxes herein or related to this document is for general information purposes only and does not purport to be complete or cover every situation. Tax law is subject to interpretation and legislative change. Tax results and the appropriateness of any product for any specific taxpayer may vary depending on the facts and circumstances. You should consult with and rely on your own independent legal and tax advisors regarding your particular set of facts and circumstances.

The Series L(04) variable annuity is issued by MetLife Investors USA Insurance Company (MetLife Investors) on Policy Form Series 8010 (11/00). It is distributed by MetLife Investors Distribution Company, 5 Park Plaza Suite 1900, Irvine, CA 92614. All product guarantees are based on the claims-paying ability and financial strength of the issuing insurance company. We reserve the right to require Home Office approval for purchase payments over $1,500,000.

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Hypothetical Illustration of Variable Annuity Series L(04)

Prepared For: Valued Client, age 30, gender Male
Requested By: Randolph Hinton
Prepared On: November 18, 2009
Contract Type: Qualified
State: CA

Assumptions
Total Purchase Payment(s): $497,500 GMIB Plus[3,4] Payout: **Single Life w/Period Certain[5]**
Death Benefit[1]: Principal Protection
Withdrawal Type: 5% Inc Base
Investment[2]: Total Variable Rate of Return is 8.64% Gross / 5.92% Net*
Withdrawal Mode: Monthly

Hypothetical Account Values							Guaranteed Minimum Income Benefit Plus[3,4]		Guaranteed Death Benefit
Anniversary Year	Age	Purchase Payment(s)[2]	% Rate of Return[2] (Net)	With-drawal Amount[2]	With-drawal Value[2]	Account Value[2]	Income Base	Income Benefit	Hypothetical[1] Death Benefit
Inception	30	$10,000	-	-	$9,300	$10,000	10,000	-	$10,000 AV
1	30-31	10,000	7.58	$0	20,198	21,277	***21,277*** ***C***	$0	21,277 AV
2	31-32	10,000	6.21	***0***	31,244	32,860	***32,860*** ***C***	0	32,860 AV
3	32-33	10,000	15.19	***0***	46,914	48,890	***48,890*** ***C***	0	48,890 AV
4	33-34	10,000	11.41	***0***	63,579	64,988	***64,988*** ***C***	0	64,988 AV
5	34-35	10,000	9.63	***0***	80,079	81,422	***81,422*** ***C***	0	81,422 AV
6	35-36	12,500	1.18	***0***	92,662	94,041	98,618 C	0	94,041 AV
7	36-37	12,500	4.87	0	109,093	110,566	116,674 C	0	110,566 AV
8	37-38	12,500	24.48	0	150,187	151,836	***151,836*** ***C***	0	151,836 AV
9	38-39	12,500	9.59	***0***	176,902	178,373	***178,373*** ***C***	0	178,373 AV
10	39-40	12,500	0.05	***0***	187,649	188,957	200,416 C	0	188,957 AV
11	40-41	15,000	5.89	0	212,276	213,701	226,187 C	0	213,701 AV
12	41-42	15,000	-10.77	0	200,235	201,546	253,247 C	0	201,546 AV
13	42-43	15,000	19.28	0	253,802	255,487	281,659 C	0	255,487 AV
14	43-44	15,000	25.46	0	334,535	336,250	***336,250*** ***C***	0	336,250 AV
15	44-45	15,000	-17.25	***0***	285,999	286,972	368,812 C	0	286,972 AV
16	45-46	17,500	9.63	0	328,284	329,738	405,628 C	0	329,738 AV
17	46-47	17,500	3.67	0	354,150	355,550	444,284 C	0	355,550 AV
18	47-48	17,500	9.90	0	403,613	405,146	484,873 C	0	405,146 AV
19	48-49	17,500	4.25	0	434,013	435,328	527,492 C	0	435,328 AV
20	49-50	17,500	-7.70	0	411,258	412,216	572,242 C	0	412,216 AV

MetLife®

Hypothetical Illustration of Variable Annuity Series L(04)

Prepared For: Valued Client, age 30, gender Male
Requested By: Randolph Hinton
Prepared On: November 18, 2009
Contract Type: Qualified
State: CA

Assumptions
Total Purchase Payment(s): $497,500 GMIB Plus[3,4] Payout: **Single Life w/Period Certain[5]**
Death Benefit[1]: Principal Protection
Withdrawal Type: 5% Inc Base
Investment[2]: Total Variable Rate of Return is 8.64% Gross / 5.92% Net*
Withdrawal Mode: Monthly

		Hypothetical Account Values					Guaranteed Minimum Income Benefit Plus[3,4]		Guaranteed Death Benefit
Anniversary Year	Age	Purchase Payment(s)[2]	% Rate of Return[2] (Net)	With-drawal Amount[2]	With-drawal Value[2]	Account Value[2]	Income Base	Income Benefit	Hypothetical[1] Death Benefit
21	50-51	20,000	9.77	0	466,841	468,212	621,854 C	0	468,212 AV
22	51-52	20,000	-1.32	0	473,892	475,035	673,946 C	0	475,035 AV
23	52-53	20,000	5.59	0	514,126	515,441	728,644 C	0	515,441 AV
24	53-54	20,000	-11.74	0	463,905	464,713	785,268 C	27,139	464,713 AV
25	54-55	20,000	7.33	0	510,647	511,777	845,250 C	29,820	511,777 AV
26	55-56	22,500	24.71	0	655,542	657,194	910,672 C	32,675	657,194 AV
27	56-57	22,500	12.91	0	756,244	757,603	980,206 C	35,876	757,603 AV
28	57-58	22,500	5.27	0	809,607	810,690	1,053,185 C	39,305	810,690 AV
29	58-59	22,500	21.62	0	1,000,385	1,002,044	1,128,947 C	42,945	1,002,044 AV
30	59-60	22,500	3.96	0	1,052,181	1,052,968	1,209,975 C	47,044	1,052,968 AV
31	60-61	0	20.50	0	1,255,714	1,256,133	1,270,881 C	50,479	1,256,133 AV
32	61-62	0	7.65	0	1,338,894	1,338,894	***1,338,894*** **C**	0	1,338,894 AV
33	62-63	0	-2.87	***66,945***	1,221,195	1,221,195	1,338,894 C	0	1,221,195 AV
34	63-64	0	-7.12	66,945	1,056,526	1,056,526	1,338,894 C	0	1,056,526 AV
35	64-65	0	-11.10	66,945	863,038	863,038	1,338,894 C	0	863,038 AV
36	65-66	0	16.56	66,945	919,782	919,782	1,338,894 C	0	919,782 AV
37	66-67	0	7.53	66,945	906,046	906,046	1,338,894 C	0	906,046 AV
38	67-68	0	3.05	66,945	852,240	852,240	1,338,894 C	0	852,240 AV
39	68-69	0	8.19	66,945	838,751	838,751	1,338,894 C	0	838,751 AV
40	69-70	0	3.23	66,945	784,380	784,380	1,338,894 C	0	784,380 AV
Totals		**$497,500**	**5.92%**	**$535,560**					

* A Net rate of return reflects the Gross rate of return reduced by the asset-based fees: the Investment Management Fee and other expenses; the Mortality and Expense and Administration Charge, the Earnings Preservation Benefit rider charge (if elected) and any elected optional death benefits, excluding the Enhanced Death Benefit.

MetLife

Hypothetical Illustration of Variable Annuity Series L(04)

Prepared For: Valued Client, age 30, gender Male
Requested By: Randolph Hinton
Prepared On: November 18, 2009
Contract Type: Qualified
State: CA

Assumptions
Total Purchase Payment(s): $497,500 GMIB Plus[3,4] Payout: **Single Life w/Period Certain[5]**
Death Benefit[1]: Principal Protection
Withdrawal Type: 5% Inc Base
Investment[2]: Hypothetical Account @ 0% (gross rate) -2.51% (net rate*)
Withdrawal Mode: Monthly

Hypothetical Account Values					Guaranteed Minimum Income Benefit Plus[3,4]			Guaranteed Death Benefit
Anniversary Year	Age	Purchase Payment(s)[2]	With-drawal Amount[2]	With-drawal Value[2]	Account Value[2]	Income Base	Income Benefit	Hypothetical[1] Death Benefit
Inception	30	$10,000	-	$9,300	$10,000	10,000	-	$10,000 AV
1	30-31	10,000	$0	18,210	19,258	21,000 C	$0	20,000 PP
2	31-32	10,000	0	26,639	28,169	32,550 C	0	30,000 PP
3	32-33	10,000	0	34,944	36,735	44,678 C	0	40,000 PP
4	33-34	10,000	0	43,827	44,959	57,411 C	0	50,000 PP
5	34-35	10,000	0	51,918	52,872	70,782 C	0	60,000 PP
6	35-36	12,500	0	61,969	62,858	87,446 C	0	72,500 PP
7	36-37	12,500	0	71,621	72,419	104,943 C	0	85,000 PP
8	37-38	12,500	0	80,899	81,556	123,316 C	0	97,500 PP
9	38-39	12,500	0	89,861	90,271	142,606 C	0	110,000 PP
10	39-40	12,500	0	98,417	98,565	162,714 C	4,549	122,500 PP
11	40-41	15,000	0	108,849	108,849	186,755 C	5,289	137,500 PP
12	41-42	15,000	0	118,624	118,624	211,842 C	6,076	152,500 PP
13	42-43	15,000	0	127,891	127,891	238,185 C	6,917	167,500 PP
14	43-44	15,000	0	136,648	136,648	265,844 C	7,816	182,500 PP
15	44-45	15,000	0	144,896	144,896	294,886 C	8,811	197,500 PP
16	45-46	17,500	0	155,043	155,043	328,005 C	9,958	215,000 PP
17	46-47	17,500	0	164,588	164,588	362,781 C	11,145	232,500 PP
18	47-48	17,500	0	173,528	173,528	399,295 C	12,458	250,000 PP
19	48-49	17,500	0	181,860	181,860	437,634 C	13,917	267,500 PP
20	49-50	17,500	0	189,581	189,581	477,891 C	15,426	285,000 PP

MetLife®

Hypothetical Illustration of Variable Annuity Series L(04)

Prepared For: Valued Client, age 30, gender Male
Requested By: Randolph Hinton
Prepared On: November 18, 2009
Contract Type: Qualified
State: CA

Assumptions

Total Purchase Payment(s): $497,500 GMIB Plus[3,4] Payout: **Single Life w/Period Certain[5]**
Death Benefit[1]: Principal Protection
Withdrawal Type: 5% Inc Base
Investment[2]: Hypothetical Account @ 0% (gross rate) -2.51% (net rate*)
Withdrawal Mode: Monthly

Hypothetical Account Values						Guaranteed Minimum Income Benefit Plus[3,4]			Guaranteed Death Benefit
Anniversary Year	Age	Purchase Payment(s)[2]	With[2]-drawal Amount	With-[2] drawal Value	Account [2] Value	Income Base		Income Benefit	Hypothetical[1] Death Benefit
21	50-51	20,000	0	199,097	199,097	522,786	C	17,126	305,000 PP
22	51-52	20,000	0	207,902	207,902	569,925	C	19,013	325,000 PP
23	52-53	20,000	0	215,992	215,992	619,421	C	21,036	345,000 PP
24	53-54	20,000	0	223,359	223,359	671,392	C	23,203	365,000 PP
25	54-55	20,000	0	229,996	229,996	725,962	C	25,612	385,000 PP
26	55-56	22,500	0	238,304	238,304	785,885	C	28,198	407,500 PP
27	56-57	22,500	0	245,775	245,775	848,804	C	31,066	430,000 PP
28	57-58	22,500	0	252,398	252,398	914,869	C	34,143	452,500 PP
29	58-59	22,500	0	258,161	258,161	984,238	C	37,440	475,000 PP
30	59-60	22,500	0	263,051	263,051	1,057,075	C	41,099	497,500 PP
31	60-61	0	0	245,354	245,354	1,109,928	C	44,086	497,500 PP
32	61-62	0	0	227,546	227,546	1,165,425	C	47,270	497,500 PP
33	62-63	0	58,271	152,708	152,708	1,165,425	C	48,388	368,602 PP
34	63-64	0	58,271	79,747	79,747	1,165,425	C	49,507	226,298 PP
35	64-65	0	58,271	8,586	8,586	1,165,425	C	50,766	59,001 PP
36	65-66	0	7,561	0	0	1,165,425	C	64,098	0
Totals		**$497,500**	**$182,374**						

* A Net rate of return reflects the Gross rate of return reduced by the asset-based fees: the Investment Management Fee and other expenses; the Mortality and Expense and Administration Charge, the Earnings Preservation Benefit rider charge (if elected) and any elected optional death benefits, excluding the Enhanced Death Benefit.

Hypothetical Illustration of Variable Annuity Series L(04)

1 The Principal Protection Death Benefit comes standard with a MetLife Investors variable annuity contract at no additional charge. The Principal Protection Death Benefit is the greater of the Account Value (AV) at death or the total contributions adjusted for partial withdrawals (PP). Withdrawals impact the Principal Protection Death Benefit proportionately. This amount is illustrated in the Hypothetical Death Benefit column. Death benefits are only payable if the contract owner dies prior to annuitizing the contract.

2 .This hypothetical illustration assumes: 1) Purchase Payments and Withdrawals are as of the beginning of the period elected; 2) Each purchase payment, adjusted for withdrawals, is assumed to grow at a gross rate of variable return and 0.00%, compounded annually, and reduced by applicable fees and charges; and 3) The values provided in this illustration are as of the end of the year. Hypothetical returns are used for illustration purposes only and should not be deemed a representation or estimate of past or future performance, or a guarantee of any kind. Actual results may be more or less favorable than those shown. 4) A Net rate of return reflects the Gross rate of return reduced by the asset-based fees: the Investment Management Fee and other expenses; the Mortality and Expense and Administration Charge; the Earnings Preservation Benefit rider charge (if elected); and any elected optional death benefits, excluding the Enhanced Death Benefit.

3 The Guaranteed Minimum Income Benefit Plus (GMIB Plus) is an optional rider available for an additional charge of 1.00% of the Income Base. The GMIB Plus guarantees you a fixed minimum level amount of annual income via annuitization. You can only exercise the GMIB Plus rider within 30 days after any contract anniversary beginning with the 10th contract anniversary. You must exercise the GMIB Plus rider no later than the 30th day following the contract anniversary immediately after your 90th birthday. If the Account Value is withdrawn to zero at any time, the contract will automatically annuitize within 30 days and income payments (if any) will be reduced by any applicable withdrawal adjustments. When exercising GMIB Plus, the amount applied to generate the **annuity income**, called the Income Base, will be **the greater of** the 5% Compounding income base until the contract anniversary following the 90th birthday and Highest Anniversary Value (HAV) income base through age 80. Any withdrawals between 0 - 5% of the current year's 5% Compounding income base will reduce the 5% Compounding income base on a dollar-for-dollar basis. Withdrawals greater than 5% annually will reduce the 5% Compounding income base proportionately. Any withdrawal will reduce the Highest Anniversary Value (HAV) income base proportionately. The income base is calculated at the time of exercise to the conservative GMIB Annuity Table specified in the rider in order to determine your minimum guaranteed lifetime fixed monthly annuity payments. The annuity rates in the GMIB Annuity Table are conservative and a withdrawal charge may be applicable, so the amount of guaranteed minimum lifetime income that the GMIB produces may be less than the amount of annuity income that would be provided by applying your account value on your annuity date to then-current annuity purchase rates. The Income Base is not a cash value and cannot be taken as a lump sum. In the prospectus and GMIB Plus rider, the 5% Compounding income base is referred to as the Annual Increase Amount and the Highest Anniversary Value income base is referred to as the Highest Anniversary Value.

With GMIB Plus, you must invest in either Option A or B in the Portfolio Flexibility Program. Each quarter your account balance will be rebalanced based on your most recent purchase payment allocation instructions. Rebalancing will also occur on a date when a subsequent purchase payment is received if accompanied by a new allocation instruction. Please refer to the Contract, Prospectus and Marketing Material for more information.

For illustration purposes only. When the account is liquidated prior to the next anniversary, the Annual Increase Amount Income Base is not yet fully valued. For actual contracts where the automatic annuitization feature is exercised, the Income Base is fully valued to the previous year's Income Base when determining the annual income. However, if your current Account Value and the current annuity purchase factors would provide a higher level of income, you would automatically receive the higher amount. This amount of income would also be guaranteed for life. In this situation, you would have paid for the optional GMIB Plus rider and received no additional benefit.

The GMIB Plus may have limited usefulness in connection with a Qualified Contract, such as an IRA, in circumstances where, due to the ten-year waiting period after purchase the owner is unable to exercise the rider until after the required beginning date of required minimum distributions under the contract. In such event, required minimum distributions received from the contract will have the effect of reducing the income base either on a proportionate or dollar for dollar basis, as the case may be. This may have the effect of reducing or eliminating the value of annuity payments under the GMIB Plus. Additionally, the GMIB Plus is not available for purchase by a beneficiary under a decedent's Non-Qualified Contract or IRA (or where otherwise offered, under any other contract which is being "stretched" by a beneficiary after the death of the owner or after the death of the annuitant in certain cases). The GMIB Plus benefit may not be exercised until 10 years after purchase, and the benefit provides guaranteed monthly fixed income payments for life (or joint lives, if applicable), with payments guaranteed for 5 years. However, the tax rules require distributions prior to the end of the 10-year waiting period, commencing generally in the year after the owner's death, and also prohibit payments for as long as the beneficiary 's life in certain circumstances. You should consult your tax adviser prior to electing a GMIB Plus rider.

Optional Step-Up may be elected on every anniversary though age 80. Step-Ups may be elected annually, or an automatic step-up option is available. The automatic step-up continues for seven contract anniversaries, unless a request is received to terminate the automatic step-up. This automatic step-up period can be renewed at any time after the seven year period has expired. The Optional Step-Up: 1) Resets the Annual Increase Amount to the account value on date of reset; 2) Resets the waiting period to exercise the GMIB Plus rider to 10 years from the date of the most recent step-up; 3) Resets the rider charge to a rate we shall determine that does not exceed a maximum charge of 1.50%, provided that this rate will not exceed the rate currently applicable to the same rider available for new contract

purchases at the time of the step-up. The step-up will increase GMIB Plus rider fees by resetting the GMIB Plus Income Base to a higher amount. For illustration purposes only, the Rider Charge will remain constant. **Please refer to the current prospectus for important details regarding the Optional Step-up.**

4 **5% Compounding** represents the higher of the annual 5% Compounding income base and applied to guaranteed annuity purchase factors or the Optional Step-Up (stepped up to account value), if higher.

5 When you elect to receive annuity payments under the Income Benefit, you have a choice of two annuity options: A life annuity with a 5 year period certain or a joint and last survivor life annuity with a 5 year period certain.

MetLife

California Insurance Code

This Is For Illustrative Purposes Only.

An Illustration is not intended to predict actual performance.

Interest Rates, Dividends, or Values that are set forth in the Illustration are not guaranteed, except for those items clearly labeled as Guaranteed.

Attachment Nine:
Wharton Report

Profitable Prudence:
The Case for Public Employer Defined Benefit Plans

Gary W. Anderson and Keith Brainard

PRC WP 2004-6

Pension Research Council Working Paper
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JEL Codes: G22 Insurance; G23 Pensions; J26 Retirement and Retirement Policies; J32 Pensions; H55 Social Security and Public Pensions.

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Profitable Prudence:
The Case for Public Sector Defined Benefit Plans

Gary W. Anderson and Keith Brainard

Abstract

Defined benefit plans remain the predominant form of retirement benefit for employees of state and local governments in the United States, which employ more than 10 percent of the nation's workforce. This chapter describes the divergence between pensions in private industry, where the focus has shifted sharply toward defined contribution plans, and in the public sector, where defined benefit plans continue to dominate. One reason is that public employers have the ongoing responsibility of attracting and retaining a large workforce whose diversity is unmatched in private industry. We also offer an economic analysis of public plans, focusing on the value-added to state economies from investment returns which are often superior to those generated by defined contribution plans.

Profitable Prudence:
The Case for Public Sector Defined Benefit Plans
Gary W. Anderson and Keith Brainard

US public sector plans covering employees of state and local governments have grown to comprise a substantial segment of national pension assets and membership. Participants include more than 14 million workers – ten percent of the national workforce – and six million retirees as well as other annuitants; all are members of more than 2,000 retirement systems sponsored by a state or local government (U.S. Census, 2002). These systems have combined assets of more than $2 trillion and they distributed over $110 billion in pension and other benefits (Board of Governors, 2004; U.S. Census, 2002); this volume exceeded the entire economic output of 22 states and the District of Columbia (U.S. Dept. of Commerce, 2003).

In recent years, public sector pensions have diverged from the private sector pension trend, in that the percentage of public employees participating in a defined benefit (DB) plan has held steady at around 90 percent, while the fraction of private sector workers with a DB plan has plummeted to around 20 percent (BLS, 2002). Against the backdrop of 30 years of private pension experience with the Employee Retirement Income Security Act (ERISA), it is useful to note that US public sector pensions evolved prior to, and outside the purview of, this federal legislation. This different experience makes it invaluable to not only learn what effects state and local government pensions have on stakeholders – including participants, public sectors employers, and taxpayers – but also to glean lessons that the public pension experience may offer to private industry.

A Brief History of Public Pensions

Public DB plans have engaged in substantial efforts to reinvent themselves in recent years, adding elements that increase their flexibility and portability. Nevertheless, public plans retain the core attributes of a traditional defined benefit model: that is, the employer bears investment risk and the plan pays lifelong benefits according to a specified formula. Against this backdrop, it remains the case that each of the over 2,000 public retirement systems has its own unique plan design, benefit structure, and governance arrangement, set forth in a vast assortment of state constitutions, laws, and administrative rules. This mosaic of structures and features reflects each state's rich variety of legal, political, economic, and demographic cultures and history as well as its political subdivisions. In other words, state and local government plans are creatures of state constitutional, statutory, and case law. As such, public pensions are accountable to each state's legislative and executive branches, independent boards of trustees which often include employee representatives and *ex-officio* publicly elected officials, and ultimately, the taxpayers of that jurisdiction.

Although some US public pensions date to the late 19th century, most public plans were established between the 1920's and the 1940's. These were mainly of the defined benefit variety. Municipal governments led states and the federal government in providing pension coverage for their workers, largely because the first groups to be covered—police, firefighters, and teachers—were established at the local level, by cities, towns, and school districts. As Clark et al. (2003) point out, these plans were initially financed from employee contributions, as a form of "forced saving plans," although over time, employers gradually took on greater responsibility for plan financing.

Because public employees initially had their own plans, the US Social Security system initially excluded state and local government workers due to uncertainty about whether the federal government could legally tax state and local employers. In 1950, Congress amended the Social Security Act to allow states to voluntarily provide social security coverage for their employees, if the state entered into an agreement with the Social Security Administration (Mitchell and Hustead, 2001). Today, the majority of state and local government employees participate in social security; the remaining non-participants are teachers and public safety personnel though most public employees in seven states do not participate (Alaska, Colorado, Maine, Massachusetts, Louisiana, Nevada, and Ohio). Where employees are exempt from social security contributions, the pension benefit and contribution levels are typically higher.

The passage of ERISA in 1974 and subsequent amendments were watershed events in the evolution of private industry pensions, but these had little impact on public pensions which remained largely untouched by federal regulation. As Metz noted (1988: 4):

> Governmental plans are specifically exempt from all of the substantive qualification requirements added to the (Internal Revenue) Code by Title II of ERISA (with the exception of the Section 415 maximum limitation on benefits), including those relating directly to participation, vesting, funding, prohibited transactions, joint and survivor annuities, plan merger and consolidation, alienation and assignment of plan benefits, payment of benefits, certain social security benefit increases, and withdrawal of employee contributions.
>
> In addition, governmental plans are exempt from ERISA's other major provisions, including reporting and disclosure requirements (Title I) and plan termination insurance (Title IV). Although government plans are not subject to

> ERISA's participation, vesting, funding and fiduciary rules, they are, nonetheless, covered by comparable although not as restrictive rules as stated in the Internal Revenue Code prior to ERISA's enactment.

In the private sector, ERISA's impact was to impose a relatively uniform and comprehensive set of regulations and standards to the pension sector; by contrast, public retirement systems' diverse nature would not be possible if they had been governed in a like manner. This is not to say that the federal government has not tried, as noted by the GFOA (1992):

> Since passage of ERISA, in 1974 ... Congress has deliberated over federal involvement in the setting of conforming standards for state and local government retirement systems. In 1978, the Pension Task Force Report, issued by the House Committee on Education and Labor, recommended federal regulation of PERS. Legislative proposals have been introduced in each successive Congress to establish federal rules for state and local government retirement systems. However, during this period PERS have made great strides in funding future pension obligations, following prudent investment policies, disseminating information and implementing administrative and operational discipline. These advances have been made without the intervention of the federal government.

Public vs Private Sector Plan Differences. Since the passage of ERISA, the percentage of private sector workers with a DB plan as their primary retirement benefit has fallen steadily, while coverage has risen by defined contribution plans (primarily of the 401(k) variety). A recent Bureau of Labor Statistics (BLS 2003) study found that only 58 percent of full-time private

sector workers participated in an employer-sponsored retirement plan, and only 10 percent of private sector employers nationwide provided a DB plan. By contrast, virtually all full-time public sector employees participate in a retirement plan, and the vast majority (90 percent) is in a DB plan. Here benefits are usually expressed as a percentage of salary for a designated period just before retirement, multiplied by years of service credit (Findlay, 1997).

What accounts for the divergence in pension coverage and type, when comparing private industry and the public sector? Several reasons have been offered for the loss of ground by DB plans in the private sector are increased private-sector government regulation; changes in the private-sector workplace, including growing employee and employer appreciation of DC plans; changes in business awareness regarding risk associated with funding DB plans; falling firmsize; greater global competition boosting the need for more flexibility in plan design; and successful marketing efforts of consultants and DC plan service providers. (Rajnes, 2002).

Nevertheless, there are also less appealing consequences of relying on DC plans as the primary retirement benefit (CBO, 2003). For instance, DC plans are seen as an unreliable vehicle for ensuring financial security in retirement to the extent that investment risk is borne solely by individual participants; this is exacerbated when plan participants are poor investors. A study prepared for the Nebraska Public Employee Retirement System (PERS) found that from1983-99, that system's DB plans generated an average of 11 percent annually, but the system's DC participants paid returns of only 6 percent (Buck Consultants, 2000). This occurred despite ongoing efforts by the PERS to educate participants on the importance of proper asset allocation. Nebraska PERS also found that a large percentage of terminating DC participants cashed out their retirement saving rather than retaining them in a retirement account. One explanation for why public DC plan returns lag professionally invested DB portfolios is that the DC asset

allocations are often quite conservative. For instance, approximately half of all assets held in 403b and 457 plans (primarily and exclusively used by public employees, respectively) were held in the form of annuity reserves at life insurance companies (ICI 2004).

Another concern with DC plans as the primary retirement benefit is termed the "leakage" problem, a term applied to describe a variety of circumstances when retirement assets are spent by plan participants prior to retirement. For example, leakage occurs if an employee chooses to spend his retirement assets after leaving a job, rather than rolling them over to an Individual Retirement Account or to a new employer's retirement plan. Leakage also occurs when workers borrow against their retirement plan assets and then fail to repay the loans. A recent study by Brainard (2003:7) addressed the issue of leakage as follows:

> A good example of terminating participants spending, rather than saving, their retirement assets are in Nebraska, where state and county government employees historically have participated in a DC plan. A study of the Nebraska Public Employees Retirement System, conducted by a national actuarial consultant, found that 68% of terminating participants cashed out their assets rather than rolling them over to another retirement plan. This finding is consistent with a Hewitt Associates study which found that more than two-thirds of participants terminating from DC plans cash out their lump sum distributions rather than rolling them to other retirement accounts.

In what follows, we outline the key advantages of DB plans to public sector employees and employers, seeking to illustrate how this paradigm for retirement provision is well-situated to meet retirement needs of the future.

Benefits to Employees

The ideal mix of retirement income sources has long been described as a "three-legged stool," with one leg each representing social security, an employer pension, and individual savings. As a rule of thumb, financial planners recommend replacing approximately 70 to 80 percent of one's working income in retirement. Public sector DB plans help achieve this goal by linking employee salary and retirement income: thus a social security-eligible employee retiring with 20 years of service in a typical public pension plan can expect the benefit to replace 35 to 40 percent of his salary. Combined with social security and personal saving, the retiree then finds the 70-80 percent target within reach. Retirees and beneficiaries of public DB plans received annual benefits of over $18,000 in fiscal year 2002 (Brainard 2004).[1] In addition to the basic DB plan, many public employers today also offer a voluntary, supplemental retirement saving plan which enables workers to save on their own for retirement. The most popular public employer-sponsored supplemental savings plans are 457 plans, also known as deferred compensation plans, and 403(b) plans, commonly referred to TSA's or tax-sheltered annuities.

Retiree financial independence relies heavily on the guaranteed income replacement concept provided by a DB plan, and it also relies on the central concept that the retiree will continue to receive benefits until death. Further, most public DB plans provide joint and survivor annuity options, to ensure that spouses and other named beneficiaries will continue to receive a benefit even in the event of the death of the retiree (Mitchell and Hustead, 2001). By contrast, defined contribution plans do not guarantee access to a life annuity nor joint and survivor benefits.

A factor receiving increasing attention in recent years is the point that public DB assets are held in trust for participants; the assets are normally administered by a governing board

whose members are legal fiduciaries. Unlike private industry DB plans, which can be curtailed in the event of the plan sponsor's bankruptcy, public pension benefits generally cannot be reduced. That is, ERISA protects only private sector DB benefits that have already accrued, while it does not protect the right to future benefit accruals. Constitutional provisions governing contract and property rights are generally interpreted as protecting not only accrued benefits but also future benefit accruals. This practice varies from state to state, with some state constitutions explicitly protecting pension benefits, while in other cases, statutes and case law expressly forbids cutting pension benefits. By contrast, state and local laws generally afford participants far greater protections, prohibiting public employers from diminishing the benefit formula, often with respect to future accruals. Another advantage of public plans is that most provide some form of protection against inflation. Since the median life expectancy of a 65-year old woman is 22 years in the US, inflation of just 2 percent will cut purchasing power by more than one-third over the retirement period. Public plans offer several mechanisms for adjusting benefits post-retirement, including with periodic adjustments subject to legislative approval, automatic increases linked to the inflation rate, and annual automatic increases of a flat percentage or dollar amount (Brainard, 2003).

Benefits to Employers

Pensions were introduced in the public sector to help public administrators attract and retain quality workers, to provide them with performance incentives, and to retire them in an orderly fashion (Eitelberg, 1997). It is worth recognizing that governments, in their dual roles as both employers and policymakers, are uniquely situated to promote retirement financial security

and serve as models for private industry, in their capacity as employer to more than one in ten working Americans.

The diversity of the public sector workforce has few, if any, peers in private industry, and attracting and retaining such a workforce requires a concerted and ongoing effort. For instance, just a few of the numerous positions maintained by U.S. public employers include game wardens and garbage collectors, school teachers and environmental scientists, elected officials and insurance analysts, psychiatrists and custodians, historians and police officers, prison guards and firefighters, and college professors, among others. Each of these positions requires a different set of skills, knowledge, and abilities; exhibits differing demographic features and career patterns; and has unique requirements for recruitment, retention, salary, and compensation. As Mitchell and Hustead (2001: 15) note, "[o] ne reason why pension plans differ (from those in private industry) is that they cover employees with different employment characteristics. For instance, because police work and fire fighting are physically demanding occupations, retirement benefits for public safety workers typically allow retirement at earlier ages, in part to maintain a younger workforce. Consequently, the retirement benefits available to police and firefighters are usually different from those provided to teachers or to general employees." Similarly, pensions for judges typically are intended to reflect that, as a group, judges are older than most other employees when entering their positions, and they often forgo larger salaries in private industry to serve as judges. Since protecting and educating its citizens is generally considered to be a government's core responsibilities, it should be no surprise that more than half of all public employees work in positions classified by the U.S. Bureau of Labor Statistics (2002) as either Education or Protective Service. More than nine million public employees are classified as

educational (including teachers, administrators, and workers in supportive roles), and there are approximately one million law enforcement personnel and firefighters in the U.S.

Not only do public DB plans attract a diverse group; they also promote retention efforts by rewarding length of service. This is because DB plan formulas usually base the retirement benefit on a worker's salary during his final years of service and on his length of service. Since salaries tend to rise over time, DB plans typically calculate pension benefits based on the worker's final three or five years (final average salary or FAS). As the workforce changes, all employers will be challenged to compensate workers who possess required knowledge, skills, and institutional memory (Mulvey and Nyce, this volume.) DB plans may be key to retaining quality employees.

DB plans also encourage orderly turnover of personnel by allowing employees to depart from the workforce with a clear knowledge of their pension benefits and with the assurance that the benefit payment will continue for life. By contrast, the DC plan provides no assurance that an employee will be financially prepared for retirement at any specific age or level of experience. Unfortunately this uncertainty (or, in some cases, certainty of the inadequacy of one's benefits) causes employees to remain on the job even when their ability to perform job duties is in decline. Clearly this may also complicate the employer's role, forcing decisions with unpleasant consequences for everyone.

In recent years, public DB plans have grown more flexible in their ability to meet a range of new employer (and employee) objectives. Developments include shorter vesting periods; a majority of public employees now participate in plans with a vesting period of five years or fewer, down from 10 years a decade ago. In addition, many large statewide public retirement plans now allow participants to purchase service earned at another retirement system or in the

military. Also many plans now permit terminating participants to take all or part of the employer contributions, and some allow retired participants to return to active employment while continuing to receive their pension benefits. The number of public sector hybrid plans, having both DB and DC plan characteristics, has risen, as has the number of plans permitting retiring participants to take a portion of their benefit as a lump sum at retirement. Some plans also now permit participants to share in investment earnings during the accumulation period.

Another feature of DB plans particularly valuable to public employers is their ability to help public employers temporarily adjust the criteria used to determine retirement eligibility (typically, age and years of service requirements). Such incentives target employees who qualify already for retirement or who are close to qualifying, many of whom may be older and have more experience and salary than other employees. Once the worker retires, his position can be held vacant temporarily or permanently, or he may be replaced with lower-paid employee. Structured and managed properly, early retirement incentive plans have been deemed useful to public employers, especially in the short-term.

Public DB plans as Financial Engines

A not-yet-discussed beneficial aspect of public DB plans is that their assets promote economic growth and vitality. Through their size, broad diversification, and focus on long-term investment returns, public pension funds stabilize and add liquidity to US and foreign financial markets. The Federal Reserve System Board (2004) reported that the $2.3 trillion held by public retirement systems equaled over than 20 percent of the nation's entire gross domestic product and approximately 20 percent of the nation's total retirement market. Public pension assets are well-diversified: approximately $1.3 trillion of public pension assets are held as corporate

equities; $800 billion is in US treasury notes and bonds and corporate debt; and another $90 billion is in real estate and mortgages (Federal Reserve Board, 2004). Most of these assets are invested on a long-term basis, while public pension cash and short-term holdings add essential liquidity to financial markets.

The cost of public pension funds to taxpayers, which is generally reported as employer contributions was $38.8 billion (in FY 2002). Public pensions paid over $110 billion in benefits in FY 2002, and a substantial majority of these funds derived from sources other than employer (taxpayer) contributions – mainly investment gains and employee contributions. Over the two-decade period from 1983 to 2002, public pensions had total receipts of $2.7 trillion: investment earnings represented $1.65 trillion of all system receipts, dwarfing employer (government) and employee contributions (U.S. Census Bureau, 2003). Through professional asset management and benefiting from favorable investment markets, public funds leveraged contributions from employers and employees into sizable investment earnings during the 1980's and 1990's. The sources of public pension revenue are summarized in Figure 1.

Figure 1 here

It is worth noting that these revenue sources shifted dramatically between 1983 and 2002, with investment earnings ring from 42 percent in 1983 to 62 percent in 2002. Meanwhile, the employer (taxpayer) share of cumulative public pension revenue declined from 42 percent to 26 percent. Unlike DB plans in private industry, most public DB plan participants contribute to their plans: 13 percent of public pension contributions came from employees during this period, and investment earnings made up the remainder. The time-series change in the distribution of revenue sources is depicted graphically in Figure 2.

Figure 2 here

By sponsoring DB plans with professional investment functions, instead of DC plans with assets managed by individual plan participants, public employers increased the value of retirement plan assets by an amount greater than the entire cost of their contributions during this same period.

Venture capital provides financing for new and rapidly growing companies; the innovations and efficiencies generated by start-up companies are considered critical to long-term economic growth. In the last decade, many public retirement systems have established target allocations to venture capital projects within their own state (PSRS/NTRS, 2002). These investments seek to provide a return to the pension fund commensurate with the investment's level of risk, and also to promote economic growth and development in the state. Venture capital typically requires at least ten years to fully mature, making it a natural match for defined benefit assets (McDonald, 2002). This is because of DB funds' focus on long-term investment results and because these funds pool assets for large numbers of participants, accumulating portfolios large enough to commit to venture capital projects. In addition, DB plans also invest in other asset classes with the same long-term focus they demonstrate with venture capital.

As consumers, retired pension participants spend their benefits on a range of goods and services. These expenditures increase economic demand and promote employment, generating additional economic activity, which begets additional demand and employment. This is known as the multiplier effect: the effect of a single dollar has an economic impact greater than one dollar as it ripples through the economy. In an analysis described in more detail in the Appendix, we estimate the impact of the higher earnings from DB plans versus those available from DC plans which take into account lower investment earnings. We evaluate the impact of these higher investment gains on the gross product of the five states with the largest public pension distributions in fiscal year 2002 (California, New York, Texas, Ohio, and Illinois). In particular,

we assume a marginal propensity to consume (MPC) of 0.67, which implies an economic multiplier effect of 3.0. Benefit payments from these five states comprised approximately 44 percent of the $110 billion in public pension benefit payments in FY 2002. The difference between the actual benefits distributed by DB plans, and the estimated value of available DC benefits in these states of $25.78 billion. represents the marginal value added by public DB plans as a result of their investment returns over the inferred value of available DC benefits (see Table 1).

Table 1 here

Next we compute for each of the five states the value added to the gross state product (GSP) by the higher payments from DB plans attributed to superior investment returns. The value added, shown on Table 1, is determined by multiplying the marginal value-added by public DB plans' higher investment returns by the economic multiplier of 3.0. The table also shows the percentage value added to each state's gross state product, which in these five states totaled a weighted average of 2.0 percent to states' GSP. If we were to extrapolate these computations to the entire economy, a national 2.0% impact would yield a value added from public DB plans of $203 billion: ***$10.137 trillion (GDP) x 2.0% = $203 billion***. This contribution to the nation's economy dwarfs the employer contributions of $39 billion to public retirement systems in FY 2002. Indeed, setting aside all the other benefits to employers and employees of DB plans, contributions to public pension plans may be among the best investments a state or local government can make.

Conclusions

The economic boost of public pension benefits is likely to grow as public employees of the Baby Boomer cohort begin to retire, and public retirement systems begin to pay out increasingly larger benefit amounts. In our view, public pension plans are in a strong position to handle the coming influx of retirees, since, unlike social security (mainly a pay-as-you-go program); public pensions are rather well-funded (approximately 95 percent in 2003). Investing the $2.3 trillion in public pension assets and the flow of benefit payments to annuitants promises a continuous, predictable, and growing source of economic stimulus. Moreover, through efficient asset management and pooling of resources, public defined benefit pension plans have a significant, positive effect on financial markets and the economy.

In general, public employers recognize that DC plans have many positive attributes, but to make them work well, many factors must fall into place: participants must consistently make sound investment decisions over their working and retired lives; they must remain in the workforce steadily, avoiding lengthy time off for having children, raising a family, completing an education, or for illness; they must have a sufficient amount withheld from their pay; they must avoid borrowing against and spending their retirement assets; and they must make appropriate decisions regarding withdrawal rates during retirement. Even then, employees might exhaust their assets after retirement. Hence having a DB plan as the primary retirement benefit protects public sector employees against many of these problems

Public DB pension plans have also enabled public employers to achieve important objectives related to the recruitment and retention of quality workers. These plans financial security in retirement and reduce retiree reliance on public assistance programs. The fact that these plans have evolved relatively independently of the federal regulatory structure governing

private pensions has allowed the public plans to engage in an ongoing process of creating and modifying plan designs and governance structures to meet the unique needs of public sector employers. The independence, flexibility, and profitable prudence of these plans will continue to support public employers in their ongoing mission to serve taxpayers, while providing financial security to retired public employees and significant economic benefits to their communities. Public plans are, indeed, a useful component of the new retirement paradigm of the future.

Technical Appendix

The multiplier effect described in the text is based on the marginal propensity to consume (MPC) which refers to the proportion of each additional dollar of household income used for consumption. As Keynes (1936) noted, people tend to consume more if their income rises, but this consumption gain tends to be less than the rise in their income. The MPC states that a worker who receives an increase in salary of $100 per month will spend some, but not all, of the entire $100; savings and taxes will make up the difference. It can be expressed as a formula: $MPC = \Delta I - MPS - t$, which simply means that the marginal propensity to consume equals the change in income minus savings minus taxes. The multiplier effect can be derived from the MPC as 1/(1-MPC).

To compare actual benefits paid by public DB pensions and the benefits that might have been payable by DC plans earning lower assumed investment returns, we reduced by ten percent the amount paid by public DB pensions to reflect migration of retired participants from the five states. This reduces the DB payments figure to $44.2 billion. For the 20-year period ended in 2002, public DB plans experienced annualized investment returns of 10.03 percent. As a base of comparison, using the Nebraska benefits adequacy study and the Investment Company Institute report on the asset allocation of 403b and 457 plan participants as a guide, we assume a net annualized investment return for DC plans during the same period of 6.5 percent. Based on these rates, the DC plan portfolio would have returned 41.7 percent of the investment gains accrued by the DB plan. Applying this proportion—41.7 percent—of the investment earnings DC plans would have generated, to the benefits actually distributed by public DB plans in the five states, yields $18.4 billion. This amount is referred to here as the *inferred value of available DC*

benefits, and represents a level of assumed DC plan benefits that can be compared with the amount actually distributed by DB plans.

While this exercise illustrates how public DB plans can have a positive effect due to their superior investment returns, relative to DC plans, there are other factors that must also be mentioned. For instance, we assumed that DC plans would pay benefits in the same proportion to their investment earnings as DB plans, but in fact we cannot know at what rate DC plan assets will actually be spent. Also we assumed that DC and DB contribution rates would have been the same. In view of the fact that some DB contributions over this period were actually intended to reduce underfunding, it is possible that contributions to DC plans would have been lower than these. In any event, our central finding—that DB contributions yield positive long-term economic results—suggests that higher contribution rates literally have been a good investment, not only for taxpayers, but also for public employers and employees. Additionally, this analysis assumed a consistent contribution rate relative to investment gains and benefit payments, though actual contribution rates varied across states. Also we did not attempt to determine additional tax revenues generated by higher DB payments; rather we assumed that the DC and DB plans produced similar rates of leakage, though most public DB plans do not permit loans. Finally, we assumed that the administrative cost of the plan types is identical, though public DB plans typically have administrative expenses considerably lower than those of DC plans. Factoring this in would likely strengthen the case for the economic value of DB versus DC plans.

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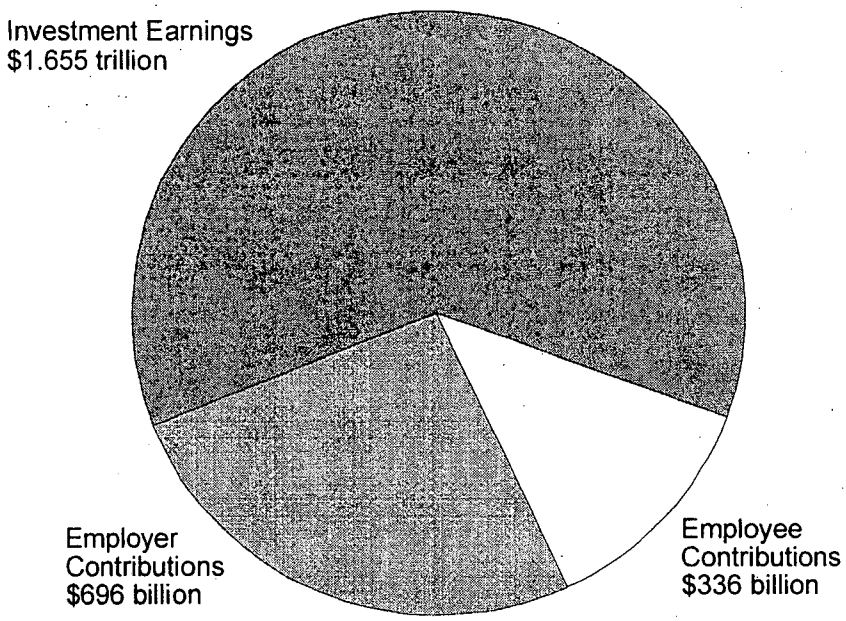
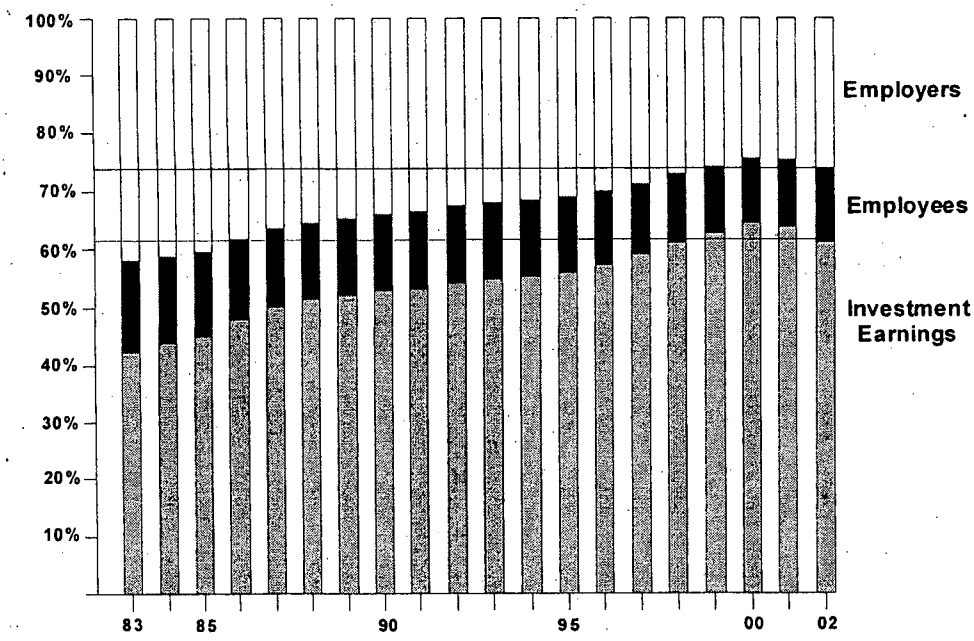
Figure 1. Sources of Public Pension Revenue



Source: US Census Bureau (2002)

Figure 2. Changes Over Time in Public Pension Fund Revenue by Source, 1983-2002



Source: US Census Bureau (2002).

Table 1. Estimated Benefits from DB and DC Plans, Assuming Lower Returns to DC Investments, 2002 (in $ billions)

State	Actual Benefit Payments Made by Public DB Plans	Assumed Payments from DC Plans	Value Added by Higher DB Plan Returns	2001 Gross State Product	$ Value Added to Gross State Product by Higher Returns	% Value Added to Gross State Product by Higher Returns
California	$14.88	$6.20	$8.68	$1,359.27	$26.05	1.9%
New York	$12.48	$5.20	$7.28	826.49	21.85	2.6%
Texas	$5.87	$2.45	$3.42	763.87	10.28	1.3%
Ohio	$5.62	$2.34	$3.28	373.71	9.85	2.6%
Illinois	$5.36	$2.24	$3.13	475.54	9.39	2.0%
Total	$44.21	$18.43	$25.78	$3,798.88	$77.42	2.0%

Note: Columns may not add due to rounding.

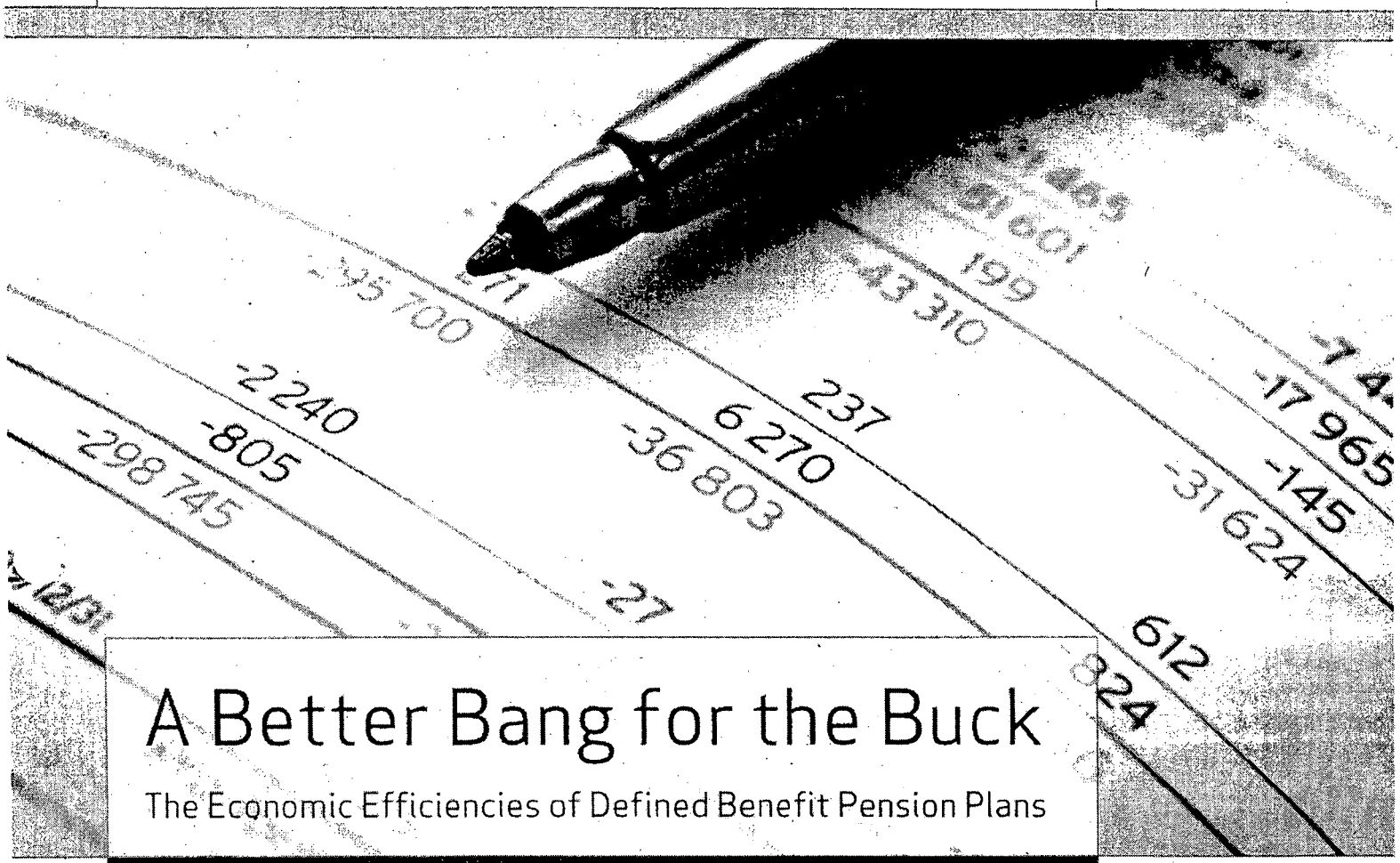
Source: United States Dept of Commerce (2003).

Endnotes

[1] For the 25 percent of state and local government employees who do not participate in social security, pension benefits are generally higher to compensate for the absence of social security benefits.

Attachment Ten:
A Better Bang for the Buck Report

NATIONAL INSTITUTE ON
Retirement Security
Reliable Research. Sensible Solutions.



A Better Bang for the Buck

The Economic Efficiencies of Defined Benefit Pension Plans

by Beth Almeida and William B. Fornia, FSA

August 2008

ABOUT THE AUTHORS

Beth Almeida is the Executive Director of the National Institute on Retirement Security. Before joining NIRS, she served as assistant director for strategic resources and as senior economist with the International Association of Machinists and Aerospace Workers (IAM) where she was instrumental in transitioning some 40,000 airline employees out of terminating or freezing pensions into the IAM's multi-employer defined benefit pension plan. Earlier in her career, Ms. Almeida led research initiatives at academic centers in Germany, France, and her home state of Massachusetts. She has authored numerous economic and pension publications and is a frequent speaker at academic and industry conferences, both in the US and abroad. Beth earned a bachelor's degree in international business from Lehigh University and a master's degree in economics from the University of Massachusetts Amherst.

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INTRODUCTION

Worries about retirement security abound. Families fear that they won't have enough to support an adequate retirement income as home values and financial markets plummet. Dwindling profit margins have employers looking to cut costs. And governments are concerned about delivering on the promises that they have made to their citizens and to their employees as tax revenues shrink amid a weakening economy.

In this environment, some have proposed replacing traditional defined benefit (DB) pensions with 401(k)-type defined contribution (DC) retirement savings plans in an effort to save money. But decision makers would be wise to look before they leap. To deliver the same level of retirement benefits, a DB plan can do the job at almost half the cost of a DC plan. Hence, DB plans should remain an integral part of retirement income security in an increasingly uncertain world because they offer employers and employees a better bang for the buck.

The value of traditional DB pensions to employees is generally recognized: they provide a secure, predictable retirement income that cannot be outlived. But less well known is the value of a DB pension to an employer. Due to their group nature, DB plans possess "built-in" savings, which make them highly efficient retirement income vehicles, capable of delivering retirement benefits at a low cost to the employer and employee. These savings derive from three principal sources.

First, DB plans better manage longevity risk, or the chance of running out of money in retirement. By pooling the longevity risks of large numbers of individuals, DB plans avoid the "over-saving" dilemma – that is, saving more than people need on average to avoid running out of cash – that is inherent in DC plans. Consequently, DB plans are able to do more with less.

Second, because DB plans, unlike the individuals in them, do not age, they are able to take advantage of the enhanced investment returns that come from a balanced portfolio throughout an individual's lifetime.

Third, DB plans, which are professionally managed, achieve greater investment returns as compared with DC plans that are made up of individual accounts. A retirement system that achieves higher investment returns can deliver any given level of benefit at a lower cost.

Because of these three factors, we find that a DB pension plan can offer the same retirement benefit at close to half the cost of a DC retirement savings plan. **Specifically, our analysis indicates that the cost to deliver the same level of retirement income to a group of employees is 46% lower in a DB plan than it is in a DC plan.** This is an important factor for policy makers to consider, especially with respect to public sector workforces, where tax dollars are an important source of funds for retirement benefits. DB plans are a more efficient use of taxpayer funds when offering retirement benefits to state and local government employees.

More specifically, this study finds that ...

- Longevity risk pooling in a DB plan saves 15%,
- Maintenance of a balanced portfolio diversification in a DB plan saves 5%, and
- A DB plan's superior investment returns save 26%

... as compared with a typical DC plan.

TWO APPROACHES TO RETIREMENT: DB AND DC PLANS

Employers who offer retirement benefits can consider two basic approaches: a traditional defined benefit (DB) pension plan and a defined contribution (DC) retirement savings plan.[1] Each type of plan has certain distinguishing characteristics that influence their cost to employers and employees.[2]

How DB plans work

While employers have a good degree of flexibility in designing the features of a DB plan, there are some features all DB plans share.

DB plans are designed to provide employees with a predictable monthly benefit in retirement. The amount of the monthly pension is typically a function of the number of years an employee devotes to the job and the worker's pay – usually at the end of their career.[3] For example, the plan might provide a benefit in the amount of 1.5% of final average pay for each year worked. Thus, a worker whose final average salary was $50,000, and who had devoted 30 years to the job, would earn a monthly benefit of $1,875 ($22,500 per year), a sum that would "replace" 45% of his final average salary after he stops working. This plan design is attractive to employees because of the security it provides. Employees know in advance of making the decision to retire that they will have a steady, predictable income that will enable them to maintain a stable portion of their pre-retirement standard of living.

Benefits in DB plans are pre-funded. That is, employers (and, in the public sector, employees) make contributions to a common pension trust fund over the course of a worker's career. These funds are invested by professional asset managers whose activities are overseen by trustees and other fiduciaries. The earnings that build up in the fund, along with the dollars initially contributed, pay for the lifetime benefits a worker receives when he retires.

How DC plans work

DC plans function very differently than DB plans.

First, there is no implicit or explicit guarantee of retirement income in a DC plan. Rather, employers (and usually employees) contribute to the plan over the course of a worker's career. Whether the funds in the account will ultimately be sufficient to meet retirement income needs will depend on a number of factors, such as the level of employer and employee contributions to the plan, the investment returns earned on assets, whether loans are taken or funds are withdrawn prior to retirement, and the individual's lifespan.

DC plans are typically "participant directed," meaning that each individual employee can decide how much to save, how to invest the funds in the account, how to modify these investments over time, and at retirement, how to withdraw the funds.

While DC plan assets are also held in a pension trust, that trust is comprised of a large number of individual accounts. DC plans are typically "participant directed," meaning that each individual employee can decide how much to save, how to invest the funds in the account, how to modify these investments over time, and at retirement, how to withdraw the funds. Retirement experts typically advise individuals in DC plans to change their investment patterns over their lifecycle.

In other words, at younger ages, because retirement is a long way off, workers should allocate more funds to stocks, which have higher expected returns, but also higher risks. As one gets closer to retirement, experts suggest moving money away from stocks and into safer, but lower returning assets like bonds. This is to guard against a large drop in retirement savings on the eve of retirement, or in one's retirement years.

This high degree of participant direction makes DC plans very flexible in accommodating individuals' desires, decisions, and control. Employees, however, do not always follow the best expert advice when it comes to saving and investing for retirement.[4] Too many workers fail to contribute sufficient amounts to the plans, and individuals' lack of expertise in making investment decisions can subject individual accounts to extremely unbalanced portfolios with too little or too much invested in one particular asset, such as stocks, bonds, or cash. For example, one study found that more than half of all DC plan participants had either no funds invested in stocks—which exposes them to very low investment returns—or had almost all their assets allocated to stocks, making for a much more volatile portfolio.[5]

Another important difference between DC and DB plans becomes apparent at retirement. Unlike in DB plans, where workers are entitled to receive regular, monthly pension payments, in DC plans it is typically left to the retiree to decide how to spend one's retirement savings. Research suggests that many individuals struggle with this task, either drawing down funds too quickly and running out of money, or holding on to funds too tightly and enjoying a lower standard of living as a result.[6] In theory, employers that offer DC plans could provide annuity payout options, but in practice they rarely do.[7]

BOTH DB AND DC PLANS ARE IMPORTANT TO RETIREMENT SECURITY

Because individuals do not have perfect knowledge as to whether they will remain in a given job (and therefore in a given DB plan) until retirement, taking advantage of the opportunity to save in a supplemental DC plan can provide employees with useful diversification of retirement income sources.

DC plans are also flexible vehicles that can accommodate individual retirement income needs that can vary. For example, two otherwise identical workers might have different family situations, health needs, or simply different preferences and expectations about their retirement income needs. DC plans give workers the opportunity to save for retirement in a manner that reflects their individual situations.

This is why most retirement experts liken the ideal design of retirement income sources to a "three-legged stool," consisting of Social Security, a DB plan, and a supplemental DC savings plan. Indeed, researchers have found that workers who have access to all three sources of retirement income are in the best position to achieve a secure retirement.[8]

However, to the extent that retirement benefits for private sector employees constitute a cost to employers, and since benefits for public employees are supported by taxpayer contributions, designing retirement benefits in a fiscally responsible fashion is an important public policy goal. To that end, it is important for policymakers to recognize that the features that make DB plans highly attractive to employees – a predictable monthly retirement benefit, low fees and professional management of retirement assets – also provide significant savings for employers and taxpayers.

DB PLANS ARE MORE COST EFFECTIVE

The cost of either a DB or DC plan depends primarily, but not only, on the generosity of the benefits that it provides. Economists have found that DB plans are typically more generous than DC plans, and obviously, more generous benefits are more expensive.[9]

However, for any given level of benefit, a DB plan will cost less than a DC plan.[10] This makes DB plans, in the language of economists, *more efficient* since they stretch taxpayer, employer or employee dollars further in achieving any given level of retirement income.

This makes DB plans, in the language of economists, more efficient since they stretch taxpayer, employer or employee dollars further in achieving any given level of retirement income.

There are three primary reasons behind DB plans' cost advantage.

- First, because DB plans pool the longevity risks of large numbers of individuals, they avoid the "over-saving" dilemma inherent in DC plans. DB plans need only accumulate enough funds to provide benefits for the average life expectancy of the group. In contrast, individuals will need to set aside enough funds to last for the "maximum" life expectancy if they want to avoid the risk of running out of money in retirement. Since the maximum life expectancy can be substantially greater than the average life expectancy, a DC plan will have to set aside a lot more money than a DB plan to achieve the same level of monthly retirement income.
- Second, because DB plans do not age, unlike the individuals in them, they are able to take advantage of the enhanced investment returns that come from a balanced portfolio over long periods of time. For instance, ongoing DB plans generally include individuals with a range of ages. As older workers retire, younger workers enter the plan. As a result, the average age of the group in a mature DB plan does not change much. This means DB plans can ride out bear markets and take advantage of the buying opportunities that they present without having to worry about converting all of their money into cash for benefits in the near future. By contrast, individuals in DC plans must gradually shift to a more conservative asset allocation as they age, in order to protect against financial market shocks later in life. This process can sacrifice investment returns because people may have to sell assets when they are worth too little due to market fluctuations coinciding with retirement timing. Moreover, they are not able to take advantage of higher expected returns associated with a balanced portfolio.
- Third, DB plans achieve greater investment returns as compared with DC plans based on individual accounts. Superior returns can be attributed partly to lower fees that stem from economies of scale. Also, because of professional management of assets, DB plans achieve superior investment performance as compared to the average individual investor.

METHODOLOGY

We compare the relative costs of DB and DC plans by constructing a model that first calculates the cost of achieving a target retirement benefit in a typical DB plan. We express this cost as a level percent of payroll over a career. We then calculate the cost of providing the same retirement benefit under a DC plan. Additional details on our methodology can be found in the Technical Appendix to this report.

Our model is based on a group of 1,000 newly-hired employees. For the purposes of simplicity, we give all individuals a common set of features. All newly hired employees are female teachers aged 30 on the starting date of their employment. They work for three years and then take a two-year break from their careers to have and raise children. They return to work at age 35 and continue working until age 62. Thus, the length of the career is 30 years. By their final year of work, their salary has reached $50,000, having grown by about 4% percent each year.

Next, we define a target retirement benefit that, combined with Social Security benefits, will allow our 1,000 teachers to achieve generally accepted standards of retirement income adequacy. The plan provides a benefit in retirement equal to $26,684 per year or $2,224 per month. A cost of living adjustment is provided to ensure the benefit maintains its purchasing power during retirement. Thus, each teacher will receive a benefit equal to 53% of her final year's salary that adjusts with inflation, which we estimate at 2.8% per year. With this benefit and Social Security benefits, each teacher can expect to receive roughly 83% of her pre-retirement income – a level of retirement income that can be considered adequate, but not extravagant.

We define certain parameters for life expectancy and investment returns. Then, on the basis of all these inputs, we calculate the contribution that will be required to fund our target retirement benefit through the DB plan over the course of a career. We do the same for the DC plan.

WHAT IS AN "ADEQUATE" RETIREMENT BENEFIT?

Experts generally believe that in order for a retiree to maintain the same standard of living enjoyed during working years, income from all sources (Social Security, DB pensions, DC savings plans, etc.) should replace roughly 70 to 90 percent of pre-retirement income. Because some expenses (commuting costs, payroll taxes, etc.) disappear after retirement, it may be possible to maintain one's pre-retirement standard of living, even with a replacement ratio (that is, the ratio of retirement income to pre-retirement income) of less than 100%.

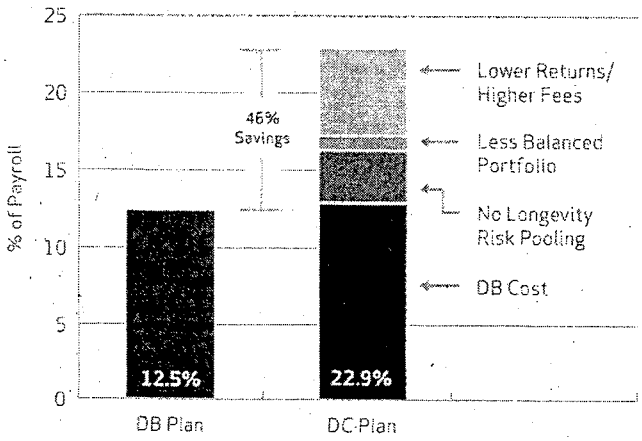
For example, Aon Consulting and Georgia State University estimate that a single retiree with a pre-retirement income of $50,000 would need to achieve a replacement ratio of 80% in order to maintain pre-retirement living standards.[11] Other analysts have recommended that workers seek to achieve an even higher replacement ratio. Human resources consulting firm Hewitt Associates predicts that employees will actually need *more* money in retirement than during their working years, and suggests a target replacement ratio of 125% to cover retiree healthcare and other expenses.[12] In our discussion, we target a replacement rate of 83% of pre-retirement income for both the DB and the DC plan.

DB PLANS ARE MORE COST EFFECTIVE BECAUSE OF LONGEVITY RISK POOLING, PORTFOLIO DIVERSIFICATION, AND SUPERIOR RETURNS

We find that the cost to fund the target retirement benefit under the DB plan comes to 12.5% of payroll each year. By comparison, we find that the cost to provide the same target retirement benefit under the DC plan is 22.9% of payroll each year. In other words, the DB plan can provide the same benefit at a cost that is 46% lower than the DC plan, as shown in Figure 1.

The DB cost advantage stems from differences in how benefits are paid out in each type of plan, how investment allocations shift in DC plans as individuals age, and how actual investment returns in DC plans compare with those in DB plans.

Figure 1:
Cost of DB and DC Plan as % of Payroll

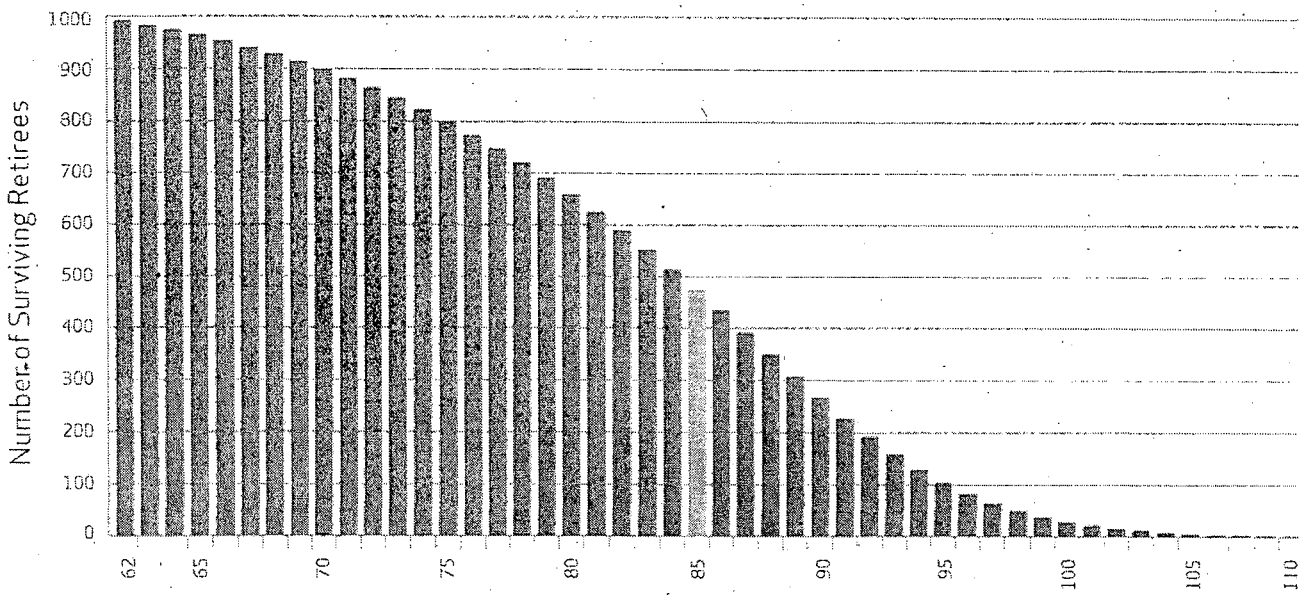


Longevity Risk Pooling

Longevity risk describes the uncertainty an individual faces with respect to their exact lifespan. While actuaries can tell us that, on average, our pool of female teachers who retire at age 62 will live to be 85, they can also predict that some will live only a short time, and some will live to be over 100. Figure 2 illustrates the longevity patterns among our 1,000 teachers. With each passing year, fewer retirees are still living. Age 85 corresponds to the year when roughly half of retirees are still alive.

In a DB plan, the normal form of benefit is a lifetime annuity, that is, a series of monthly payments that lasts until death. A DB plan with a large number of participants can plan for the fact that some individuals will live longer lives and others will live shorter lives. Thus, a DB plan needs only to ensure that it has enough assets set aside to pay for the *average* life expectancy of all individuals in the plan, or in this case, to age 85. Based on our target benefit level, the DB plan needs to have accumulated approximately $355,000 for each participant in the plan by the time they turn 62. This amount will ensure that every individual in the plan will receive a regular, inflation-adjusted monthly pension payment that lasts as long as they do. The contribution required to fund this benefit, smoothed over a career, comes to 12.5% of payroll.

Figure 2: **Longevity of 1,000 Retired Female Teachers**



WHAT ABOUT MONEY FOR A SURVIVING SPOUSE?

Our analysis did not explicitly analyze the effect of providing income to a retiree's surviving spouse. But the method of providing for spouse benefits would be similar under either the DB or DC approach. Under a DB plan, a retiree has the option of electing a reduced monthly benefit in exchange for a portion of the benefit continuing on to her surviving spouse if there is one. Virtually all pension plans offer at least a "50% Joint and Survivor" option and a "100% Joint and Survivor" option. For example, in our model, the retired teacher could have three payment options:

- $2,224 per month for as long as she lives, with no surviving spouse benefit, or
- $2,046 per month for as long as she lives, with half ($1,043) continuing to her surviving husband for as long as he lives, or
- $1,882 per month for as long as either the retiree or her husband lives

These three options are roughly "actuarially equivalent," meaning that for a large group following the actuarially assumed mortality and investment return patterns, the plan costs are neutral with respect to the option chosen.

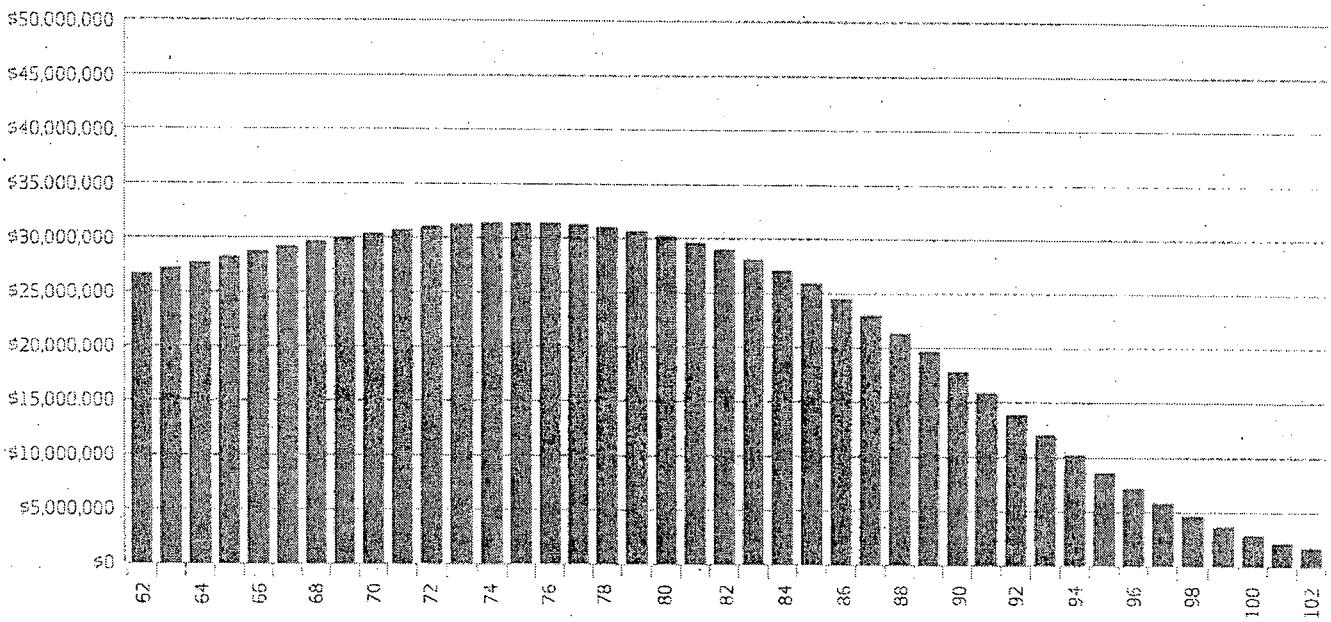
Under a DC plan, if this retiree wanted to provide her husband with retirement income should he outlive her, she would reduce the amount of her monthly withdrawals to enable him to be more likely to have residual assets available for him upon her death. If the retired couple were to make calculations as to how much to reduce their benefit, they would make calculations identical to those made by the plan to determine the actuarially equivalent benefit.

In other words, the desire of providing survivor income can be met through either a DB or DC plan.

We could have modeled our analysis based on a married retiree seeking survivor income protection, but adding this complexity would not have made a material difference in our analysis. This is because while it is difficult for a retiree to predict how long she will live, it is also difficult for a couple to predict how long they each will live.

Total annual payments out of the DB plan will have a hump-shaped pattern as seen in Figure 3. The amount of benefits paid out will increase for a number of years, because the effect of inflation adjustments is greater than the effect of individuals gradually dying off. At age 77, the impact of retiree deaths overtakes the effect of the cost of living adjustments and payments decline with each passing year. In the DB plan, every retiree recieves a steady inflation-adjusted monthly income that lasts until her death.

Figure 3: **Total Payments under the Defined Benefit Plan**

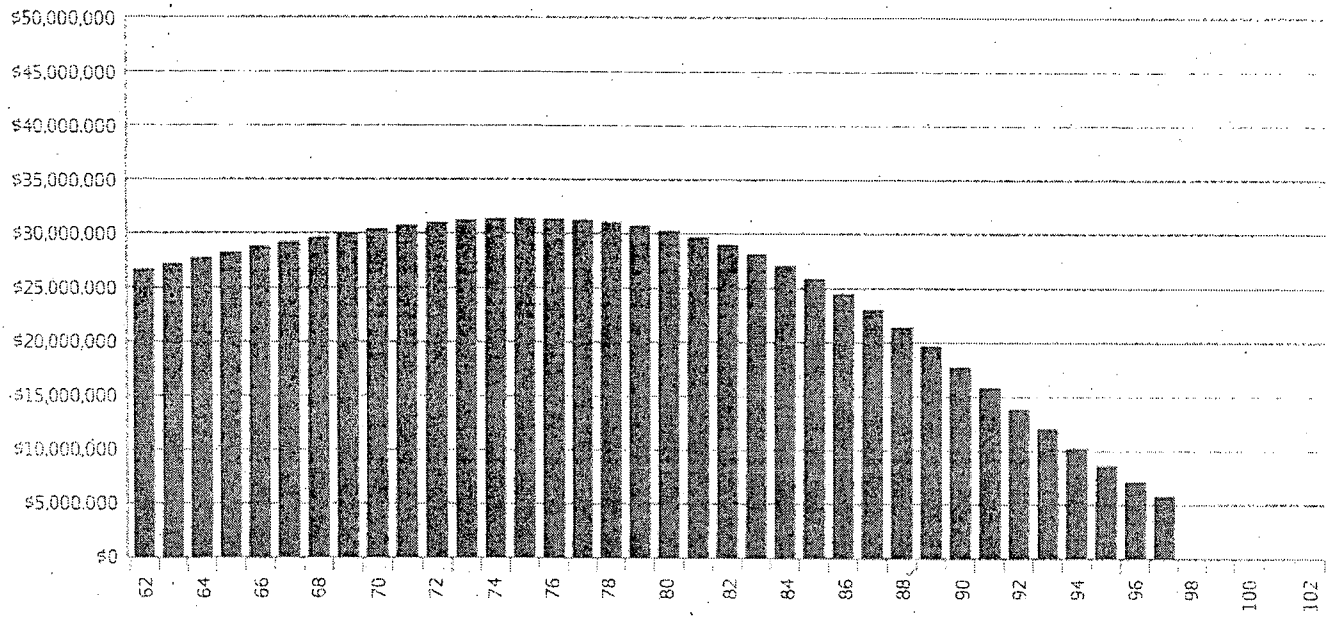


Next, we contrast this situation with that in a DC plan. Because DC plans rarely offer annuity options, individuals must self-insure longevity risks. This can be an expensive proposition. Because an individual in a DC plan does not know exactly how long she will live, she will probably not be satisfied with socking away an amount sufficient to last for the *average* life span, for if she lives past age 85, she will have depleted her retirement savings. For this reason, an individual will probably want to be sure that she has enough money saved to last for the *maximum* life span (or something close to it).

We define the "maximum life expectancy" for purposes of this analysis as 97 years old. It corresponds to the age beyond which only 10% of individuals survive, and therefore it is not a "true" measure of maximum life expectancy.[13] In fact, our mortality table indicates that one lucky individual out of the 1,000 will celebrate her 110th birthday. This simplifying assumption is intended to be more realistic (that most individuals will be satisfied with a 90% chance of not outliving their money, rather than a 100% chance), but it will also tend to understate the cost of the DC plan. Figure 4 illustrates the payout pattern under the DC plan, where individuals withdraw funds on an equivalent basis to the DB plan until age 97 – that is, in a series of regular, inflation adjusted payments. After age 97, there are no more withdrawals, even though 100 (10% of our initial pool of 1,000) teachers are still living. The money has simply run out.

Thus, our simplifying assumption of using a 90th percentile life expectancy of 97, rather than the true maximum life expectancy, will reduce the cost of providing the target benefit under the DC plan, but will also mean that individuals with exceptionally long lives will experience a reduced standard of living, compared to what they would experience under a DB plan. Thus, in our example, the DC plan ends up actually delivering less in total retirement benefits than the DB plan.

Figure 4: **Total Benefit Payments under the DC Plan Based on Life Expectancy of 97**



Of course, those 10% of individuals who do survive beyond age 97 would want to avoid the possibility of having their retirement income reduced to zero. It is likely that individuals will respond to a long life by gradually reducing their withdrawals from the plan to avoid running out of money. Thus, we assume that once an individual reaches age 90, she begins to reduce the size of annual withdrawals from the plan. This changes the withdrawal pattern to avoid the steep drop off in payments at age 97, as shown in Figure 5. However, it should be noted that those with very long lives will see their standard of living reduced significantly.

It is important to acknowledge that if a retiree dies before exhausting all of her retirement savings, the money in the account does not simply evaporate. Rather, it will pass to her estate. Benefits that were intended to be pension benefits become death benefits paid to heirs instead. This is the "over-saving" dilemma that is inherent in DC plans. As Figure 6 illustrates, the aggregate amount of money transferred to estates is substantial – totaling 24% of all assets accumulated in the plan.

While some individual heirs will benefit from these inter-generational transfers of wealth, they are not economically efficient from a taxpayer or employer perspective. Because heirs did not provide services that the employer/taxpayer benefited from, providing additional benefits to heirs is economically inefficient. Moreover, these additional "death benefits" are not tied in any direct way to an individual employee's productivity during her working years, rather their value is a function of living a shorter life.

DB plans avoid this problem entirely. By pooling longevity risks, DB plans can not only ensure that all participants in the plan will have enough money to last a lifetime, they can accomplish this goal with less money than would be required in a DC plan. Because DB plans need to fund only the *average* life expectancy of the group, rather than the *maximum* life expectancy for all individuals in the plan, less money needs to be accumulated in the pension fund. Remember that the DB plan needed to accumulate about $355,000 for each participant in the plan by the time they turn 62 in order to fund the target level of benefit. Due to the "over-saving" dilemma, DC plans must accumulate at least $455,000 per participant, or $100,000 more, in order to minimize the likelihood of running out of funds. In order to accumulate those additional amounts, contributions to the plan would climb to 16.0% of pay, from 12.5% under the DB plan.

Figure 5: **Total Benefit Payments under the DC Plan Based on Adjusted Life Expectancy**

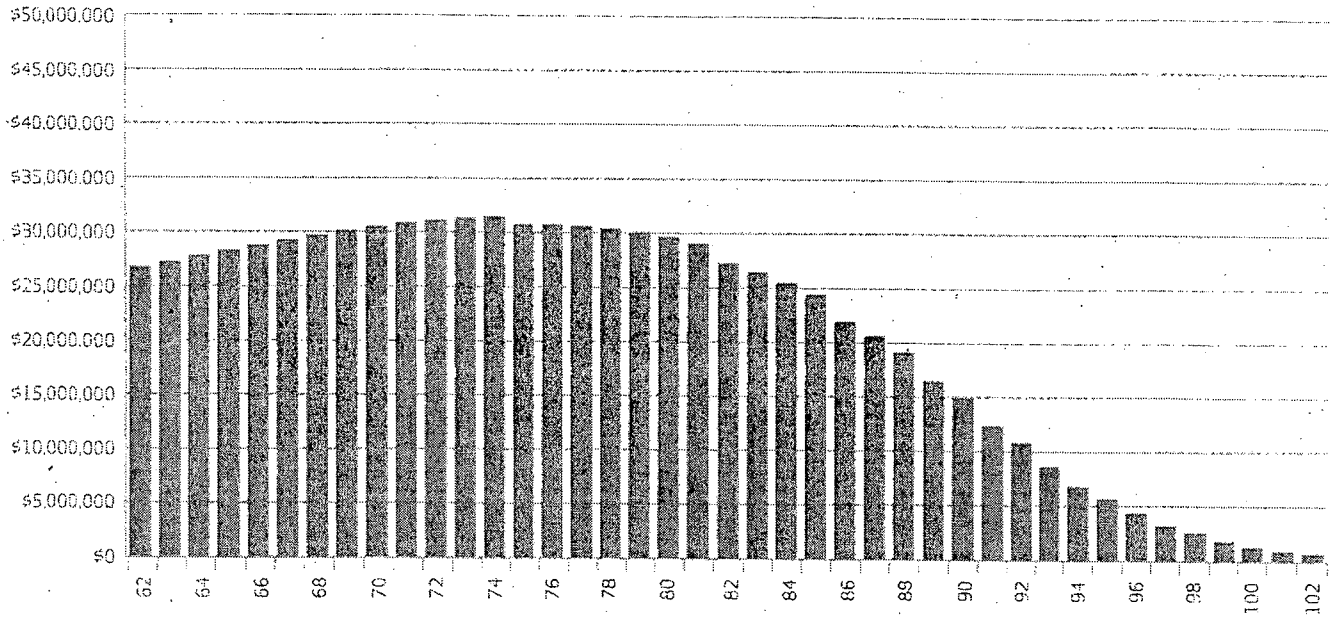
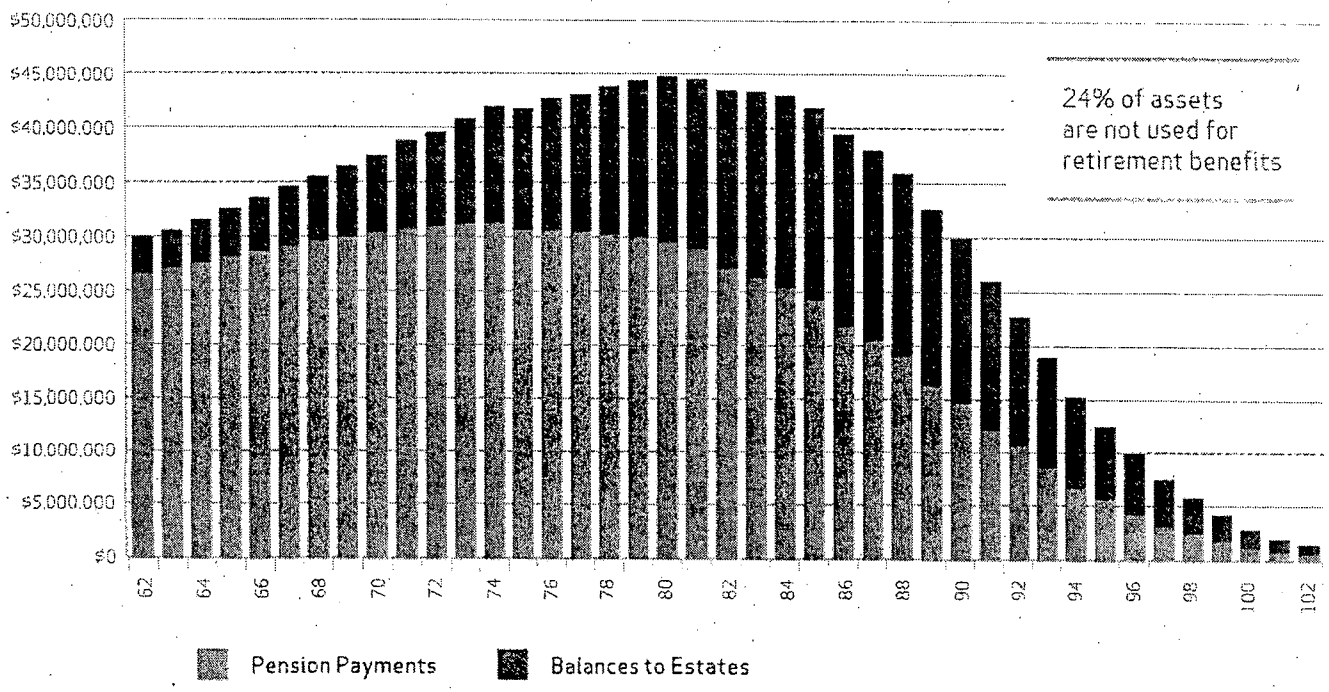


Figure 6: **Total Benefit + Estate Payments under the DC Plan**



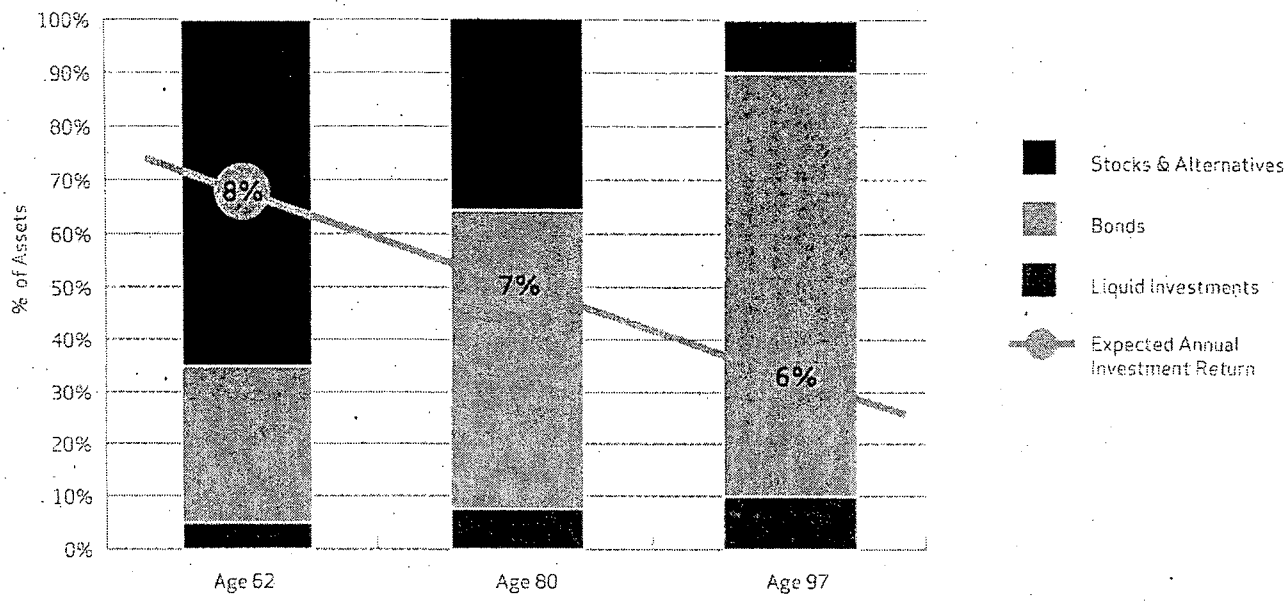
Maintenance of Portfolio Diversification

A retirement system that achieves higher investment returns can deliver a given level of benefit at a lower cost. All else equal, the greater the level of investment earnings, the lower contributions to the plan will need to be.[14] Prior research substantiates DB plans' significant advantage in investment returns, as compared with DC plans.

Part of the reason why DB plans tend to achieve higher investment returns as compared with DC plans is that they are long-lived. That is, unlike individuals, who have a finite career and a finite lifespan, a DB pension fund endures across generations; thus a DB plan, unlike the individuals in it, can maintain a well-diversified portfolio over time. In DC plans, individuals' sensitivity to the risk of financial market shocks increases as they age. The consequences of a sharp stock market downturn on retirement assets when one is in their 20s are minor, compared to when one is on the eve of retirement. For this reason, individuals are advised to gradually shift away from higher risk/higher return assets as they approach retirement. While this shift offers insurance against the downside risk of a bear market, it also sacrifices expected return since more money will be held in cash or similar assets that offer low rates of return in exchange for more security. A reduction in expected investment returns will require greater contributions to be made to the plan in order to achieve the same target benefit.

In our model, the well-diversified DB plan is expected to achieve investment returns of 8% per year, net of fees. In the DC plan, individuals gradually shift out of higher risk/higher return assets in favor of lower-risk/lower return assets. This results in a sacrifice of expected annual return of 2% by age 97, as shown in Figure 7.

Figure 7: **As Portfolio Allocation Shifts, Expected Return in DC Plan Falls**



We find that the shift in portfolio allocation has a modest, but nonetheless, significant effect on cost. Specifically, we find that the per-retiree amount that must be accumulated in the DC plan by retirement age now climbs to about $485,000. By comparison, the DB plan requires about $355,000. The contributions required to fund the target benefit level now climb to 17.0% of payroll (compared to 12.5% of payroll under the DB plan).

Another important reason why DB plans achieve higher investment returns than DC plans is that assets are pooled and professionally managed.

Superior Returns

Another important reason why DB plans achieve higher investment returns than DC plans is that assets are pooled and professionally managed. Expenses paid out of plan assets to cover the costs of administration and asset management reduce the amount of money available to provide benefits. As a result, a plan that can reduce these costs will require fewer contributions. By pooling assets, large DB plans are able to drive down asset management and other fees. For example, researchers at Boston College find that asset management fees average just 25 basis points for public sector DB plans.[15] By comparison, asset management fees for private sector 401(k) plans range from 60 to 170 basis points.[16] Thus, private DC plans suffer from a 35 to 145 basis point cost disadvantage, as compared with public DB plans.[17] On their face, these differentials may appear small, but over a long period of time, they compound to have a significant impact. To illustrate, over 40 years, a 100 basis point difference in fees compounds to a 24% reduction in the value of assets available to pay for retirement benefits.[18]

Administrative costs are largely driven by scale. Thus, a similarly-sized DB plan and DC plan can have opportunities to negotiate minimized administrative expenses. A DC plan involves costs that do not exist in a DB plan, such as the costs of individual recordkeeping, individual transactions, and investment education to help employees make good decisions. However, DB plans, unlike DC plans, bear the administrative costs of making regular monthly payments after retirement.

But fees are only part of the story – differences in the way retirement assets are managed in DB and DC plans play a substantial role. As previously discussed, investment decisions in DB plans are made by professional investment managers, whose activities are overseen by trustees and other fiduciaries. Research has found that DB plans have broadly diversified portfolios and managers who follow a long-term investment strategy.[19] We also know that individuals in DC plans, despite their best efforts, often fall short when it comes to making good investment decisions. Thus, it should not be surprising that researchers find a large and persistent gap when comparing investment returns in DB and DC plans. Munnell and Sunden put the difference in annual return at 80 basis points.[20] A 2007 report from the global benchmarking firm, CEM, Inc., concluded that between 1998 and 2005, DB plans showed annual returns 180 basis points higher than DC plans, largely due to differences in asset mix.[21] And Watson Wyatt found that, between 1995 and 2006, DB plans outperformed DC plans by 109 basis points, on average. Among large plans, the DB advantage was even greater – at 121 basis points. [22]

In our model, we use conservative estimates of the differences in DB and DC plan costs and expected returns. We model a 100 basis point (1%) net disadvantage for the DC plan annual investment returns as compared with DB plan returns. While this is slightly higher than the estimate of Munnell and Sunden,[23] it is lower than the more recent estimates of Flynn and Lum,[24] and Watson Wyatt.[25] This 100 basis point differential persists into the retirement years and magnifies the effects of the shift in asset allocation discussed previously. However, our model separates these effects to avoid double-counting. We do not isolate the impact of expenses and fees from the impact of superior investment management skill.

We find that a 1% per year disadvantage in DC plan investment returns compounds over time to create a significant cost disadvantage. In particular, we find that the amount which must be set aside for each individual at retirement age now climbs to about $550,000 (compared to the roughly $355,000 required in the DB plan). The level of contributions to the plan climbs again, this time to 22.9% of payroll (compared to 12.5% under the DB plan).

"BUT I THOUGHT DC PLANS WERE CHEAPER?" UNTANGLING BENEFIT GENEROSITY AND ECONOMIC EFFICIENCY

GM Will Freeze Salaried Pensions, Shift to 401(k)s
"...move will save the struggling automaker $420 million in 2007."
USA Today - April 10, 2007

IBM Adds Its Name to the List of Firms Freezing Pensions
"...cut worldwide retirement-related expenses by $450 million to $500 million this year."
The Washington Post - January 6, 2006

Verizon to Halt Pension Outlay for Managers
"...company hopes to save about $3 billion over the next decade".
The New York Times - December 6, 2005

Headlines like these have, understandably but unfortunately, led to a good deal of confusion about the relative costs and economic efficiencies of DB plans versus DC plans. While many employers have cited the financial burden of DB plans as their main reason for shifting from a DB to a DC plan, it is important to separate the question of benefit generosity from the question of the economic efficiency of a retirement plan.[26]

A review of the economic literature helps in this regard. Researchers have found that when employers move out of DB and into DC plans, they almost always cut the average employee benefit in the process.[27] Ghilarducci and Sun find, for instance, that between 1981 and 1998 the average employer pension contribution declined from $2,140 to $1,404 per employee, while the share of pension contributions attributed to DC plans increased from 23% to 68% in that time period.[28] Also, a UK study found that the average contribution per employee is 15-18% under a DB system, but only 9% under a DC system.[29] Thus, when employers simultaneously reduce their contributions along with the move from DB to DC, they will undoubtedly save money. Yet this does not mean that DC plans are inherently cheaper than DB plans; it simply means that employers are reducing employee benefits, while also changing the benefit design. Shifting costs from one party (the employer who reduces contributions) to another (employees who receive less in retirement) does not reduce costs overall. As the *The Economist* succinctly put it, "Whatever the arguments about the merits of the new wave of [DC] schemes, if you put less money in, you will get less money out."[30]

Whether an employer chooses a DB plan, a DC plan, or both, it has to decide how generous the benefits should be. But, as our analysis demonstrates, the economic efficiencies built into DB plans mean that such systems can provide the same benefit at a much lower cost, as compared with a DC plan.

SUMMARY OF RESULTS: DB PLANS REDUCE COSTS BY ALMOST HALF

Taken together, the economies that stem from investment pooling and longevity risk pooling can result in significant cost savings to employees and employers (or in the case of the public sector, taxpayers). In our model, required contributions are 46% lower in the DB plan as compared with the DC plan.

Our analysis clearly demonstrates that DB plans are far more cost-effective than DC plans. We find that to achieve roughly the same target retirement benefit that will replace 53% of final salary, the DB plan will require contributions equal to 12.5% of payroll, whereas the DC plan will require contributions to be almost twice as high – 22.9% of payroll.

We find that due to the effects of longevity risk pooling, maintenance of portfolio diversification, and greater investment returns over the lifecycle, a DB plan can provide the same level of retirement benefits at almost half the cost of a DC plan.

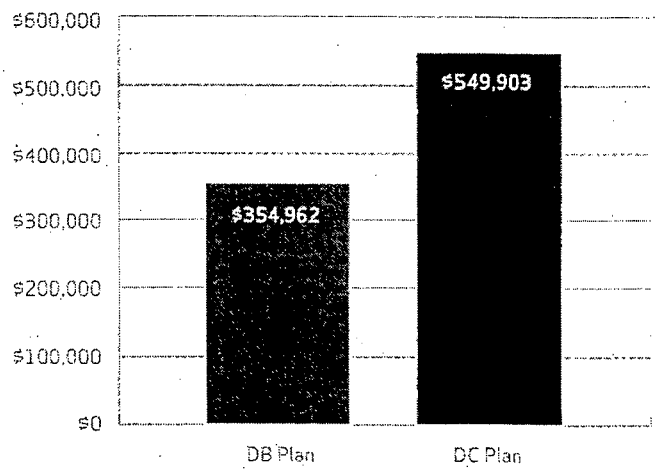
Figure 8: **Tallying DB Plan Cost Savings**

1. Longevity risk pooling saves	15%
2. Maintenance of portfolio diversification saves	5%
3. Superior investment returns save	26%
All-in costs savings in DB plan	**46%**

The longevity risk pooling that occurs in the DB plan accounts for 15% of the incremental cost savings. DB plans' ability to maintain a more diversified portfolio drives another 5% cost savings, and their superior investments returns across the lifecycle generate an additional 26% reduction cost.

Our results also indicate that DB plans can do more with less. That is, they can ensure that all individuals in the plan (even those with very long lives) are able to enjoy an adequate retirement benefit that lasts a lifetime, at the same time that they require less money to be contributed to a retirement plan and fewer assets to accumulate in the plan. We calculated the amount of money that would be required to be set aside for each retiree in each type of plan, to provide a modest retirement benefit of about $2,200 per month. As shown in Figure 9, at retirement age, the DB plan requires only about $355,000 to be set aside for each individual, whereas the DC plan requires almost $550,000. The difference – nearly $195,000 for each and every employee – illustrates that the efficiencies embedded in DB plans can yield large dollar savings for employers, employees and taxpayers.[31]

Figure 9:
Per Employee Amount Required at Age 62 DB Plan vs. DC Plan



CONCLUSION

Our findings indicate that DB plans provide a better bang for the buck when it comes to providing retirement income. We find that a DB plan can provide the same level of retirement income at almost half the cost of a DC plan. Hence, DB plans should remain a centerpiece of retirement income policy and practice, especially in light of current fiscal and economic constraints.

We find that the biggest drivers of the cost advantages in DB plans are longevity pooling and enhanced investment returns that derive from reduced expenses and professional management of assets. The sacrifice of investment returns that results from life-cycle driven shifts in portfolio allocation in DC plans had a smaller, but still significant, effect. The sources of cost savings in DB plans reflect, at a very basic level, the differences in how DB and DC plans operate. Group-based DB plans provide lifetime benefits and feature pooled, cost-efficient, professionally managed assets: these features drive significant cost savings that benefit employers, employees, and taxpayers.

When considering our results, it is important to keep in mind that in our effort to construct an "apples to apples" comparison, we made a number of simplifying assumptions that actually reflected more favorably on DC plans. For instance, we did not model any asset leakage from the DC plan before retirement, through loans or early withdrawals nor any terminations of employment under either plan. We also assumed that individuals followed a sensible "goldilocks-like" withdrawal pattern in retirement – not too fast, not too slow, but just right. We used conservative estimates of the difference in actual investment returns between DB and DC plans. And, we used a 90th percentile life expectancy to project required accumulations in the DC plan, rather than "full" life expectancies. Thus, if anything, our analysis likely underestimates the cost of providing benefits in a DC plan and thereby understates the cost advantages of DB plans.

Due to the built-in economic efficiencies of DB plans, employers and policy makers should continue to carefully evaluate claims that "DC plans will save money." As discussed, benefit generosity is a separate question from the economic efficiency of a retirement plan. While either type of plan can offer more or less generous benefits, DB plans have a clear cost advantage for any given level of retirement benefit. Considering the magnitude of the DB cost advantage, the consequences of a decision to switch to a DC plan could be dramatic for employees, employers, and taxpayers.

While either type of plan can offer more or less generous benefits, DB plans have a clear cost advantage for any given level of retirement benefit. Considering the magnitude of the DB cost advantage, the consequences of a decision to switch to a DC plan could be dramatic for employees, employers, and taxpayers.

Finally, policymakers should consider proposals that can strengthen existing DB plans and promote the adoption of new ones. When viewed against the backdrop of workers' increasing insecurities about their retirement prospects and the economic and fiscal challenges facing employers and taxpayers, now more than ever, policy makers ought to focus their attention and energy on this important goal. The very features that make DB plans attractive to employees drive cost savings for employers and taxpayers. In this way, DB plans represent a rare "win-win" approach to achieving economic security in retirement that should be recognized and replicated.

TECHNICAL APPENDIX: CALCULATING THE COST SAVINGS EMBEDDED IN DB PLANS

We calculate the cost, expressed as a level percent of payroll over a career, of achieving a target benefit in a typical DB plan and compare that with the cost of providing the same target benefit in a typical DC plan.

We begin by constructing a cohort of 1,000 newly-hired employees. For the purposes of simplicity, we give this cohort a common set of features. All newly hired employees are age 30 on the starting date of their employment and they are all female teachers. They work for three years and then take a two-year break from their careers to have and raise children. They return to work at age 35 and continue working until age 62. Thus, the length of the career is 30 years. By their final year of work, their salary has reached $50,000, having grown by 4.05% percent each year.

Modeling DB Plan Benefits and Costs

The DB plan provides a benefit in retirement equal to 1.85% of final average salary for each year worked. This represents the median benefit among DB plans covering public employees who are also covered by Social Security.[32] Final average salary is calculated on the basis of the final three years of one's career, which in this case is $48,079. Thus, the initial benefit in the DB plan is $26,684 per year or $2,224 per month.

The DB plan provides a cost of living adjustment that ensures the benefit maintains its purchasing power during retirement. Inflation is projected at 2.8% per year. Thus, each individual in our cohort will receive a benefit equal to 53% of her final year's salary that adjusts with inflation. This DB plan (in combination with Social Security) would allow an employee to meet generally accepted standards of retirement income adequacy, or roughly 83% of pre-retirement income.

DB plans typically offer married participants the ability to receive joint-and-survivor annuity benefits, whereby when the retiree dies, her spouse can continue to receive a monthly benefit that will last the spouse's lifetime. But the retiree pays the cost of this survivor's benefit. That is, the monthly benefit that would be payable on a single-life basis will be reduced by an actuarially determined factor to account for the fact that payments may continue if the retiree dies before her spouse. Therefore, for simplicity, we model all benefit payouts on a single-life basis (and do the same for the DC plan), using the RP-2000 Healthy Female Annuitants mortality table.

In order to model the contributions that are required to fund these benefits, we start by establishing expected investment returns. The DB plan is expected to achieve nominal investment returns of 8.01% per year, net of fees. We calculate a weighted average return, based on assumptions about asset allocation and returns for each asset class.

The DB plan follows a typical asset allocation of 2% in cash/liquid assets, 15% in treasuries/agency debt, 13% in corporate bonds, and 70% in equities and alternative assets. Our expected investment returns for each asset class are based on the projections prepared by the Office of the Actuary of the Social Security Administration to support analysis of the impact of private accounts by the President's Commission to Strengthen Social Security. The Commission's report described these assumptions as "conservative," noting that these assumptions are "much lower than that used in many academic and policy studies."[33] We expect cash/liquid investments to earn a nominal 2.8% per year, treasuries and agency debt to earn 5.8%, corporate bonds to earn 6.3%, and stocks and alternatives to earn 9.3%. Asset management fees of 0.25% are deducted from these returns, reflecting the average for DB plans in the public sector.[34]

Figure 10	% of Assets	Expected Annual Investment Return
Cash/Liquid Investments	2%	2.8%
Treasuries and Agency Debt	15%	5.8%
Corporate Bonds	13%	6.3%
Stocks and Alternatives	70%	9.3%
Less Asset Management Fees		-0.25%
Overall Portfolio		**8.0%**

On the basis of these inputs, we calculate the contribution that will be required to fund this benefit through the DB plan over the course of a career, and express this as a level percent of payroll. We find that the cost to fund the target retirement benefit, smoothed over a career, comes to 12.5% of payroll. Contributions could be made entirely by the employer, or, in the public sector, they may be split between the employer and employee.

Modeling DC Plan Benefits and Costs

Modeling the cost of the target retirement benefit in the DC plan requires some adjustments based on what we know about how DC plans differ from DB plans.

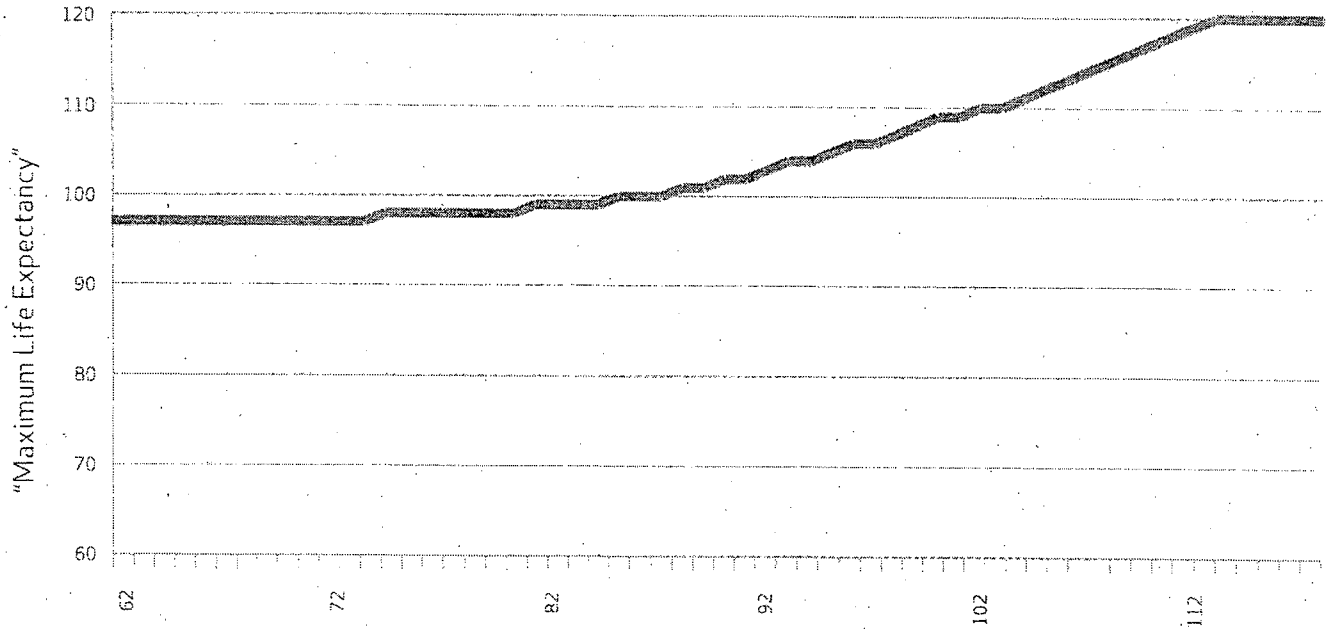
First, because employees are not provided with an annuity benefit at retirement under the DC plan, we determine the size of the lump sum amount that an individual would need to accumulate by their retirement date in order to fund a retirement benefit equivalent to that provided by the DB plan (including inflation adjustments) for a period of 35 years, or to age 97. This represents our estimate of the "maximum life expectancy." It corresponds to the age beyond which only 10% of individuals survive, and therefore is not a "true" measure of maximum life expectancy. In fact, our mortality table indicates that one individual out of 1,000 will survive to 110. This simplifying assumption is intended to be more realistic (that most individuals will be satisfied with a 90% chance of not outliving their money, rather than a 100% chance). Using a 90th percentile life expectancy of 97, rather than the true maximum life expectancy will reduce the cost of providing the target benefit under the DC plan, but will also mean that individuals with exceptionally long lives will experience a reduced standard of living, compared to what they would experience under a DB plan.

Of course, those 10% of individuals who do survive beyond age 97 would see their standard of living drop quite dramatically once their DC accounts were depleted. In reality, individuals would be likely to respond to a long life by gradually reducing their withdrawals from the plan to avoid the possibility of having their retirement income reduced to zero. For this reason, we assume that once an individual reaches age 90, she reduces annual withdrawals from the plan. We assume that the individual monitors her "maximum life expectancy" each year, and whenever it increases by a year, she adjusts her withdrawals accordingly. Figure 11 illustrates this process.

To model the impact of the shift to a more conservative portfolio allocation, starting at age 62, we have individuals begin to shift their portfolio allocation to gradually reduce the share held in equities and increase the holdings of cash and liquid investments, treasuries and agency debt, and corporate bonds. At age 62, the portfolio holds 65% of assets in equities; by age 72 it holds 49%; by age 82, it holds 33%; by age 92, it holds 16%; and so on. This drives the expected return on the baseline portfolio down from 8% per year to 6% per year in nominal terms.

The investment/withdrawal strategy we model is not the result of an optimization rule, rather it follows ad hoc rules. The investment strategy is modeled as a "glide path," along which the retiree gradually reduces her exposure to equities. Withdrawals are designed to mimic DB plan payouts, at least in the early years of retirement, declining in later years. Work by William Sharpe and colleagues suggests that an optimal approach would integrate investment and withdrawal

Figure 11: "Maximum Life Expectancy" increases as one gets older



strategies. Specifically, they find that a constant withdrawal rate must be paired with a riskless investment strategy in order to be optimal for an individual.[35] However, a post-retirement asset allocation entirely concentrated in risk-free assets would dramatically drive up the cost of the DC plan. Thus our model's ad hoc investment and withdrawal strategies would tend to understate the cost advantage of DB plans.

We use conservative estimates of the differences in DB and DC plan costs and expected returns. We assume that a large, sophisticated employer will seek to use whatever economies of scale are available to negotiate fees down on both types of plans. To capture the effect of lower DC plan returns over a lifetime, due to fee differentials and superior investment decisions, we model a 100 basis point disadvantage in net return as compared with DB plan returns. While this is slightly higher than the estimates of Munnell and Sunden,[36] it is lower than the more recent estimates of Flynn and Lum[37] and Watson Wyatt.[38] Thus, we assume individuals achieve a 7% nominal rate of return during their working years. This 100 basis point differential persists into the retirement years. So the return disadvantage compounds on top of the shift in portfolio allocation. (We calculate the impact of each effect separately to avoid double counting.) As a result, the expected return on the portfolio gradually declines from 7% per year to 5% in nominal terms.

On the basis of these inputs, we calculate the contribution that will be required to fund this benefit through the DC plan over the course of a career, and express this as a level percent of payroll. We find that the cost to fund the target retirement benefit, smoothed over a career, comes to 22.9% of payroll in the DC plan.

Future extensions of our model might incorporate additional differences between DB and DC plans. For example, one could analyze the impact of "leakage" of assets from DC plans through loans or early withdrawals, two features which are rare in DB plans. Pre-retirement death and disability benefits, which are a common feature of DB plans, but not DC plans, could be considered as well. Finally, the model could be extended to capture cyclical and idiosyncratic variances in investment returns. That is, one could analyze the effects of ups and downs in financial markets and the impact that these have on investment returns and costs in both DB and DC plans over a career. Also, the fact that in DC plans some individuals will have "better luck" with investing than others means that individuals' retirement prospects will exhibit a wider dispersion than what is predicted by our model.

ENDNOTES

1 The most common type of DC plan in the private sector is the 401(k) plan. Public sector employees often save for retirement in 403(b) plans or through 457 plans. These nomenclatures reflect the sections of the Federal tax code that spells out the rules governing these plans.

2 Both types of plans also share some common features. For instance, they both are employment-based plans that make preparing for retirement easier than if employees had to tackle the job completely on their own. Both DB and DC plans benefit from tax incentives designed to encourage retirement preparedness. And both types of plans are governed by laws designed to protect employees and their benefits.

3 The benefit factor could also be a function of a worker's earnings over their entire career (a so-called "career average plan.") Or, the factor could be a flat dollar amount: for example, the plan will pay a monthly benefit equal to $50 per year of service, so that a 30 year employee would have a benefit of $1,500 per month. "Flat dollar" plans are primarily seen among blue-collar workers in the private sector.

4 Benartzi, S. & R.H. Thaler. 2007. "Heuristics and Biases in Retirement Savings Behavior." *Journal of Economic Perspectives.* Vol. 21 No. 3. 81-104. Mitchell, O. and S. Utkus. 2004. *Pension Design and Structure: New Lessons from Behavioral Finance.* New York: Oxford University Press. Munnell, A. H. and A. Sunden. 2004. *Coming Up Short: The Challenge of 401(k) Plans.* Washington, DC: Brookings Institution Press.

5 Holden, S. and J. VanDerhei. 2001a. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2000." *EBRI Issue Brief* 239. Washington, DC: Employee Benefit Research Institute.

6 Copeland, C. 2007. "How Are New Retirees Doing Financially in Retirement?" *EBRI Issue Brief.* No. 302. Washington DC: Employee Benefit Research Institute. Love, D., P.A. Smith and L. McNair. 2007. "Do Households Have Enough Wealth for Retirement?" *Finance and Economics Discussion Series.* 2007-17. Federal Reserve Board, Washington DC.

7 Perun, P. 2007. "Putting Annuities Back into Savings Plans." In Ghilarducci and Weller, eds. *Employee Pensions: Policies, Problems, and Possibilities.* Champaign IL: Labor and Employment Relations Association.

8 Munnell, A. H., M. Soto, A. Webb, F. Golub-Sass, and D. Muldoon. 2008. "Health care costs drive up the National Retirement Risk Index." Center for Retirement Research Issue in Brief, No. 8-3. Boston College. Munnell, A.H., A. Webb and F. Golub-Sass. 2007 "Is there Really a Retirement Savings Crisis? An NRRI Analysis." Center for Retirement Research Issue in Brief, No. 7-11. Boston College. Love, D. et al., op. cit.

9 Ghilarducci, T., & W. Sun. 2006. How defined contribution plans and 401(k)s affect employer pension costs. *Journal of Pension Economics and Finance, 5(2),* 175-96. Blake, D. 2000. Does it matter what type of pension scheme you have? *The Economic Journal, 110(461), F46-F81.*

10 Fuerst, D. & A. Rappaport. 2004. "Defined Benefit Plans: Still a Good Idea?" *AARP Global Report on Aging.* Washington DC: AARP International. at http://www.aarpinternational.org/gra_sub/gra_sub_show.htm?doc_id=562911

11 Palmer, B., R. DeStefano, M. Schachet, J. Paciero, and C. Bone. 2008. *2008 Replacement Ratio Study.* Chicago, IL: Aon Consulting.

12 Hewitt Associates. 2008. *Total Retirement Income at Large Companies: The Real Deal.* Chicago, IL: Hewitt Associates.

13 Authors' calculations based on RP-2000 Healthy Female Annuitants mortality rates. Society of Actuaries. "Table 4-6: Female RP-2000 Rates." *RP-2000 Mortality Tables.* at http://www.soa.org/files/pdf/rp00_mortalitytables.pdf.

14 Another factor is particularly important in the discussion of investment – the degree to which contributions and investment earnings remain in the plan until retirement. This is generally not an issue in DB plans, but is a concern in most DC plans, where employees can borrow from their retirement account or take money out before retirement age (with the attendant tax penalties). This problem of "leakage" from DC plans has been well-documented and is receiving more attention by researchers and policy-makers. (See Weller, C., and J. Wenger. 2008. "Robbing Tomorrow to Pay for Today: Economically Squeezed Families are Turning to their 401(k)s to Make Ends Meet." CAP Economic Policy Report. Washington, DC: Center for American Progress.)

15 One basis point is equal to 0.01%. Thus 25 basis points is equal to one-quarter of one percent, or 0.25%.

16 Munnell, A.H. & M. Soto. 2007. "State and Local Pension Plans are Different from Private Plans." Center for Retirement Research State and Local Pensions, No. 1. Boston College.

17 This large fee gap may be attributable to several factors. One is plan size. Since most public pension plans tend to be very large compared to many private sector DC plans, their lower fees may be attributable to scale economies. Another factor may be differences in asset mix, which analysts find to be a key driver of asset management fees. However, here the direction of the effect is not entirely predictable. Although DB plans invest in less expensive index funds more often than DC plans, they also are

more likely to invest in assets that involve higher expenses (but also higher returns), such as real estate, private equity, or hedge funds. (Flynn, C. 2008. Author's correspondence.)

18 Weller, C., and S. Jenkins. 2007. "Building 401(k) Wealth One Percent at a Time: Fees Chip Away at People's Retirement Nest Eggs." CAP Economic Policy Report. Washington, DC: Center for American Progress.

19 Weller, C. and J. Wenger. 2008. "Prudent Investors: The Asset Allocation of Public Pension Plans." Unpublished manuscript. University of Massachusetts Boston.

20 Munnell, A.H. and A. Sunden, op. cit. 2007.

21 Flynn, C. & H. Lum. 2007. "DC Plans Underperformed DB Funds." Toronto, ON: CEM Benchmarking, Inc.

22 Watson Wyatt. 2008. "Defined benefit vs. 401(k) plans: Investment returns for 2003-2006." *Watson Wyatt Insider*, 18(5).

23 Munnell, A.H. and A. Sunden, op. cit. 2007.

24 Flynn, C. and H. Lum, op. cit.

25 Watson Wyatt, op. cit.

26 Clark, R.L., & A.A. McDermed. 1990. *The Choice of Pension Plans in a Changing Regulatory Environment.* Washington, DC: AEI Press. Kruse, D.L. 1995. "Pension substitution in the 1980s: Why the shift toward defined contribution pension plans?" *Industrial Relations, 34(2)*, 218–41.

27 *The Economist.* 2008. Falling short: The trouble with pensions. *The Economist*, June 12, 2008.

28 Ghilarducci, T. and W. Sun, op. cit.

29 Blake, D. op. cit.

30 *The Economist*, op. cit.

31 There is an additional consideration for taxpayers we do not explore. Qualified retirement plans involve a significant amount of foregone revenue to federal and state treasuries, because taxes on contributions and investment earnings are deferred. To illustrate, the exclusion of DB and DC plan contributions and income from Federal tax involved a loss of $108.6 billion in revenue in 2007. By comparison, the mortgage interest tax deduction cost $73.7 billion. (See Joint Committee on Taxation. 2007. *Estimates of Federal Tax Expenditures for Fiscal Years 2007-2011.* Washington, DC: US GPO. September 24.) Since our analysis demonstrates that DC plans require more assets to be accumulated to deliver the same amount of retirement benefits, it is likely that the implicit tax subsidy to deliver $1 in retirement benefits through a DC plan exceeds that provided to deliver $1 in benefits through a DB plan. Valuing this impact is beyond the scope of this report, however, and analysis this issue must be left for future research.

32 Brainard, K. 2007. *Public Fund Survey Summary of Findings for FY 2006.* Georgetown, Texas: NASRA.

33 President's Commission to Strengthen Social Security. 2001. "Strengthening Social Security and Creating Personal Wealth for All Americans: Report of the President's Commission." Washington, DC.

34 Munnell A.H. and M. Soto, op. cit.

35 Sharpe, W.F., J.S. Scott, and J.G. Watson. 2007. "Efficient Retirement Financial Strategies." *Pension Research Council Working Paper PRC WP2007-19.* Philadelphia, PA: The Wharton School, University of Pennsylvania.

36 Munnell, A.H. and A. Sunden, op. cit.

37 Flynn, C. and H. Lum, op. cit.

38 Watson Wyatt, op. cit.

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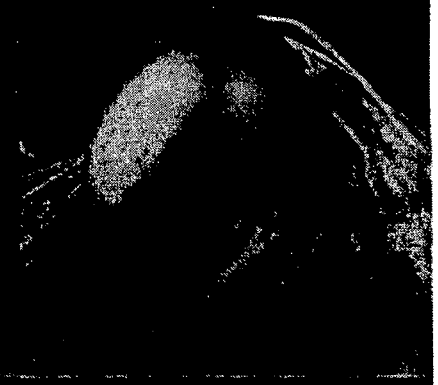
Attachment Eleven:
Pension Intervention: Reforming California's Employees Public Retirement System

Pension Intervention:

Reforming California's Public Employee Retirement Systems



By Anthony P. Archie and
Peter J. Ferrara

February 2006

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Table of Contents

Executive Summary

California's public employee pension systems are unfair, unstable, unpredictable, and outdated. They are unfair because they prevent public employees from having a voice in how their hard-earned dollars are invested. They are unstable because state contribution rates fluctuate wildly. They are unpredictable because pension costs are eating up the budgets of state and local governments. They are outdated because they are incompatible with the demographics and desires of today's workforce.

California needs a pension intervention for three reasons:

- The current pension systems are inherently unstable and unpredictable, leaving governments at risk of defaulting on their obligations and public employees at risk of a reduction in benefits.

- The pension systems are an increasing burden on state and local government budgets, which means that taxpayers will have to pay more to keep the system running.

- The pension systems are outdated and inappropriate for a modern workforce, placing public employees at a disadvantage compared to their private-sector counterparts.

California operates several pension systems for state and local employees. These include the California Public Employee Retirement System (CalPERS), the California State Teachers Retirement System (CalSTRS), and dozens of local pension systems. They all operate under a defined benefit (DB) pension structure. DB plans guarantee specific annual pension amounts upon retirement. The amounts are calculated based upon a combination of the employee's peak annual salary, age, and number of years of service.

While employees are assured predetermined pension amounts, public employers (state and local agencies) are not assured defined costs. This is because DB plans depend on the success of a collective investment portfolio. Ideally, the returns on the invested funds cover the promised benefits to retirees. But the market is in constant fluctuation, and the investments often under-perform, creating an unfunded liability.

An unfunded liability is defined as "the difference between the value assigned to retirement benefits earned by employees and the assets the retirement system will have to provide those benefits." Because of this fluctuation in pension costs, state and local governments are unable to predict how much to allocate towards pensions each year.

In the end, state and local governments have had problems meeting their pension obligations and taxpayers have had to cover the shortfalls through cuts in services, tax hikes, and heavy borrowing.

California's public employee pension systems are also outdated for today's workforce. In the 21st century, employees no longer remain in one job for their lifetime, but the current system is skewed so that it benefits long-term workers who retire directly from public

employment. The vast majority of short-term public employees are shortchanged under the current plan. If given the option, they would prefer a pension plan that allows employees to take their pension account with them when they leave public employment. The system must be changed because it is unfair to both taxpayers and employees.

Much of the private sector, as well as a number of other states, have already moved away from the defined benefit (DB) structure. Instead, they have adopted defined contribution (DC) pension plans. DC plans provide employees with portable and individually controllable retirement accounts, while taxpayers obtain a system that is stable and predictable. DC plans contain a number of other advantages. Taxpayers would see long-term cost savings, a new workforce recruitment tool, and protection from political and investment risks.

For employees, the benefits include greater investment choices, protection from political manipulation, and most important, higher returns. Based upon our findings, 61 percent of the state's public employee workforce would obtain higher returns under a DC pension plan, including the roughly 120,000 state workers who choose to leave public employment before retirement.

Our economy is ever changing, making it necessary for individuals to go from job to job. Why shouldn't their money go with them? The public has realized this for some time. A recent survey showed that nearly two thirds of Californians support changing to defined contribution pension plans. Californians deserve pension systems that are fair to taxpayers and employees alike. The time has come for a pension intervention.

Introduction:
Why California Needs a Pension Intervention

During an intervention, family and friends gather together to stop a loved one from self-destructing. California, to put it simply, is self-destructing: its public-employee pension systems are in trouble and the time to deal with the problem is now.

There are three overarching reasons why California needs a pension intervention:

- The current pension systems are inherently unstable and unpredictable, leaving governments at risk of defaulting on their obligations and public employees at risk of a reduction in benefits.

- The pension systems are an increasing burden on state and local government budgets, which means that taxpayers will have to pay more to keep the system running.

- The pension systems are outdated and inappropriate for a modern workforce, placing public employees at a disadvantage compared to their private-sector counterparts.

California's pension systems not only pose a risk to the state but are genuinely unfair to taxpayers and public employees alike. Public employees deserve a pension that provides more flexibility, choice, and protection from political manipulation. Taxpayers deserve a pension system that is more stable, predictable, and fiscally prudent.

Reform looked promising in early 2005 as Governor Arnold Schwarzenegger championed a reform proposal that would have ended wild cost fluctuations, saved the state millions and provided investment choice for workers. His plan, however, was unpopular with police and firefighter unions, who claimed that the measure had the potential to remove on-the-job death and disability benefits.

The initiative, which did not apply to current employees, was silent on how the death and disability benefits would work for future workers. Neither the initiative's authors nor the governor had any intention of changing any death and disability benefits, but repeated efforts to dispel fears proved futile.

Gov. Schwarzenegger chose to pull the initiative and put the issue on hold for 2005. The governor pledged to continue working on this issue in 2006 and beyond. But California cannot afford to wait.

Other states have already moved forward in their reforms, leaving California behind the curve. The state must adapt to the needs of a 21st century workforce and provide the retirement planning options that millions of private-sector employees already enjoy. California's leaders can no longer delay the inevitable. The state's public-employee pension systems must be changed.

Chapter 1:
What's Wrong With California's Public Employee Pension Systems

I. California's Current Public Employee Pension Systems

California operates several pension systems for state and local employees. Some are small systems run under the jurisdiction of a city or county. Others are giants such as California's Public Employee Retirement System (CalPERS) or California's State Teachers Retirement System (CalSTRS), the biggest and second-biggest retirement systems in the nation, respectively. CalPERS is the pension system for 1.4 million current and former state and local employees, while CalSTRS provides pensions to 750,000 current and retired K-12 and community college teachers throughout the state. Cities and counties have the option of participating in CalPERS and/or CalSTRS or they can institute their own independent pension system.

All of California's pension systems operate under what is known as a defined-benefit (DB) plan structure. DB plans guarantee specific annual pension amounts upon retirement. The amounts are calculated based upon a combination of the employee's peak annual salary, age, and number of years of service.

For example, the current formula for general state employees under CalPERS allows an employee to retire at age 55 with two percent of their peak annual salary for every year the employee has worked. If an employee with 30 years on the job, having earned a peak salary of $100,000 a year, chooses to retire at age 55, then that employee is able to receive 60 percent of his or her top salary, or $60,000 annually throughout retirement. If that same employee retires at 65 with 40 years on the job, he or she would receive 80 percent, or $80,000 annually.

Pension calculation formulas vary with type of employment—CalPERS permits public safety workers, namely police officers and firefighters, to retire at age 50 with three percent of peak salary for every year served—and jurisdiction—Orange County's pension system permits a 2.7-percent calculation at age 55 for its non-public safety workers.

California's pension systems, like all DB plans, ensure a set figure for the retiree. Annual payments are mandated under state law. Though employees are assured this defined benefit, the employers (state and local agencies) do not have defined costs.

Like all DB pension systems, CalPERS and CalSTRS receive their funding from payroll contributions, both from the employee (five percent of salary) and the employer agency (which fluctuates based upon investment returns). These funds are invested in various market instruments such as stocks, bonds, and other commodities, under the supervision of board members.

A 13-member board runs CalPERS, which deploys an investment portfolio worth $200 billion.[1] CalSTRS has a 12-member board and its portfolio holds $132 billion in assets.[2] These members have the responsibility to oversee the management of the pension funds and have decision-making power over where the funds are invested.

Members of the boards are composed of political appointees chosen by either the governor or the legislative leadership and directly elected members chosen by the pensioners themselves. In addition, the State Treasurer and Controller are ex-officio members of both the CalPERS and CalSTRS boards.

Ideally, the returns on the invested funds cover the promised benefits to retirees. But the market is in constant fluctuation, and the investments often under-perform, creating an unfunded liability. An unfunded liability is defined as "the difference between the value assigned to retirement benefits earned by employees and the assets the retirement system will have to provide those benefits."[3] When this difference occurs, a pension system's health is determined by its funding ratio (available assets to liabilities). A lower funding ratio implies that a pension system has a higher potential to default on its obligations.

II. California's Pension Systems Are Inherently Unstable and Unpredictable

California's DB pension systems allow a retiree to receive a guaranteed pension based on a combination of peak annual salary, age, and years of service. Pension amounts are guaranteed under state law at retirement. This ensures that the employee will receive a set amount no matter how the invested funds perform. This detachment from the success of the investments reveals the root of the problem.

Regardless of the health of the pension fund, employees remain entitled to benefits while taxpayers are obligated to cover the costs. Because taxpayers bear the investment risk, governments must fund the pension account regardless of whether available revenues can support it. The core problem is that DB plans have unpredictable costs.

A DB plan depends on the success of the collective investment portfolio. If the investments are under-performing and can't meet the pension obligations, taxpayers must foot the bill. While under-performance can be a result of various factors, the overall success of the market plays a major role.

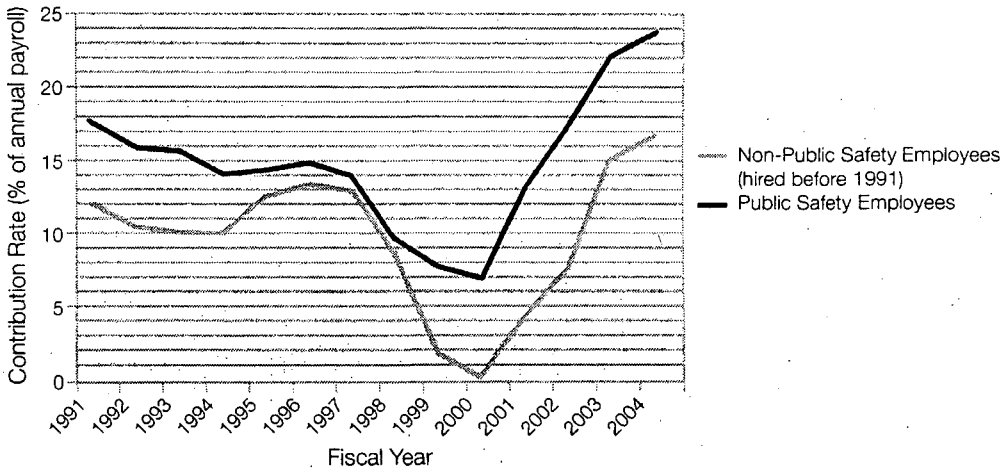
During a recession or economic downturn, investment gains usually slow along with the economy. Not coincidentally, tax revenue usually does the same under these conditions. Therefore, state and local governments that operate under DB pension systems must deal with pension deficit problems at a time when they are least able to afford them. This ups the incentive for cuts in services, borrowing, and tax increases, all politically unpopular moves.

Conversely, with an economic boom, investment returns and revenues are most likely abundant. Rarely, though, is the windfall given back to taxpayers. In fact, in California it is illegal to use CalPERS surpluses for General Fund allocations. Instead, during periods of surpluses, political pressure mounts to increase pension benefits.

Wild Fluctuations in State Contribution Rates

State employer contribution rates have varied widely in the past two decades. Figure 1 charts the fluctuation in state retirement contribution rates as a percentage of payroll since fiscal year 1991-1992. State employees are broken down into two categories: non-public safety employees hired before 1991, and public-safety employees. Looking at the chart, one can see periods when employer agencies did not have to contribute as much to the system, not coincidentally during the late-1990s economic boom. Within the past several years, rates have skyrocketed.

Figure 1: Annual Contribution Rates are Unpredictable



Source: California State Senate Office of Research

The volatility of the pension costs makes it unpredictable to plan for pension allocations out of a government's budget. Under the current system, legislators, county supervisors and city council members do not know whether their burden will be severe or light in a given year. If governments could predetermine pension contributions, elected officials could allocate accordingly in their budgets, allowing for better fiscal planning and stability.

III. State and Local Government Budgets Are Engulfed by Skyrocketing Pension Costs

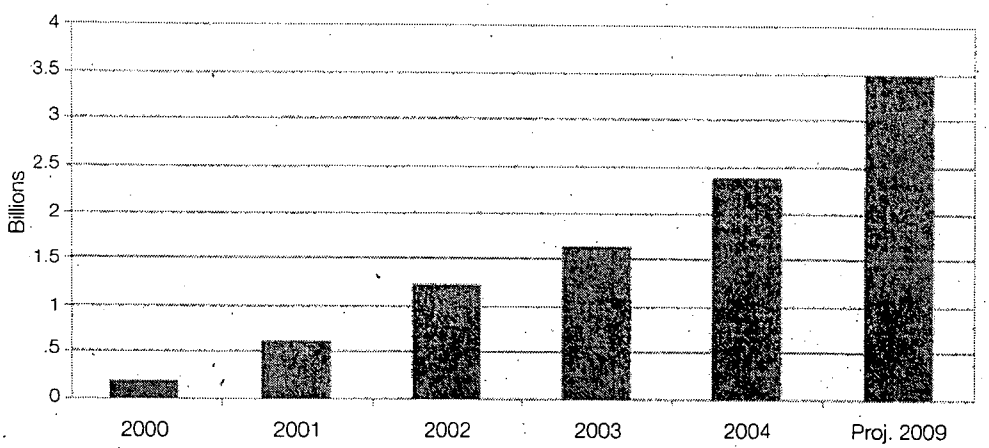
As shown with the rise of contribution rates in the past several years, California's state and local governments have seen a dramatic spike in the cost of employee pensions. This upward trajectory of costs has swallowed the budgets of cities, counties, and the state itself. These costs have been passed on to the taxpayers in the form of tax hikes, cuts in services, and sizable debt.

CalPERS' Annual Deficits

The CalPERS system is set up so that the returns on invested funds cover promised benefits to retirees. Recently, that has not been the case, as the investments have under-performed leaving the fund with unfunded liabilities.

In order to cover the pension outlays, money must be allocated by the legislature from the state's General Fund. From 2000 to 2004, the amount of CalPERS' unfunded liabilities grew substantially, increasing the burden on the state budget. Figure 2 charts the rise of the CalPERS' annual deficits during the period.

Figure 2: Dramatic Increase in Taxpayer Dollars Used to Bail Out CalPERS



Source: California Legislative Analyst Office

At the beginning of 2005, the projected General Fund allocation towards CalPERS' shortfall was $2.6 billion. Then throughout the year, CalPERS saw improved returns. It also adopted a new "smoothing" policy that requires investment gains to be spread out over a 15-year period. This will, in turn, spread out the costs of each year's shortfall over a longer period. Even with these two developments, the legislature still had to fill a CalPERS shortfall of $1.3 billion.[4] The deficits are expected to remain and will continue to increase: the projected deficit for 2009 is $3.5 billion.[5]

CalSTRS' Funding Shortage

CalPERS isn't the only major pension fund in trouble. CalSTRS has also had a tough time meeting its pension obligations.

In 2000, CalSTRS had a funding ratio of 110 percent, meaning that it had 10 percent more money than it needed to pay future pension obligations. In 2005, that figure dropped to 82 percent. The California Legislative Analyst estimates that CalSTRS' total operating shortfall is more than $23.1 billion.[6]

Things are so bad at CalSTRS that in June 2005, a trustees meeting was held to discuss options on how to tackle the severe shortage. As reported in the *Sacramento Bee*, the board mapped out a plan to reduce benefits for new employees and increase the employee contribution rates.

Estimates by the consulting firm Milliman showed that CalSTRS must hike contributions by at least four percent to meet obligations. If they don't ask for more from employees, the pension fund would have to earn a return of 9.1 percent every year for the next thirty years to meet its obligations. This is highly unlikely given that the average long-term stock market return is eight percent. If nothing is done, Milliman calculated that in 30 years CalSTRS' shortfall could reach $217 billion.[7]

As the CalSTRS board deliberates, the state continues to cover the fund's shortfalls. In fiscal year 2005-2006, the state allocated $469 million to cover CalSTRS. [8]

Local Governments' Unfunded Liabilities

Counties and cities are also having problems meeting their pension obligations, some at dangerously high levels. This is seriously impacting the distribution of local funds. To meet their pension obligations, services are being cut, infrastructure investments are being postponed, and borrowing is increasing, leaving sizable debt repayments in the future.

This problem is plaguing CalPERS counties and cities as well as those localities that retain independent investment pools. For example:

- **Contra Costa County,** with a non-CalPERS system, allocated 12.26 percent of their General Fund towards pension costs for fiscal year 2004-2005. A recent report by the Contra Costa Grand Jury states that the county's pension fund needs to see 18 percent returns over the next five years to meet its pension liabilities.[9]

- Equally alarming, the city of **Bakersfield,** a CalPERS city, spent 14 percent of its 2004-2005 General Fund on pensions, up from 4.9 percent in 2003-2004. The city saw their pension obligation rise by $1.6 million in 2004.[10]

- Another CalPERS city, **San Marcos,** has seen tremendous jumps in costs. The city shelled out only $712,000 in 2001. In 2005, $3.7 million must come out of the budget. In 2006, $5.1 million, a seven fold increase in five years.[11]

- **Los Angeles County** had the largest nominal pension deficit of California's 58 counties in 2003, a full $3.9 billion. In order to pay for this deficit, the county allocated $711 million of its $18 billion total budget toward pension payouts. In 2005, things got worse. Retirement costs swallowed up $125 million more of the budget, with $836 million going towards pension costs.

The list of struggling localities goes on and on. Virtually all of California's cities and counties are facing rising pension costs. Some stand in great risk of bankruptcy if the pension problems continue. Nowhere is this more apparent than in San Diego, California's second-largest city.

San Diego, A Worst-Case Scenario

The problem began in 1996, when San Diego began purposefully under-funding their pension system, moving investment dollars out of the pension pool to fund the city's operating budget. At the same time, the pension board was doling out pension perks to the workers in exchange for approval of the under-funding scheme. This plan worked during the high-performing 1990s, but when markets tanked in 2001, San Diego's pension system suffered severe shortfalls.

In 2002, the city only had enough funds to cover 75 percent of its pension liabilities. By 2004, that number declined to 67 percent.[13] In 2005, San Diego's pension system had a whopping $1.5 billion deficit, the highest among California's cities.

Riddled with debt, the city tried to borrow its way out, but San Diego's credit rating is so poor that the city cannot issue bonds. Unable to borrow, the city has had to cut services such as libraries and aquatic centers. San Diego will now have to increases fee and taxes to help pay for pension costs.

Things are so bad in San Diego that the Securities and Exchange Commission, the FBI, and the District Attorney are investigating the under-funding scandal, an act that led to the resignation of Mayor Dick Murphy, a special mayoral election, and a call for municipal bankruptcy.

Since state and local governments are spending more on pension outlays, governments are trying to find ways to finance them. As stated, cuts in services and tax hikes frequently occur, but a much more common alternative is heavy borrowing.

Pension Debts Consume California

For years California has used the selling of pension bonds as a substitute to General Fund raids or tax increases. In 2003, California's outstanding debt on the state and local pension obligation bonds was $17.725 billion.[14] While these bonds may dull the pain, they prolong the problem, leaving sizable repayments to subsequent generations because more debt today means higher taxes in future.

Governor Schwarzenegger, who since taking office in 2003 has maintained a pledge of no new taxes, has turned to borrowing to help pay for a portion of the pension shortfalls. In 2004, Schwarzenegger attempted to borrow nearly $1 billion. After taxpayer groups negotiated the governor down to $550 million, the governor and the legislature tried to sell the bonds, but an Orange County taxpayer group challenged the bonds' constitutionality. On November 17, 2005, a judge in Sacramento ruled that the bonds were unconstitutional

because the voters did not approve of them via referendum. The state will have to pay the $550 million out of the General Fund in 2006.

Combined, local governments borrow more than $2 billion annually from pension bonds.[15] And some have been overwhelmed with pension bond debt. Some examples include:

- **Sacramento County,** where despite having to repay $538 million borrowed in 1996 to cover pensions, the county was forced to sell $460 million in bonds for its 2003 pension shortfall.[16]

- **San Diego County** where they recently issued $454.1 million in pension bonds to deal with their pension troubles. This debt is on top of $430 million borrowed in 1994 and $737 million borrowed in 2002. San Diego County is prime for reform. In 2001, the County had a 107 percent funding ratio and saw a surplus of $238.7 million. By 2003, the County could only fund 76 percent of its obligations. It currently stands at 81 percent and has an unfunded liability of $1.2 billion.[17]

Pension costs are plaguing budgets up and down the state. Despite California's improving economy, CalPERS, CalSTRS, and other pension funds cannot make their obligations without diving into taxpayer dollars. With an increasingly unsustainable system, taxpayers can only pay so much. The situation was correctly summarized by Assemblyman Keith Richman who called California's public employee pension systems "a ticking fiscal time-bomb" threatening all levels of government."[18] Certainly, fixing the system is vital to California's fiscal health.

IV. California's Pension Systems Are Outdated for Today's Workforce

California's current defined-benefit pension system structure is outdated for a 21st century workforce. DB plans were originally created at a time when the average length of retirement was shorter, and thus less expensive per person. Today, people are living longer— life expectancy is 80 years for men and 84 years for women—and thus collect more in pension benefits. California's demographics compound the problem.

The baby-boomer cohort is set to retire in the next 10 years. Such a large number of retirees will require more investment into the system so pension obligations can be kept. To meet the demand, either more employees need to be hired via an expansion of government services, or require the remaining workers to pay a higher contribution rate. The latter scenario is more likely, with employees shelling out more for their predecessors' pensions.

While this might be necessary to keep the pension system solvent, statistics show that younger workers do not stay in one job for a long period of time, and thus would be less likely to "wait it out" for their pension. With an employment culture that values worker choice over corporate loyalty, employers can no longer expect their employees to stay in one job their entire life. This is reflected in national job turnover rates.[19]

According to the Department of Labor, the median job tenure length for American employees is 4.7 years. For those workers between age 25 and 34 that figure is near 2.6 years.[20] By age 32, an average American worker has held nine jobs.[21] The statistics show that today's younger workforce is less likely to stick around to pay for the pensions of older retirees.

Job mobility is now the norm. Given this trend, workers are less likely to prefer a pension plan that does not allow employees to take their pension accounts with them when they leave the public sector. Under the current system, when a public employee switches to a private-sector job, the money the employer contributed into the pension system on their behalf is not refunded or held until retirement.

Only employees that are vested in the pension systems—those workers that have five years of service under their belts—can get their employee contribution back in the form of a pension at retirement. If employees are not yet vested, their employee portion is un-refundable as well.

This system of holding employees' retirement funds hostage is incongruent with the needs of the modern American workforce. This system is undesirable to the vast majority of persons who desire only short-term public employment.

The Private Sector Has Moved Away from Defined Benefit Plans

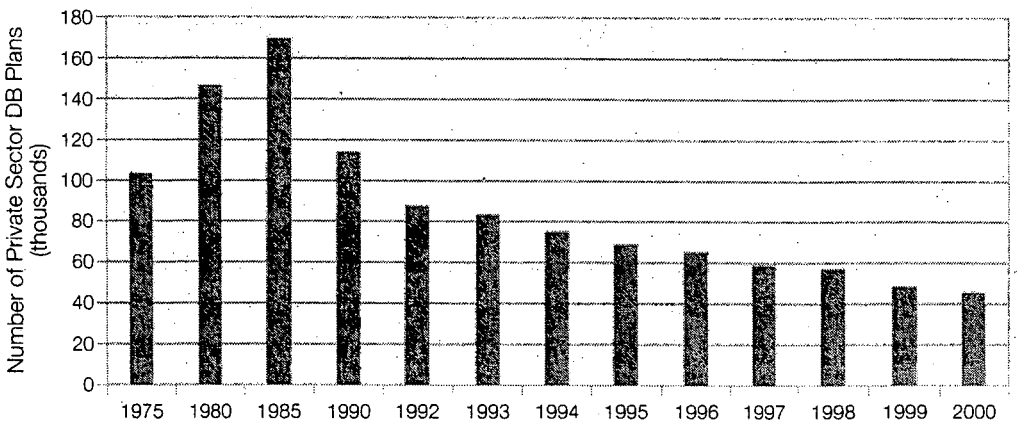
The private sector has understood that DB plans are incompatible with current job and economic trends and has moved away from them over the past two decades. As shown in Figure 3, the number of private-sector DB plans was near 103,000 in 1975. That figure spiked in 1985 at 175,000, but since then the number of plans has declined, reaching only 48,000 in 2000. Companies that have retained DB plans have suffered because of them.

Citing the reality that retirees are living longer, these companies, such as US Airways, Boeing, and Bethlehem Steel, to name a few, have had to shell out enormous amounts of money to cover the pension obligations. This has led to decreasing profit margins and increased debt. Furthermore, these companies are having a hard time competing with foreign firms and newer American companies that do not offer DB plans.[22] These "legacy costs" have been estimated by the Department of Labor to run about $450 billion cumulatively.[23]

As these companies struggle, they continually rely on the government as a crutch. They do this because the Pension Benefit Guaranty Corporation (PBGC), a Federal entity, insures corporate pensions by taking on the obligations if the company goes belly up. The most recent example of such a bailout occurred in May 2005 as a U.S. bankruptcy court cleared the way for PBGC to take on United Airlines' pension liabilities.[24]

As more and more companies falter on their pension responsibility the PBGC has to take on more of the load. Unfortunately, it too is riddled with deficits, up to $23 billion worth in 2004. This is remarkable considering it enjoyed an $8 billion surplus in 2001.[25] Further, projected costs to the public over the next twenty years are expected to reach $91 billion. [26]

Figure 3: Decline of Private Sector Defined Benefit (DB) Pension Plans in the U.S.



Source: Private Pension Plan Bulletins Abstract of Form 5500 Annual Report, U.S. Department of Labor

The Private Sector Has Moved Towards Defined Contribution Plans

Realizing that DB plans are outdated, unstable and costly, the private sector has adopted defined contribution (DC) pension plans. DC plans provide employees with a portable and individually controllable retirement account that is their own.

With DB plans, investment funds are collected in a common pool and invested collectively, but with DC plans, individual employees have the opportunity to choose how and where their retirement savings gets placed. With such options, employees can decide whether they want to pursue a conservative or more risky investment strategy. Employees can also choose to be a hands-off investor by hiring a financial services company to invest on their behalf. Many companies help their employees find an investment advisor that suits them.

The most common form of retirement investment in the private sector is the tax-exempt 401(k) account. Employees contribute a portion of their paycheck into the account every month. While the worker is employed, the account grows. At retirement, the employee can cash out and collect their earnings. Some companies will even "match" the employee's contribution up to a certain amount, allowing the account to grow at a higher rate.

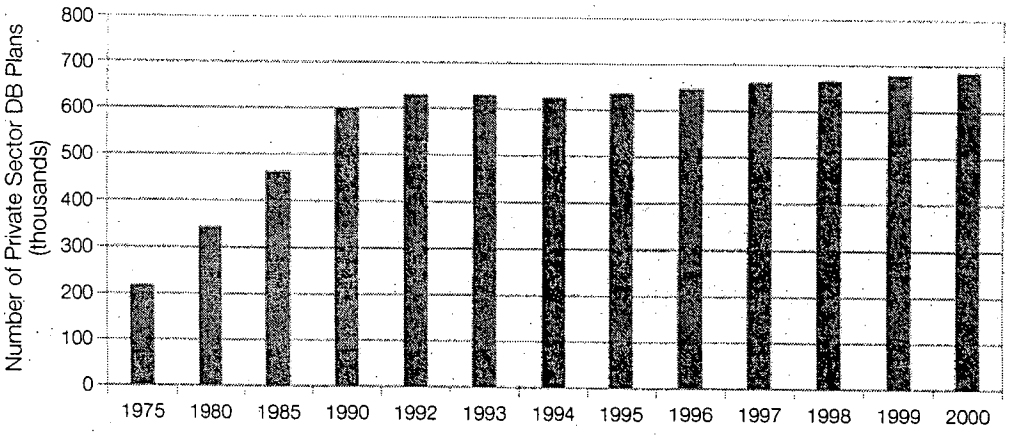
While DC plans provide the employee with more control than a DB plan, DC plans provide the employer with cost stability and predictability. Because the employee shares the investment risk, companies can plan for how much they will have to contribute towards pensions in a given year.

For example, consider a company with 100 employees each making $100,000 a year. That equates to a $10 million payroll. If the employer matches a maximum of five-percent contribution, then in a given year the company can plan to contribute $500,000 towards their employees pension that year. If in the next year everyone gets a $5,000 raise, then the company can expect their pension contribution costs to total $525,000.

This predictability allows for a company to plan for their pension obligations well in advance. They fully consider the costs of employees' pensions during the hiring process and decide whether they can afford that obligation. This ability to plan allows for the pension system to be sustainable and fully funded. Under a DC plan, companies are not at risk for skyrocketing costs eating up more and more of their annual budgets.

Because of its advantages, the majority of America's companies have chosen to move towards DC plans. As seen in Figure 4, the number of private-sector DC plans has nearly quadrupled since 1975, rising to more than 686,000, or 92.3 percent of all private pension plans in 2000.[27]

Figure 4: Increase of Private Sector Defined Contribution (DC) Pension Plans in the U.S.



Source: Private Pension Plan Bulletins Abstract of Form 5500 Annual Report, U.S. Department of Labor

Some of the current companies that offer 401(k)s are Southwest Airlines, Home Depot, Wal-Mart, Microsoft, and America Online. It should come as no surprise that these have been a few of the most successful companies over the past ten years. Hoping to avoid a potential pension quagmire, businesses such as IBM and Verizon are ending their current DB systems and are opting for types of DC plans. And they are not alone.

The private sector must continue to adapt as competition from home and abroad increases. Companies that have retained their DB plans have learned the hard way and bare heavy and unstable costs. It is clear that successful businesses in the 21st century must operate under a DC pension system. So too should governments.

Public employees desire an investment they can take with them if they change employers and can keep until retirement. While state and local governments offer supplemental plans that are portable and permit freedom of investment, the bulk of an employee's retirement money still is locked up in the outdated pension model. Governments are losing ground to the private sector in attracting bright young workers. If public service is to be a desired profession, California needs to adapt its pension systems for the 21st century.

Chapter 2:
Implementing Defined Contribution Pension Systems in California

For California to achieve reform it must adopt a defined contribution pension plan, but the nuts and bolts of the reform proposal may vary. Fortunately, other states have led the way in reforming their pension systems and California's leaders can look to them for guidance.

As of 2005, there are 20 states that permit a portion of their public employees to have 401(k) type pensions. But many of these plans come with restrictions. States such as West Virginia and Washington limit their DC plans solely to teachers, excluding other groups of employees.

Some states, such as Oregon, have adopted hybrid plans that mandate employees to pay into a DB plan along with their 401(k)s. A few states, including Michigan in 1996 and Alaska in 2005, followed the lead of the private sector and implemented a comprehensive DC plan for all workers.

In early 2005, Governor Schwarzenegger proposed a DC pension plan for California. It roughly followed the DC plans of the private sector and states like Michigan. But in April, the governor scrapped the proposal due to the absence of specific language regarding death and disability benefits. Despite this, it provided a good format for implementing a DC plan for the state's public employees.

In 2006, California State Assemblyman Keith Richman is pushing a new proposal that would give newly hired employees the option of entering into either a hybrid plan or a full DC plan.

I. Michigan's DC Plan

In 1996, the state of Michigan chose to switch to a pure defined contribution plan, granting their new employees full ownership rights of their retirement money after a four-year vesting period. It applied to all new employees hired after March 31, 1997. The Michigan Department of Management and Budget estimates that the defined contribution model saved $100 million in the first year alone.[28]

The state of Michigan contributes four percent of every paycheck into an employee's 401(k) account. The state will also match an employee's contribution up to three percent, maximizing the state's contribution at seven percent. Employees can contribute more if they wish, up to 13 percent of salary.[29]

The Michigan plan also gave current employees a four-month window to opt into the new system. For those workers, the amount accumulated under the defined benefit plan was moved into the employee's 401(k).

Employees within the DC plan are able to choose among a variety of investments including stocks, bonds, mutual funds and other commodities. CitiStreet, a private company that

specializes in pension savings plans, provides investment administration and planning for employees. When an employee retires, their 401(k) can be turned into an annuity ensuring equal monthly payments, or transferred to an Individual Retirement Account (IRA). All other benefits including death and disability benefits are retained in the DC plan.

Michigan law requires that the Office of Retirement Services administer death and disability benefits to the beneficiaries. All benefits are the result of the state's participation in a group insurance plan. If an employee is injured and permanently incapacitated on the job, the worker will receive a monthly disability benefit based upon salary and years of service. If an employee must retire due to the disability, they are entitled to no-cost life insurance coverage plus continued health, dental and vision insurance at discount rates.

If an employee dies due to an employment-related activity, the worker's spouse and dependent children will continue to receive health, dental, and vision insurance at no cost in addition to the monthly benefit.[30] Beneficiaries will also receive distributions of the employee's 401(k) account, as well as a life insurance payout equal to two times the employee's annual salary. An additional $100,000 is provided if the death was due to an on-the-job injury.[31]

II. Alaska's Reform Plan

Alaska's reform plan is much like Michigan's. Employees hired after July 1, 2006, will obtain individual retirement savings accounts. Current employees and those hired before July 1 will have the opportunity to switch into the DC plan. Preliminary estimates show that the new program will reduce state costs by as much as 38 percent for Alaska's public employee retirement system and 42 percent for Alaska's state teacher's retirement system.[32]

Under Alaska's new plan, employees are required to contribute eight percent of salary to the account. All employee contributions are immediately vested. State employers must contribute five percent of salary towards the 401(k) for public safety and other workers. Teachers are able to receive seven percent from employer contributions. Employer contributions are 100-percent vested after five years of employment. Unlike Michigan, Alaska's plan contains no matching provision.

Workers who become permanently disabled are entitled to a monthly benefit equal to 40 percent of salary. These benefits stop at retirement, at which time the employee would be enrolled in a Retiree Medical Benefit plan that supplements health care costs for retirees over age 65. If the employee dies while receiving the monthly disability benefit, then their spouse and/or dependent children will continue to receive the benefit until the year the worker would have been eligible for retirement—either age 65 or sooner depending on years of service to the state.

If an employee dies as a result of employment, the beneficiaries are entitled to a monthly pension equal to 40 percent of the employee's salary. For beneficiaries of firefighters and po-

lice officers, they are entitled to 50 percent. This will end in the year the worker would have been eligible for retirement, at which time the beneficiaries are entitled to the retirement benefit. In addition, the employer will continue to make contributions into the 401(k) until the year the worker would have been eligible for retirement.[33]

III. Oregon's Hybrid Plan

In 2003, the state of Oregon instituted a hybrid pension system, named as such because the employee maintains both a DB and DC pension plan simultaneously. Preliminary estimates figure the hybrid plan will save the state roughly $9 billion over the next 25 years.[34]

In the DB portion, employees obtain benefits under the typical DB structure. Non-public safety employees get 1.5 percent of their final average salary for every year of service upon retirement. Public safety workers get 1.8 percent of their final average salary for every year of service upon retirement.

"Final average salary" is deemed as the higher of either the average of the highest three consecutive years or one-third of total salary in the past 36 months. Retirement eligibility age for public safety workers is 60, or 53 if the employee has more than 30 years of service. For non-public safety workers, the age is 65, or 58 if the employee has 30 years or more of service.

In the DC portion, employees contribute six percent of salary to their individual 401(k) account. Employers must match that six percent with their own contribution.

If an employee is injured due to a job-related activity, they will receive 45 percent of salary as of the last full month of employment after salary. If an employee dies due to a job-related activity, their beneficiary will receive 50 percent of the total pension that would have been paid to the employee at retirement.[35]

IV. California's 2005 Reform Plan

On January 5, 2005, Governor Arnold Schwarzenegger outlined a DC pension plan for new state and local employees. The day after the governor's speech, Assemblyman Keith Richman introduced Assembly Constitutional Amendment No. 1 (ACA1). Soon after the legislation was crafted, Assemblyman Richman along with the Howard Jarvis Taxpayers Association, authored an initiative version almost identical in text. The governor wanted to use the threat of a ballot initiative to force the legislature to act on the issue.

The proposal would have required that all new state and local employees hired after July 1, 2007, be enrolled in a DC plan. This included all future employees under CalPERS, CalSTRS, and the other independent pension systems. It also gave current employees in those systems a six-month window to opt into the new system if they so desired.

Under the DC plan, all new state and local employees would have obtained personal retirement accounts much like 401(k)s. The employees would retain ownership of the account and control all investment decisions.

Figure 5: Maximum Contribution Rates Under Schwarzenegger's 2005 Reform Proposal

	Employer	Employee	Matching	Total
In Social Security				
Nonsafety	3%	3%	3%	9%
Safety	4.50%	4.50%	4.50%	13.50%
Not in Social Security				
Nonsafety	3%	4.50%	4.50%	12%
Safety	6.00%	6%	6%	18%

Source: California Legislative Analyst Office

As shown in Figure 5, both employer agencies and employees would have contributed funds into the individual accounts. The rates vary as to whether the agency, and therefore the employee, participates in the federal Social Security System. If the agency doesn't participate, pension contribution rates were permitted to be higher to supplement the absence of Social Security. The contribution rates would have been as follows:

For employees who pay into the Social Security system:

- **Employer's Defined Contribution:** A public agency's contribution to the worker's DC account would be no higher than three percent of an employee's base salary, with the exception of police officers and firefighters who are eligible for up to 4.5 percent of base salary from their employers.

- **Matching:** If non-safety employees contributed three percent of their base salary and public safety employees contributed 4.5 percent, then the employer agency would match those contributions.

- **Total Contribution:** Therefore, a non-public safety employee could receive up to six percent of salary in contribution from a public agency for a total contribution of nine percent, while public safety workers could obtain nine percent of salary from employer contributions, for a total contribution of 13.5 percent.

For those employees who <u>do not</u> pay into the Social Security system:

- **Employer's Defined Contribution:** Employer contributions would be no higher than three percent for non-safety workers and six percent for public safety workers.

- **Matching:** If non-safety employees contributed 4.5 percent of their base salary and public safety employees contributed six percent, then the employer agency would match those contributions.

- **Total Contribution:** Therefore, a non-public safety employee could receive up to nine percent of salary in employer contributions for a total contribution of 13.5 percent, while public safety workers could obtain 12 percent of salary from employer contributions, for a total contribution of 18 percent.

The proposal permitted any local government to increase employer contributions with approval by two-thirds of the local voters. The state could also change these figures with three-fourths approval in the legislature in two consecutive legislative sessions.[36]

Governor's Plan Would Have Produced Long-Term Savings For the State

While new employees would enter into the DC plan, current employees who chose to stay under the DB plan would continue to collect their pension benefits out of the collective investment fund. Employees and employers would still contribute into the system until the last employee under this system retires. At that point the pension system would continue to pay out benefits until the last beneficiary dies.

The transition from a DB to a DC plan would require sizable up-front costs because the state or local agency would have to start making direct contributions to the individual DC accounts while also slowly decreasing the number of DB contributions for current retirees. Eventually, though, CalPERS and CalSTRS will start to see significant savings. According to the Legislative Analyst's Office, savings under this plan could potentially reach as much as "several hundred million dollars to over $1 billion annually."[37] CalPERS also crunched their own numbers.

They found that because the defined contribution rates would be far lower than the average of current contribution rates, in the long-term, savings will occur. CalPERS estimated that the additional costs placed on the system during the first fiscal year (2007-2008) would be $820 million. Over the next 10 years, the total burden would be $1 billion. But over the next 20 years the state would save about $16 billion. Over a 30-year period, the state would save a whopping $35.8 billion. As these numbers show, the upfront costs are miniscule compared to the long-term savings.[38]

Despite long-term savings from California's 2005 reform proposal, opponents focused on the lack of text dealing with death and disability benefits. Because it was not explicitly written that death and disability benefits to employees and their beneficiaries would be retained, opponents claimed that they would be eliminated.

Supporters countered that the initiative only dealt with the overarching pension structure and that additional benefits had to be negotiated in contracts. The governor made it

clear that he had no intention of revoking any such benefits: "I can guarantee you that as long as I am governor," Schwarzenegger stated, "there will never be any death benefits or disability benefits taken away from police officers, from law enforcement, or from firefighters. It won't happen."

V. California's 2006 Hybrid Plan

In late 2005, Assemblyman Keith Richman chose to move forward with a new DC pension proposal. This plan would require employees hired after July 1, 2007 to choose between a hybrid pension plan and a comprehensive DC plan. They will not be permitted to choose the current system. Current employees will have the option to move from the current system to either the hybrid or DC plan during the period running from July 1, 2007 to January 1, 2008. .

The pure DC plan would instate a 401(k) for employees. Employers would be obligated to match any employee contributions up to four percent of the employee's salary. Employers could also match additional dollars that equal the cost of the defined benefit portion of the hybrid plan.

The hybrid plan would also grant employees a 401(k). Employer agencies would also be obligated to match an employee's contribution up to four percent of salary, but the employees in the hybrid plan would be excluded from the additional matching dollars.

The defined benefit portion of the hybrid plan would operate in this manner:

- Non-public safety employees who pay Social Security would receive one percent of highest average salary for each year employed upon retirement. Highest average salary is determined from an average of the highest salaries in three consecutive years. The retirement eligibility age is 65.

- Non-public safety employees who do not pay into Social Security would receive 1.75 percent of highest average salary for each year employed upon retirement. Eligibility age is also 65.

- Public-safety employees would receive two percent of highest average salary for each year employed upon retirement.

Under this proposal, all contribution rate increases must be approved by the voters in a statewide election. Local government increases must be approved by two-thirds of voters in a jurisdictional election. Further, the Regents of the University of California have the ability to boost contribution rates to recruit individuals for competitive teaching and administrative positions.

And unlike the early 2005 plan, death and disability benefits are specifically addressed. They will continue to be provided to all beneficiaries based on a formula that encapsulates age, salary, and years of service.[39]

VI. California's DC Plan Must Address Concerns

Clearly, if California is going to adopt a new DC pension plan, it must follow the lead of other states and explicitly instate a clear and straightforward death and disability benefit process along with the 401(k). This will alleviate the concerns of public-safety officers and their families.

Next, the DC plan should include employer matching as an incentive for employees to invest. This is a very attractive selling point because it encourages employees to contribute more then they would have otherwise, creating a bigger 401(k) to collect from at retirement. Accumulated over many years, these employer and employee contributions will lead to a substantial retirement. This would make public employment even more attractive given that many private sector employees do not provide employer matching. The DC plan also needs to address investment options.

Some employees will be more adventurous in their investing while others will be risk adverse. Therefore their needs to be a variety of investment instruments that the employees can access. For the more risk adverse, the purchase of put options and secondary insurance plans should be emphasized and encouraged. Also, the employees should have the option of Treasury notes and high-yield savings accounts if investing in the stock market frightens them. These tools hedge an individual's investment against economic downturns and quell the worry over investment risk.

Because some employees are not Wall Street virtuosos, state and local governments must provide some sort of investment guidance. Michigan uses CitiStreet as its administrator. They help create a portfolio for each employee that suits their individual preferences and answer any and all questions employees may have. This is comforting for public employees who understandably have a lot riding on their pension accounts.

If these provisos had been included in Governor Schwarzenegger's 2005 proposal, the public would have certainly been more accepting to the plan. Assemblyman's Richman's recent proposal would address some of these concerns. Others would have to be implemented through supplemental legislation or collective bargaining agreements.

It is important that the details of any new pension plan be hashed out, so that pension reform can occur in California. These apprehensions should not cloud the reality that DC pension plans are a better system for employees and taxpayers alike.

Chapter 3:
How California's Public Employees Would Gain From a Defined Contribution Plan

Saving for retirement should be of the utmost of importance to public employees. As such, it is only right that they should want the best possible retirement investment. With its many flaws, DB pension plans do not provide the flexibility and security necessary for today's workers. Given that DB pension systems are unstable, unpredictable, and outdated, California must follow the lead of the private sector, and modernize its pension system for a 21st-century workforce.

Fortunately, DC plans contain a number of advantages that do not exist in the current system. These benefits include asset ownership, portability, investment stability and flexibility, protection from political manipulation, and higher returns. Combined, these provisions make a DC plan essential for California's public employees.

I. Ownership and Portability

With a DC plan, individual workers will obtain full ownership of their retirement accounts. As owners, they are able to whatever they want with their money, including bequeathing the account to heirs upon death—an act forbidden under the current system.

And since the employee is an owner of the account, it is completely portable, meaning that if the employee chooses to leave the public sector, the pension plan can be taken with them. This provision makes sense given the amount of job turnover in the state's public workforce.

According to *Capitol Weekly*, California currently has approximately 223,000 state employees, only 54,259 of whom were working for the state in 1997. Since the state averages about 6,000 retirements a year, about 48,000 employees retired during that period. This means that 120,000 employees have been hired within the past eight years to fill in for someone who left state employment for non-retirement reasons. It also means that three out of every four state employees in California leave the public sector before obtaining the maximum benefit payout.[40]

A vested employee—one that worked in public employment for at least five years—is able to receive a small monthly pension benefit at retirement funded by the employee contributions they paid while employed. But employees that leave the public sector forgo the employer contribution portion. That portion is lost to them forever and remains in the fund to pay for the benefits of those who stay in public employment until retirement.

Essentially, this equates to three other workers making contributions for one worker's retirement. This is incredibly unfair to the hard-working public employees who earned those benefits. A DC plan ensures that employer contributions go directly into an individual workers account and not a collective account.

II. Investment Stability

Nearly two thirds of California's workforce is composed of those who are baby boomers or older. The State Personnel Board estimates that the number of employees age 50 and beyond will increase in the next five to seven years. Further, the available labor pool is shrinking. Demographers state that there are only 40 million generation X-ers compared to 70 million baby boomers in the U.S.[41] Clearly, the country and the state is in for a dramatic shift as those baby boomers retire.

As noted, DB pension plans do not account for demographic changes in the population. They are built on the assumption that there will be a steady stream of younger workers to fill in for those who retire. Of course, that is not always true and population statistics state otherwise.

With people living longer on average, the extended lifespan means additional years of retirement benefits. With a substantial cohort of employees soon to retire, the state legislature may decide on increasing employee contribution rates to meet the obligations to soon-to-be retirees. This would negatively impact younger workers the most, since it is they who would have to pay for their predecessor's retirement.

In a DC plan, all contributions go directly into an individual's account. While the state legislature and local governments can still hike employee contributions, the added contribution would only benefit the individual employee by adding more into their investments.

III. Protection From Political Manipulation

With the current system, the pension boards decide where to invest an employee's money, often against the ideological and moral wishes of the individual. For example, a vegetarian might oppose CalPERS investing in a meat-packing plant, but because the collective wishes of all the pensioners outnumber the individual, there is little an employee can do.

With the freedom inherent in a DC plan, this can be stopped, since employees will be free from the decisions of the pension board. Employees can choose investments that they agree with ideologically and morally. It will also stop other forms of political manipulation.

Under the current system, the pension boards are able to use the multi-billion dollar fund as leverage against businesses to achieve perceived social gains. By threatening to dump shares or by buying up enough shares to influence shareholder elections, CalPERS and CalSTRS have gained a reputation of targeting businesses that their respective boards disagree with politically.

For example, in 2004, CalPERS wanted Safeway supermarkets to retool its board of directors and remove its CEO. The reason: Safeway challenged its striking union workers on benefit increases and the CalPERS board, composed of a majority of union chiefs and union-friendly Democrats, wanted retribution.[42]

This trend has been increasing in the past decade, a scary proposition for pensioners whose investments are at risk from meddling board members. CalPERS claims that this social activism does not come at the expense of returns, but the facts show otherwise.

A white paper by Dr. Lawrence J. McQuillan, Director of Business and Economic Studies at the Pacific Research Institute, shows this activism has not lead to an improvement of stock values. The paper looks into research done by several economists and finds that efficacy of shareholder and CalPERS activism is inflated. In fact, the paper concludes that the corporate activism of CalPERS and other pension funds does not help shareholder value or pensioners in any way.[43]

This becomes apparent when one looks at the annual investment returns over the past decade. While CalPERS achieved a 12.7-percent return in fiscal year 2004-2005 and a 16.7-percent return during fiscal year 2003-2004, its ten-year average is only 9.7 percent. CalSTRS' ten-year average is worse at 9.1 percent. Compare that to the Standard & Poor's 500 and the Dow Jones Industrial Average. Those indexes averaged nearly a 12-percent return over the same period. [44] While causation could be attributed to a number of factors, a misguided social and political agenda may have played a role in the underperformance of the funds.

Under the current DB structure, the employee is not free to pursue his or her own investment strategy. With a DC plan, an employee will enjoy the flexibility to invest however they wish. This will permit more diversity of investment and potentially higher rates of return.

IV. Higher Rates of Return for a Majority of Workers

The current system locks employees into a rigid benefit calculation that deprives some workers of achieving greater investment gains. While a small minority of workers benefit under the current system, a majority of workers are being ripped off and would earn more under a DC pension plan.

Those who would have most to gain are younger workers who, as noted, are likely to stay with the government for a short time. The State Personnel Board confirms that California's public-employee workforce has high turnover rate, roughly 12 percent a year. Unfortunately, because the current system bases its benefits on age, years of service and peak salary, it is inherently skewed towards long-term workers.

Defined Benefit Plans Hurt Younger and Short-term Employees

Here's an example of how younger and short-term workers are disadvantaged by the current system. Say a worker, Linda, enters government employment at age 22 and continues to work for the state for 15 years. At age 37, Linda then leaves for a private-sector job. Although Linda will obtain a small government pension upon her retirement years later,

the final salary used to calculate her benefits at retirement will be the salary she earned at age 37, her last year of public employment. No salary increases for the next 25-30 years of Linda's career will be counted.

By contrast, suppose another worker, Max, starts employment at 22, continues working for the same government employer for 40 years, and retires at 62. As compared to Linda, Max's benefits will naturally equal an additional two percent of salary for each additional year worked past age 37, which fairly gives him credit for the additional years worked. But this additional two percent per year will be taken against the final salary at age 62, which will include 25 years of additional salary increases. This gives Max more benefits for each year of work than Linda.

To make matters worse, the contributions paid into the system for Linda by the state agency during her years of employment continued to earn investment returns for many years after she left public employment. Because she left early, Linda will get nothing for all the years of investment returns gained from the employer contributions made on her behalf. As stated earlier, these returns will be redistributed to finance the higher benefits of the workers like Max.

Inflation makes the problem even worse. As a public employee, Max received annual cost of living adjustments. This greatly influenced his final benefit calculation since it boosted his salary figure. For Linda, this inflation compensation stopped when she left government employment. The figure used to calculate Linda's benefit calculation is her salary at age 37 without any cost of living increase. Thus, the value of her benefits will consequently be depreciated by inflation because the salary figure had been depreciated by inflation over the years.

Defined Contribution Plan is Best for a Majority of Public Employees

To illustrate how a majority of California's public employees would benefit from a DC pension plan, we calculated the benefits that the current CalPERS plan would provide to certain hypothetical workers compared to what the Governor Schwarzenegger's 2005 defined contribution plan would have provided.

We started by projecting wage histories for workers who begin public employment at various ages earning $25,000 per year. We then assumed the workers' wages would grow over the years at the average rate of growth of wages in the economy as projected by the Chief Actuary of Social Security.[45]

The current CalPERS system generally requires workers to contribute five percent of wages to the system. The Governor's plan would have allowed workers to forego this entire contribution if they choose, or contribute up to three percent of wages with a dollar for dollar

match from the public employer. The employer would also contribute another three percent of wages, for a total contribution of nine percent from the employer and worker combined. Workers can choose to contribute more to their accounts without any employer match.

The Governor's plan would have consequently provided an immediate benefit to all workers by allowing them to pay less into the retirement plan if that is what they prefer. But for purposes of this study we calculated what retirement benefits workers would receive under the Governor's plan if they chose to contribute the same five percent of wages each year that is generally required under the current system. That would mean a total of 11 percent of wages would be contributed to the personal account of the worker each year, five percent from the worker and six percent from the employer.

We assumed that workers would earn a long-run real rate of return on their account investments of five percent, net of administrative costs. This is consistent with long-run standard returns earned in the market on capital investments. The long-run real return on corporate stocks going back almost 100 years to before the Great Depression has been 7.0–7.5 percent.[46] The long-run real return on corporate bonds over the same period has been 3.0–3.5 percent.[47]

We also assumed administrative costs of 25 basis points, or one fourth of one percent.[48] Indeed, over the long run, as the accounts build up to large amounts, administrative costs are likely to be much less than this, as one fourth of one percent on several billion dollars of investment would generate a huge and excessive cash flow for administration. CalPERS' administrative costs for last year were only 18 basis points.[49]

We assumed that workers chose investment funds for their accounts with 50 percent invested in corporate bonds and 50 percent invested in corporate stock. With a real return on average of 7.25 percent for stocks and 3.25 percent for bonds, and administrative costs of 25 basis points, the net real return earned on such a portfolio would be five percent.

Gains for Short-Term Employees

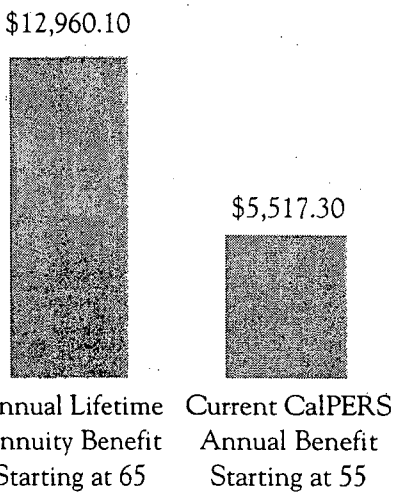
Under these assumptions, we looked at how a DC pension plan would impact the bulk of workers who leave public employment before retirement. Using current workforce figures, we found that workers who left the public sector after 10, 15, and 20 years would have done substantially better under a DC plan.[50] Currently, there are 160,000 state employees under the age of 50. Given that three out of every four employees leave public employment before retirement and that job tenure among workers under 50 is low, we found that a defined contribution pension plan would be a better deal for those 120,000 employees under age 50 who choose to leave the public sector.[51]

Figure 6

Nelson:
Starts public employment at age 22 and leaves for the private sector at age 32.
10 total years of public employment.

Account Accumulation At Age 55	$122,563.50
Annual Interest Until Age 65	$6,128.20

(All figures in constant 2005 dollars)



We first looked at a hypothetical worker, Nelson, who starts public employment at age 22 and continues in that employment for 10 years, turning to the private sector at age 32. Figure 6 shows what would happen.

Under the Governor's plan, Nelson would stop making contributions to his account at age 32, perhaps instead contributing to his retirement plan with his new employer at that time. But the funds that he and his public sector employer contributed to that account during his 10 years of public employment would continue to be invested and accumulate annual returns.

At age 55, Nelson's account would have accumulated to $122,564 in today's dollars, after adjusting for inflation. Under the current CalPERS system, Nelson would be able to get a lifetime annual benefit at that time of $5,517, which would be 20 percent (two percent for each of his 10 years of public employment) of his annual wage at age 31 ($27,587) his last year of public employment.

But under the Governor's plan, the accumulated fund at age 55 would be enough to pay him about 10 percent more than that, $6,128, out of the continuing investment returns on the fund each year. At age 65, Nelson could then use the account funds to buy an annuity paying him $12,960 per year, about twice the CalPERS benefit for this worker.

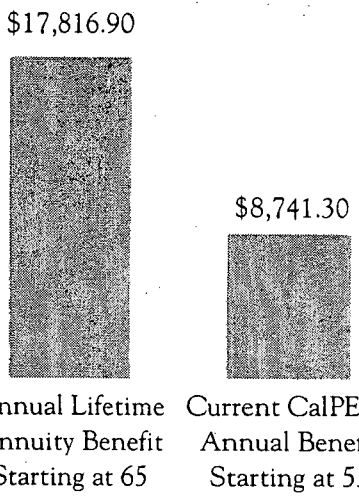
Figure 7 reports the results for Paula, a worker who starts public employment at age 22 and continues in that employment for 15 years, leaving for private sector employment at age 37.

Figure 7

Paula:
Starts public employment at age 22 and leaves for the private sector at age 37.
15 total years of public employment.

Account Accumulation At Age 55	$168,564.30
Annual Interest Until Age 65	$8,424.70

(All figures in constant 2005 dollars)



Contributions to the public sector retirement account would stop then, but the account would again continue earning investment returns each year. By age 55, the account would accumulate to $168,564 in today's dollars.

The current CalPERS system would pay Paula $8,741 per year, which would be 30 percent (two percent for each of her 15 years of public employment) of her wage at age 37 ($29,138), her last year of public-sector employment.

But under the 2005 DC plan, the accumulated account funds would be enough to pay her about the same each year out of the continuing investment returns earned on the account. At age 65, the account would be enough to buy Paula an annuity paying $17,817 each year for life, or again about twice what CalPERS would pay.

Figure 8 next reports the results for a worker, Quentin, who starts public employment at age 22 and continues in that employment for 20 years, leaving for private sector employment at age 42. By age 55, Quentin's account would accumulate to $206,494, again in today's dollars. The current CalPERS system would pay Quentin $12,176 per year starting then, which would be 40 percent (two percent for each of his 20 years of public employment) of his annual wages at age 42 ($30,726), his last year of public employment.

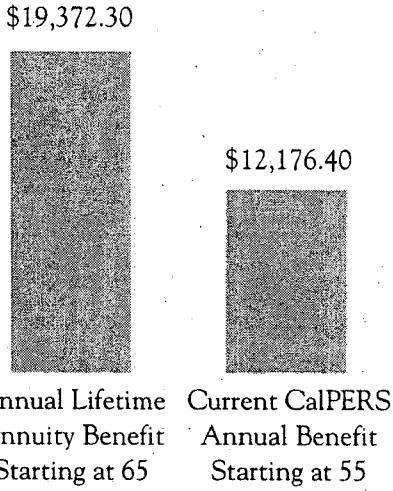
But under the DC plan, the accumulated account would be enough to pay Quentin the exact same amount each year as the current CalPERS plan until age 65. At that point he could buy an annuity paying $19,372 per year for life, about 60 percent more.

Figure 8

Quentin:
Starts public employment at age 22 and leaves for the private sector at age 42.
20 total years of public employment.

Account Accumulation At Age 55	$206,494.40
Annual Interest Until Age 65	$12,176.40

(All figures in constant 2005 dollars)



Gains for Long-Term Workers

We next looked at longer-term workers who would retire within the system, to see what they would gain from a DC pension plan. We found that long-term workers who start employment at 25 or 35 and then retire at 65 would also gain under the DC plan. Given that roughly 56,000 of current employees will retire in the system, and that Generation X-ers and Y-ers make up roughly one third of the total state workforce, we can assume that around 18,600 additional workers would gain under a DC plan if they chose to retire at 65.

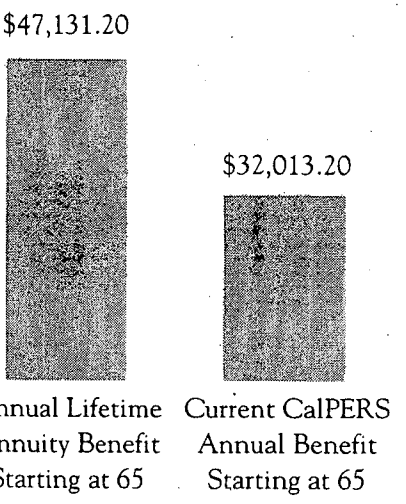
Figure 9 is for Rosa, a worker who starts public employment at age 25 and continues public employment for 40 years, retiring at age 65. Under the Governor's plan, Rosa would reach retirement with an accumulated fund of $445,719 in today's dollars. Currently CalPERS would pay Rosa $32,013 each year, which would be 80 percent (two percent for each of his 40 years of employment) of her annual wage at age 65 ($39,581), her last year of public employment. (Note that the annual wages in all these examples are in today's constant dollars after adjusting for future inflation). But under the Governor's plan the account would be enough to pay her $47,131 per year for life, about 50 percent more.

Figure 9

Rosa:
Starts public employment at age 25 and retires at age 65.
40 total years of public employment.

Account Accumulation At Age 65	$445,719.10

(All figures in constant 2005 dollars)



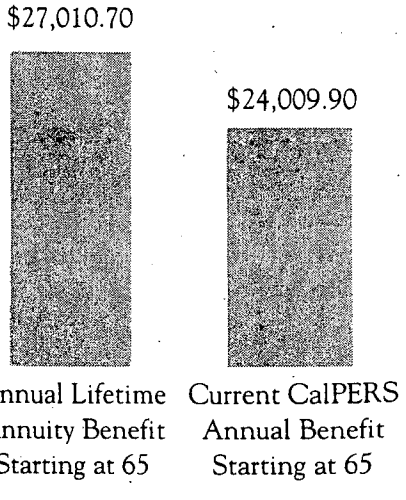
In Figure 10, Samuel starts public employment at age 35 and continues in that employment for 30 years until age 65. His account by then would have accumulated to $255,440 in today's dollars. CalPERS would pay Samuel an annuity of $24,010 per year, which would be 60 percent (two percent for each of his 30 years of public employment) of his annual wage at age 65 ($39,581), his last year of public employment. But Samuel's accumulated account would be enough to buy him an annuity of $27,011, about 12.5 percent more.

Figure 10:

Samuel:
Starts public employment at age 35 and retires at age 65.
30 total years of public employment.

Account Accumulation At Age 65	$255,439.90

(All figures in constant 2005 dollars)



A Clear Choice for Employees

While the current system benefits a portion of employees—specifically those employees like Max who have worked for the state long-term, but retire before the age of 65—a clear majority of employees would gain from a DC plan. This includes the approximately 120,000 workers under 50 who leave public employment before retirement and the roughly 18,600 long-term workers who remain employed until age 65. Under these assumptions, nearly 136,600 or 61 percent of California's state public employee workforce would gain under a DC pension plan.

Chapter 4:
How California's Taxpayers Would Gain Under a Defined Contribution Plan

DC pension plans would not only help pensioners but taxpayers as well. Under a DC plan, taxpayers would obtain pension cost stability and predictability, protection from political and investment risk, protection from pension fraud, long-term cost savings and a new public-service recruitment tool.

I. Pension Cost Stability and Predictability

Under a DC plan, public employers—the state and local agencies funded by taxpayer dollars—would be able to predict and plan for pension obligations year after year. As in the private sector, employers can figure out how much their contribution will be in a given year by setting it as a percentage of payroll.

With this predictability, governments will know how much revenue they need in advance to cover their defined contributions to employees. Because of this advantage, elected officials can adopt annual budgets without the fear that skyrocketing pension costs will grab an ever-increasing portion.

The reason skyrocketing pension costs will no longer occur is because under a DC plan the market volatility is shared between the taxpayers and the employees. In a DB plan, when a recession occurs the investment portfolio under-performs while tax revenues are decreasing. That leaves elected officials with the burden of paying more in the way of contributions at a time when budgets can't afford the increase. The consequence is that taxpayers have to pay more or endure cuts in social services.

In a DC plan, if a recession occurs, the individual employee pension accounts may fluctuate depending on the contents of each investment portfolio, but contributions by the employer will remain constant at the defined contribution rate. Therefore, even though decreased tax revenue may tighten budgets, elected officials will still be able to predict and manage their pension costs. Although taxpayers are still obligated under law to fund the pension payouts, they don't have to worry about covering any unexpected shortfalls because the system will be fully funded every year.

II. Long-Term Savings

With the fiscal stability of the DC plan, taxpayers will save millions in the long-term. Because of the absence of unfunded liabilities, the General Fund will be safe from impromptu pension raids, freeing it up for vital public goods, such as roads and utilities. Also, because the actual day-to-day investing will be undertaken by the private sector, administrative costs will be reduced.

As shown with California's 2005 plan, short-term transition costs will occur but long-term savings will be in the billions. Again, the Legislative Analyst's Office estimated that the

state could gain as much as "several hundred million dollars to over $1 billion annually."[52] CalPERS calculated that the 30-year savings could be upwards of $35.8 billion.[53]

III. Protection Against Political and Investment Risk

The current system relies on investment officers appointed by the pension boards to set up an investment strategy. If they are incorrect in their assessment of the market and miscalculate, taxpayers must pay for their mistakes. Under a DC plan, taxpayers don't have to bear the risk from bad investments. With a DC plan, risk is shared with employees. The taxpayers are only liable for making the agreed contributions into the individual portfolios.

Further, a DC plan eliminates any political manipulation on the part of the pension boards and elected officials. With a collective investment pool, pension board members have an opportunity to use the fund to further their own interests. Not only do they have the ability to threaten businesses to achieve a union-backed agenda, as in the Safeway example, but they also have the ability to "buy" pensioner's votes by approving of the sizable and costly pension benefit increases proposed by elected officials.

A recent study of all the states' public employee retirement systems shows that between 2000 and 2004, the average annual benefit increase to state and local workers equaled 37 percent—this at a time when fiscal problems plagued many of the states.[54] With disregard for the taxpayers, politicians dole out pension benefits like candy, and get votes and campaign dollars in return.

In a DC plan these forms of political manipulation can be stopped. With voter approval of all employer contribution rate increases, taxpayers can keep pension board members, and the elected officials who propose lavish increases, in check.

IV. Protection from Pension Fraud

Pension fraud has been regular occurrence in California. Employees falsely claim disabilities to boost pension benefits. The most blatant example was the California Highway Patrol, where 80 percent of its high-ranking officers filed disability claims just before retirement. In claiming disability, their pensions were increased substantially, granting them retirement incomes that rival or even surpass their peak salaries while employed.[55]

Pension fraud has also been a problem for local agencies. In Los Angeles County for example, 79 percent of firefighters and 56 percent of sheriffs have retired with disability claims. This is an unusually high number considering that the city of Los Angeles' firefighters and police officers only have a disability claim percentage of 44 and 15 percent, respectively. Under the county's system, the retiree can get 50 percent of salary tax-free as a guaranteed part of the disability pension. The county paid $50 million in 2003 to cover the costs of the additional benefits.[56]

With a DC plan for all state and local employees, the costs from fraud in the pension system will be eliminated because disability benefits would be independent from any pension amount calculation. Therefore, taxpayers wouldn't have to pay more for fraudulent pension bonuses.

V. Better Workforce Recruitment Tool

The California State Personnel Board concedes that new strategies are needed to obtain a modern workforce for the state. They state:

> It is incumbent upon employers today, and more specifically, every State agency and department to reconcile their workforce requirements with the personal needs and desire of current and potential employees. A number of surveys and studies have identified a shift in today's labor force from a loyalist, "hire and retire from one company" mindset to a mindset of free agency.

Clearly, the state understands that today's workforce is changing. A DB plan is incongruent with the new worker mindset. With a DC plan, the state can deploy another tool in its arsenal as it competes with the private sector in recruiting workers.

Conclusion:
It's Time For a Pension Intervention

The time for reform is now. California's public employee pension systems are unfair, unstable, unpredictable, and outdated. They are unfair because they prevent public employees from having a voice in how their hard earned dollars are invested. They are unstable because state contribution rates fluctuate wildly. They are unpredictable because pension costs are eating up the budgets of the state and local governments. They are outdated because they are incompatible with the demographics and desires of today's workforce.

Compared to the way private sector and other states provide pension benefits, California falls behind the curve and risks being left in the dust. Ninety-two percent of American companies offer their employees 401(k)s. So too should public employers.

California's elected officials have a gamut of options in crafting a DC plan. Not only can they look toward other states, but they can look to the plans introduced by various legislators, including the plan embraced by the governor in early 2005 and the newly proposed hybrid plan introduced by Assemblyman Keith Richman. Of course, the details must be worked out with the concerns of the public in mind, especially those raised by the public employees themselves. But such concerns, while valid and important, must not overshadow the gains DC plans would bring to taxpayers and employees.

Taxpayers would gain cost savings, stability and predictability, and protection from political favoritism and investment risk. Employees would gain asset portability and ownership, investment stability and flexibility, protection from political manipulation and for a majority, higher returns.

Our economy is ever changing, making it necessary for individuals to go from job to job. Why shouldn't their money go with them? The public has realized this for sometime. A recent poll found that nearly two thirds of Californian's support having defined contribution pension plans.[57] Californians deserve pension systems that are fair to taxpayers and employees alike. It's time for a pension intervention in the Golden State.

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[48] The Chief Actuary of Social Security assumes administrative costs of this amount in evaluating Social Security reform plans involving personal accounts, based on the most thorough studies of the issue.

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[50] Annuities were calculated based on probability of living each year, up to age 100, times the annual annuity benefit, with the sum equal on a present discounted value basis to the accumulated personal trust fund at retirement.

[51] California State Personnel Board, "Workforce Planning: Maximizing the State of California's Workforce" 2002.

[52] Ibid.

[53] Testimony by CalPERS to California State Senate Budget and Fiscal Review Subcommittee No. 4 on State Administration, General Government, Judicial, and Transportation, Budget and Fiscal Review Committee. February 15, 2005.

[54] Wisconsin Legislative Council, "2004 Comparative Study of Major Public Employee Retirement Systems" December 2005.

[55] John Hill and Dorothy Korber, "Chief's Disease Rife at CHP," *Sacramento Bee*, September 10, 2004.

[56] Troy Anderson, "Pension Probe Launched," *Los Angeles Daily* News, January 5, 2005.

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