

Spring 2012

An Assessment of Local Government Strategies for Addressing Pension Costs

Bret Uppendahl
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_projects

Part of the [Public Administration Commons](#)

Recommended Citation

Uppendahl, Bret, "An Assessment of Local Government Strategies for Addressing Pension Costs" (2012). *Master's Projects*. 233.
DOI: <https://doi.org/10.31979/etd.xecp-h45q>
https://scholarworks.sjsu.edu/etd_projects/233

This Master's Project is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Projects by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

An Assessment of Local Government Strategies
for Addressing Pension Costs

by

Bret Uppendahl

A Thesis Quality Research Paper
Submitted in Partial Fulfillment of the
Requirements for the Masters Degree

In

Public Administration

Prof. Frances Edwards. Ph.D.

The Graduate School
San Jose State University

May, 2012

Table of Contents

Introduction.....	3
Literature Review.....	16
Problem Statement.....	27
Methodology.....	28
Findings.....	32
Analysis and Conclusions.....	38
Sources Consulted.....	47

List of Graphics

Graph 1 Palo Alto and Sunnyvale Combined Sales and Property Tax Revenue..... 6

Graph 2 Palo Alto and Sunnyvale Property and Sales Tax Revenue.....7

Graph 3 Palo Alto and Sunnyvale Tax Revenue 8

Table 1 Unfunded Liability..... 15

Table 2 Contribution Rate for Unfunded Liability.....15

Table 3 CalPERS Defined Benefit Plans..... 30

Table 4 Summary of Valuation Data for Palo Alto and Sunnyvale Pension Plans..... 31

Table 5 Approximate Changes to Employer Contribution Percentage for Miscellaneous
Employees.....32

Table 6 Approximate Changes to Employer Contribution Percentage for Safety Employees.... 32

Table 7 Projected Normal Costs for Palo Alto Pension Plans..... 33

Table 8 Projected Normal Costs for Sunnyvale Pension Plans..... 34

Table 9 Employee Costs and Benefits of Selected Pension Plans..... 36

INTRODUCTION

The economic downturn that occurred in 2008 created a financial crisis for local governments throughout the nation. The primary cause of their financial problems was the drop in housing prices and consumer spending that resulted in significant revenue declines at the local level (Hoene & Pagano, 2011). However, decisions made by elected officials throughout the past decade also resulted in a dramatic increase in personnel costs. Specifically, decisions related to employee pension benefits were based upon revenue projections and pension funding assumptions that have been proven to be unreasonably optimistic (San Mateo County Civil Grand Jury, 2009). The dismal performance of the financial markets affected pension funds because they relied upon optimistic asset growth assumptions for pension funding calculations. Without consistently positive annual financial returns, CalPERS and other pension administrators have been forced to require higher contributions from public agencies to fund retirement benefits (CalPERS, 2009).

As a result of these factors, local governments throughout California are considering pension reform as one tool for preserving financial stability and integrity (League of California Cities, 2011). This study analyzes the effect of the recent economic downturn on public agencies, focuses on Palo Alto and Sunnyvale, and addresses the key question facing policymakers as to whether pension reform is an effective solution for addressing the financial issues that threaten to cripple local governments' ability to provide direct services to their residents. If pension reform is effective, then what is the optimal way within existing contractual constraints to equitably implement a change in employee benefit programs? If pension reform is

not effective, then what other strategies should policymakers consider to mitigate employee costs and ensure the long-term success of vital public services?

Local Government Revenue Decline

The fundamental cause of the recent local government fiscal crisis stemmed from an abrupt drop in local revenues due to the economic downturn. Not only did revenue sources decline at a significant rate, but local governments in California have a limited ability to increase revenues on an annual basis. Much of this is due to the fact that two of the fundamental sources of revenue for California cities are property tax and sales tax. Together these two revenue bases can account for more than 80 percent of local tax revenue. Furthermore, in 2006, property tax and sales tax accounted for approximately 37 percent of all local government revenues (Hill, 2007). Aside from property tax and sales tax, the majority of local revenues come from fees, charges and intergovernmental aid (Coleman, 2005).

In California, Proposition 13 effectively prevents local governments from controlling the amount of property tax revenue they can receive and the Bradley-Burns Act limits the local government share of sales tax to one percent of total taxable sales (Hill, 2007). Local districts are permitted to increase the sales tax rate by up to one additional percent with voter approval. However, since any sales tax increase must be approved by voters, future increases may be unlikely given the national recession (California Board of Equalization, 2010).

According to a 2010 National League of Cities (NLC) survey, general fund revenues declined 2.5 percent from 2008 to 2009 (Hoene & Pagano, 2010). In 2011 the NLC survey showed that national fiscal conditions improved slightly; however, 57 percent of city finance officers responded that their cities are in a worse condition than in 2010. General fund revenues

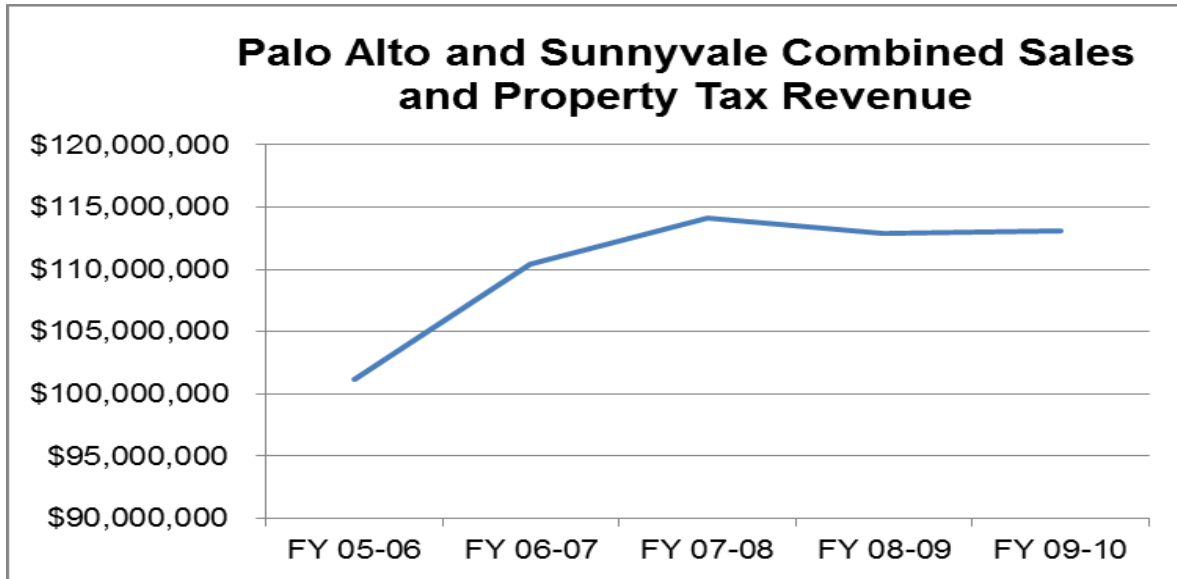
declined 3.8 percent from 2009 to 2010 and respondents projected that general fund revenues would decline another 2.3 percent in 2011. When including the projections for 2011, city revenues have declined for five straight years (Hoene and Pagano 2011).

Data from the US Census bureau shows that state and local tax revenue collection has only grown at an average rate of 1.7 percent over the past 6 years with only 1 year, 2007, having growth of over 2 percent (United States Census Bureau, 2011). Over this same time period, the national inflation rate has averaged 2.6 percent. Therefore, adjusting for inflation, the real local tax revenue growth rate has actually been negative (Bureau of Labor Statistics, 2011). Since this data is an aggregation of tax collections for all states, which have different tax structures, it is more informative to focus on sales and property tax growth rates. Property tax is relatively consistent and stable, and its average annual growth has closely mirrored overall growth at 1.7 percent. However, sales tax, which is directly related to local economic activity and can be much more volatile on a year to year basis, has only grown at an average rate of 1.4 percent (United States Census Bureau, 2011).

When looking at the revenue data on a quarterly basis compared to the prior year, the recent declines become much more evident. Beginning in 2006, states saw 12 straight quarters of growth, averaging 5.3 percent. Rapid decline began in the first quarter of 2009, when states saw three straight quarters of declining revenue. This resulted in a two year period of overall decline, which averaged -0.8 percent over the two year period. Sales tax revenues were the driving force behind the declines as the two year period beginning in 2009 resulted in an average quarterly decline of 2 percent (United States Census Bureau, 2011).

Looking at similar data in the Silicon Valley provides a more telling example of the revenue-related issues that are affecting local government. Graph 1 combines general fund data from Palo Alto and Sunnyvale and shows that property and sales tax revenues declined in FY 2008-09 and had minimal growth in FY 2009-10.

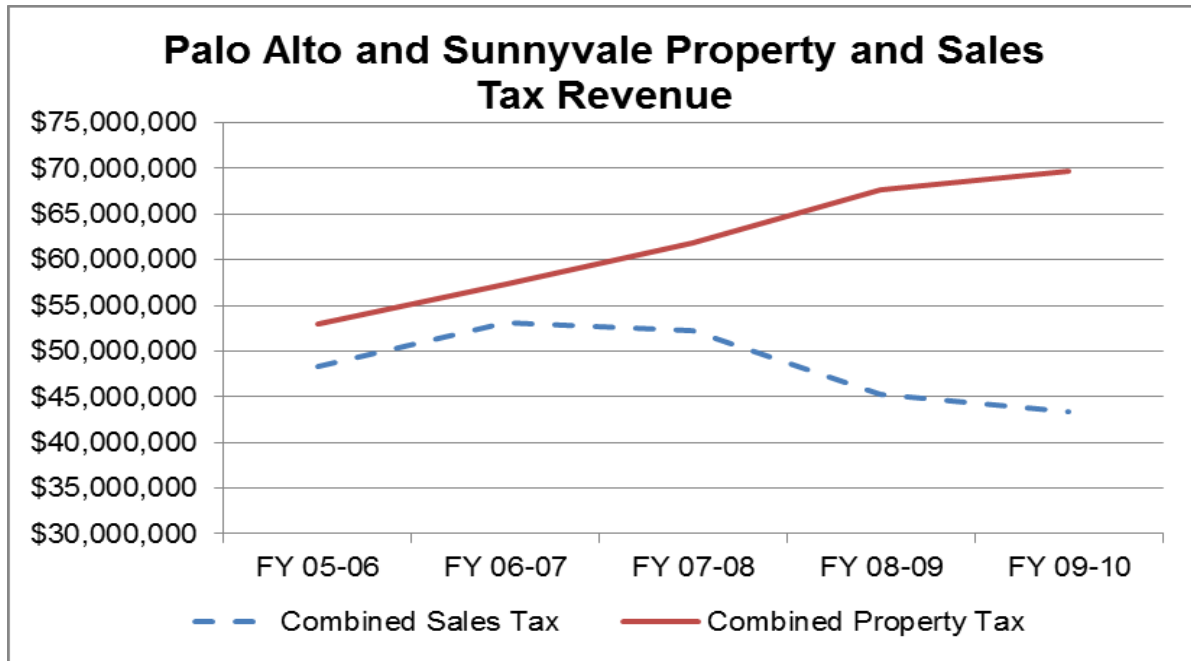
Graph 1



Sources Used: City of Palo Alto 2007-17 Long Range Financial Forecast; City of Palo Alto 2008-18 Long Range Financial Forecast; City of Palo Alto 2009-19 Long Range Financial Forecast; City of Palo Alto Long Range Financial Forecast Fiscal Years 2010 to 2020; City of Palo Alto Long Range Financial Forecast Fiscal Years 2011 to 2021; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2007/2008; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2008/2009; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2009/2010; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2010/2011; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2011/2012.

The primary cause of the revenue stagnation in Palo Alto and Sunnyvale was a severe drop in sales tax revenues. Graph 2 shows that although property tax revenues steadily increased over the past five years, sales tax revenues have fallen by nearly 17 percent since FY 2007-08.

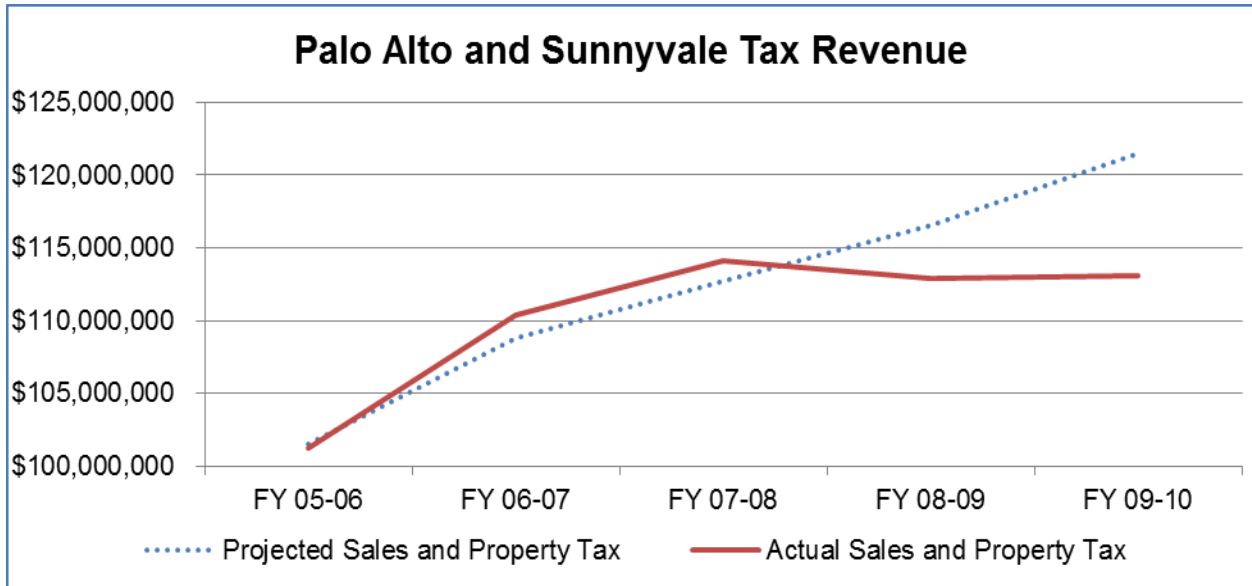
Graph 2



Sources Used: City of Palo Alto 2007-17 Long Range Financial Forecast; City of Palo Alto 2008-18 Long Range Financial Forecast; City of Palo Alto 2009-19 Long Range Financial Forecast; City of Palo Alto Long Range Financial Forecast Fiscal Years 2010 to 2020; City of Palo Alto Long Range Financial Forecast Fiscal Years 2011 to 2021; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2007/2008; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2008/2009; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2009/2010; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2010/2011; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2011/2012.

Although the recent downturn in local tax revenue has had an immediate fiscal impact, the effects are even more significant when applied to long term revenue forecasts. Graph 3 shows the recent property and sales tax revenue compared to the FY 2007-08 revenue forecasts developed by Palo Alto and Sunnyvale.

Graph 3



Sources Used: City of Palo Alto 2007-17 Long Range Financial Forecast; City of Palo Alto 2008-18 Long Range Financial Forecast; City of Palo Alto 2009-19 Long Range Financial Forecast; City of Palo Alto Long Range Financial Forecast Fiscal Years 2010 to 2020; City of Palo Alto Long Range Financial Forecast Fiscal Years 2011 to 2021; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2007/2008; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2008/2009; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2009/2010; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2010/2011; City of Sunnyvale Adopted Budget and Resource Allocation Plan Fiscal Year 2011/2012.

Graph 3 shows that both cities expected property and sales tax revenues to continue on a stable trajectory throughout the end of the decade. By FY 2009-10, the two cities expected to receive over \$120 million in property and sales tax revenue; however, the actual revenue received was only \$113.1 million. In their FY 2007-08 projections, Palo Alto and Sunnyvale overestimated their future revenues by over \$9.2 million.

Local Government Expenditure Increases

At the same time that local governments have experienced decreasing revenue growth rates, expenditures have significantly increased. In particular, pension related expenditures have become a primary concern. In the October 2010 NLC survey, over 81 percent of finance officers said that increasing pension costs were a primary factor affecting city budgets (Hoene & Pagano, 2010). The 2011 NLC survey showed that pension costs had become a larger concern as 84 percent of respondents cited pension costs as having a negative impact on their city's fiscal condition (Hoene & Pagano, 2011). While the NLC surveys capture nationwide responses, California cities face a similar situation. According to a 2009 Public Policy Institute of California (PPIC) study, over 90 percent of cities claim that pension costs are important factors in expenditure growth. The PPIC survey also showed that most local governments in California took various steps in FY 2008-09 to realign expenditures with revenues. Seventy one percent of respondents used hiring freezes, fifteen percent used furloughs, thirteen percent used wage reductions and thirty percent used layoffs to balance their budget. Furthermore, when asked about their strategy for future years, thirty percent of respondents anticipated using layoffs and thirty seven percent anticipated using wage reductions to keep expenses under control (Neiman & Krimm, 2009).

Local governments in the Bay Area have also taken notice of the increasing personnel costs. In 2008 and 2009, the San Mateo Civil Grand Jury and the Santa Clara County Civil Grand Jury both studied the impacts of employee compensation costs. The San Mateo Civil Grand Jury found that during the dot-com boom city services and staff expanded, and salaries and pensions were embedded in union contracts. As the economy struggled throughout the

decade, expenses continued to grow and they are expected to grow even more throughout the next decade. The majority of cities in San Mateo County now spend approximately 70 percent of their general fund budget on employee compensation and they expect employee costs to increase by at least four percent per year for at least five years (San Mateo County Civil Grand Jury, 2009). The Santa Clara County Civil Grand Jury found similar results in 2009. Their study found that wages have steadily increased, pension and healthcare benefits have significantly increased, and that total compensation costs now threaten cities' fiscal stability. Comparing total employee costs from 2000-01 to 2009-10, the Santa Clara County Civil Grand Jury found that employee compensation costs as a percentage of general fund expenditures have increased by 15 percent. When calculated on a cost per employee basis, non-safety employee costs have increased 37 percent and safety employee costs have increased 41 percent since 2000-01. During this time period, inflation increased by 27 percent (Santa Clara County Civil Grand Jury, 2010).

Defined Benefit Pension Overview

As is shown by the financial surveys and Civil Grand Jury reports, rising defined benefit pension costs have become a focal point for local governments. There are various forms of defined benefit pension plans; however, the general formula is to pay a certain percentage of an employee's final year salary upon their retirement. This formula provides for a fixed percentage of salary for each year of service, meaning that the total pension amount increases with each year of service. For example, a pension plan that offers 2 percent for each year of service would provide 40 percent of the employee's salary for the rest of their life after 20 years of service, or 60 percent after 30 years of service (CalPERS, 2011b).

Pension funding formulas are based on a three part contribution structure: employer contribution, employee contribution, and return on investment of the fund. Employers and employees typically pay a certain percentage of employee salaries to pension administrators such as CalPERS (CalPERS, 2011b). While employee contributions are typically a fixed percentage of their salary, the employer contribution percentage is set by actuarial formulas and varies among different agencies. In the medium sized cities in the Bay Area, this percentage ranges between 10 and 40 percent, meaning that for every dollar an employer pays in salary, it pays up to an additional \$0.10 to \$0.40 to fund future pension obligations (CalPERS, 2011d). Funds are invested annually over an employee's working life and the invested money is expected to grow in value to match the lifetime payout during retirement (CalPERS, 2011b).

In the statewide CalPERS system, local agency retirement plans are divided into two categories. Sworn police and fire employees are grouped into the Safety plan, while all other employees are grouped into the Miscellaneous plan. These two plans have different benefit levels and CalPERS provides annual actuarial statements for each plan that shows the annual costs and describes the assumptions used in calculating future contribution rates (CalPERS, 2011b).

Perhaps the most challenging aspect of the pension funding formula for local government financial planning is that the annual contribution rate is controlled by the pension administrators and can be changed from year to year depending on actuarial changes and financial market performance. When stock values were rising during the late 1990's, some local government retirement plans were classified as "super funded". This resulted in decreased annual pension funding requirements and gave local agencies more flexibility with respect to pension benefits. As a result, many local governments chose to enhance their pension plans and offer more

generous pension benefits. When the economy experienced two recessions in the past decade, the invested assets that were used to provide pension benefits shrank and pension administrators required higher annual contributions. The employer contribution rates rose to unsustainable levels, and have now provided a catalyst for local pension reform efforts (San Mateo County City Managers Association, 2009).

In 2008, state and local government employee retirement systems lost nearly \$180 billion, or about 5 percent of their value. According to the chief of the Census Bureau's Governments Division, "Shortfalls in state and local government pension plans may have long-term consequences for some state and local governments" (United States Census Bureau, 2010b, p.1). Data from the Census Bureau shows that from September 2007 through March 2009, state and local pension funds lost more than 28 percent. In those 21 months, there were only two quarters of positive growth, however, both of those positive quarters showed gains of less than 1 percent. In the two years following March 2009, pension funds gained 31 percent, however the total combined assets of pension funds is still lower than it was in 2007 (United States Census Bureau, 2010a).

The CalPERS investment portfolio is comprised of a broad range of assets including stocks, bonds and real estate investments. Their stated target for investment return is 7.75 percent and over the past 20 years, the average annual investment return has been 7.9 percent (CalPERS, 2011b). On a fiscal year basis, there have only been four years of negative returns since 1990. Two of those years occurred during the dot-com bust of 2001 and 2002, when the investment fund lost 7.1 percent and 6.0 percent, respectively. In 2008 and 2009 the investment fund lost 4.9 percent and 23.4 percent, respectively. During the same time period, there were thirteen years

where returns exceeded ten percent (CalPERS, 2011a). However, the most recent decline in 2009 was so severe that it shattered long term projections. In order to mitigate the effects of the recent decline, CalPERS elected to use a smoothing method that isolated all gains and losses from FY 2008-09 to FY 2010-11. Under this method, the effects of the recent downturn are treated as separate from the rest of the portfolio and will be paid for separately from all other liabilities (CalPERS, 2009).

In addition to the effects of the stock market decline, CalPERS pension funding expenses have also increased as a result of updated actuarial assumptions. In April 2010, the CalPERS Actuarial Office released the *CalPERS Experience Study: 1997 to 2007*. The purpose of the study was to compare the current actuarial assumptions to the actual results of the system and to develop new assumptions to apply to future pension funding formulas. The study reviewed ten years of demographic data on all members that participate in the California Public Employees Retirement Fund, including state employees, school employees and public agencies. Data was gathered regarding retirement rates, termination rates, mortality rates, and salary increase rates, and the updated data was used to modify the actuarial formulas for employer contribution rates effective in FY 2011-2012 (CalPERS, 2010a; CalPERS Actuarial Office, 2010).

The study revealed three primary factors that have affected the pension funding formulas. First, life expectancy has increased for all members. The life expectancy for males has increased by one year and the life expectancy for females has increased by approximately four months. This means that pension benefits must be provided for a longer period of time, and therefore additional funding is required. Second, the age in which miscellaneous members retire is slightly lower than expected and is slightly higher than expected for public safety members. The study

attributed these changes in retirement ages to the passage of SB 400, which increased benefits to members and therefore provided additional incentive to retire early. Increased retirement rates are also believed to be caused by the recent economic downturn and the resulting changes to the work environment, such as furloughs. The final factor that changed as a result of the experience study was higher than expected salary increases for members with higher years of service. Previously, it was assumed that members with higher years of service would reach a plateau where their salaries would only increase by the overall rate of wage inflation. However, the study showed that in addition to wage inflation, members with higher years of service actually continue to receive increases due to seniority, merit and promotion. This is thought to be the result of promotional opportunities late in individual's careers and greater than expected salary increases (CalPERS Actuarial Office, 2010).

The increased costs associated with the stock market declines and the recent experience study can be seen in the unfunded liability figures provided by CalPERS. The tables below show the effects of the recent changes for Palo Alto and Sunnyvale. These two cities have seen their unfunded liabilities nearly double since 2005 and, consequently, the projected increases to their contribution rates have nearly doubled to pay for the increased costs.

Table 1: Unfunded Liability

	Palo Alto Safety	Sunnyvale Safety	Palo Alto Miscellaneous	Sunnyvale Miscellaneous
2005	\$23,862,338	\$52,537,831	\$52,502,825	\$28,528,449
2006	\$27,777,775	\$52,634,012	\$52,668,486	\$47,890,724
2007	\$26,453,429	\$56,104,384	\$58,082,037	\$41,712,944
2008	\$30,080,374	\$58,010,769	\$63,500,255	\$49,051,264
2009	\$44,018,407	\$75,503,671	\$100,435,301	\$72,921,246

Sources Used: Actuarial Valuation as of June 30, 2009 for the Miscellaneous Plan of the City of Palo Alto: Required Contributions for Fiscal Year July 1, 2011 – June 30, 2012; Actuarial Valuation as of June 30, 2009 for the Miscellaneous Plan of the City of Sunnyvale: Required Contributions for Fiscal Year July 1, 2011 – June 30, 201; Actuarial Valuation as of June 30, 2009 for the Safety Plan of the City of Palo Alto: Required Contributions for Fiscal Year July 1, 2011 – June 30, 2012; Actuarial Valuation as of June 30, 2009 for the Safety Plan of the City of Sunnyvale: Required Contributions for Fiscal Year July 1, 2011 – June 30, 2012.

Table 2: Contribution Rate for Unfunded Liability

	Palo Alto Safety	Sunnyvale Safety	Palo Alto Miscellaneous	Sunnyvale Miscellaneous
2005	6.84%	10.71%	6.58%	3.40%
2006	7.72%	11.46%	6.43%	6.29%
2007	7.13%	11.19%	6.92%	5.52%
2008	7.70%	10.77%	7.47%	6.84%
2009	12.31%	14.26%	11.63%	9.57%

Sources Used: Actuarial Valuation as of June 30, 2009 for the Miscellaneous Plan of the City of Palo Alto: Required Contributions for Fiscal Year July 1, 2011 – June 30, 2012; Actuarial Valuation as of June 30, 2009 for the Miscellaneous Plan of the City of Sunnyvale: Required Contributions for Fiscal Year July 1, 2011 – June 30, 201; Actuarial Valuation as of June 30, 2009 for the Safety Plan of the City of Palo Alto: Required Contributions for Fiscal Year July 1, 2011 – June 30, 2012; Actuarial Valuation as of June 30, 2009 for the Safety Plan of the City of Sunnyvale: Required Contributions for Fiscal Year July 1, 2011 – June 30, 2012.

Unfortunately, many of the factors that have resulted in increased pension costs were not adequately forecasted in 2007 when Palo Alto and Sunnyvale granted increased benefit plans to their employees. In their 2007-17 Long Range Financial Forecast (2007), Palo Alto claimed that “the cost of the retirement benefit is offset over time by a containment of medical costs and by employees paying a portion of the retirement benefit...It is critical to note that CalPERS investments have improved dramatically since 2000 to 2002...Pension expenses are expected to level out in subsequent years” (p.10-11). Their long range forecast included a graph showing that the city expected their contributions to remain near 25 percent of payroll for their public safety employees and near 16 percent for their miscellaneous employees (City of Palo Alto, 2007).

The City of Sunnyvale made similar miscalculations. In their FY 2007-08 budget, they claimed that the increased costs of retirement enhancement would be fully offset by salary concessions offered by miscellaneous employees. It was thought that a lower salary base would result in enough savings to offset the anticipated cost of the enhanced benefits. In addition, Sunnyvale created reserve accounts that were thought to be sufficient to cover CalPERS rate uncertainties in the future (City of Sunnyvale, 2007).

LITERATURE REVIEW

As governments have trimmed their budgets to adjust to decreasing revenues and increased expenditures, pension plans have become a hot-button topic. Certain interest groups have demanded public pension reform, in large part because they believe that public servants are relatively overpaid and enjoy retirement security that is no longer available for private sector workers. One of the most publicly debated studies on California’s public pension systems was

conducted by the Little Hoover Commission in February 2011. The study found California's pension plans to be "dangerously underfunded" as a result of "overly generous benefit promises" and urgently promoted "aggressive reforms" to avoid significant service reductions. The study showed that as of 2010, none of California's ten largest defined benefit systems were more than 74 percent funded and that CalPERS was only 61 percent funded. The four primary recommendations were:

- 1) State and local governments must pursue aggressive strategies to reduce growing pension liabilities.
- 2) California should move to a hybrid retirement model.
- 3) Immediate action must be taken to realign pension benefits and expectations.
- 4) Transparency and accountability must be improved (Little Hoover Commission, 2011).

Among the many assertions and findings in the study, there was one that was particularly sobering. Due to the legal protections that treat pension systems as public debt, it is nearly impossible for state and local governments to significantly alter their current obligations. This means that pension funds will not become bankrupt because pension systems can force employers to contribute any amount necessary to cover their expenses, and these additional contributions will come at the expense of other government services (Little Hoover Commission, 2011). Although the Little Hoover Commission aggregated CalPERS data and did not provide projections regarding potential savings associated with alternative pension plans, it did provide a comprehensive overview of the current state of California pension plans and helped frame the impending pension reform debate.

A 2010 article in *Public Administration Review* analyzed state pension systems throughout the United States and found that in 2007, before the economic downturn, the total amount of unfunded pension liabilities was over \$360 billion. Yet, despite these staggering numbers, state governments are hesitant to reduce benefits because they face an impending human capital crisis in which the baby boomer generation is preparing to retire and take with it their vital skills and institutional knowledge. At the same time, states face increasing competition with the private sector for qualified employees and the authors argue that benefits are extremely valuable for prospective employees (Coggburn & Kearney, 2010). Although this article focuses on state-level pension systems and the statistical determinants of unfunded liability, such as per capita income and public employee density, it does provide a good context for the debate surrounding the financial costs of employee benefits. Furthermore, the authors explore the potential consequences of ballooning unfunded liabilities which can include downgraded credit ratings, increased borrowing costs, and decreased service levels (Coggburn & Kearney, 2010).

An inherent assumption in the pension reform debate is that government employees are provided compensation that is out of line with the private sector (Santa Clara County Civil Grand Jury, 2010). However, a 2010 study by the Economic Policy Institute shows that public employees are not necessarily overcompensated when accounting for factors such as education, experience and workload. In fact, the study shows that public employees may be slightly undercompensated (Keefe, 2010).

One of the most difficult aspects of creating a meaningful comparison between the public sector and the private sector is that the nature of work is vastly different. For example, there are no true comparisons for core public sector functions such as public safety or education.

Furthermore, the mix of salary and benefits can be dramatically different. In order to create a more effective comparison, the Economic Policy Institute study compared full-time public and private sector employees and also controlled for hours worked per year, organizational size, and education level (Keefe, 2010).

In terms of organizational size, the study found that the mix of salary and benefits was very similar when comparing public sector employers to private sector employers that have more than 500 employees. The study also found that public sector employees are more highly educated, with more than 54 percent of the workforce having at least a four-year college degree. Only 35 percent of private sector employees have a four year degree. Salaries of college educated public-sector employees were found to be more than 25 percent less than similarly educated private sector workers, and the disparity is more than 30 percent for public sector employees with Masters or Doctorate degrees. However, public sector employees with less than a four-year degree were found to earn between five and ten percent more than similarly educated private sector employees (Keefe, 2010). While the Economic Policy Institute did not specifically address pension reform, their analysis of compensation levels helps define the debate regarding the appropriate level of compensation for public sector employees.

Joshua Franzel, the vice president of research for the Center for State and Local Government Excellence, addressed the issues that many public sector agencies face when trying to recruit and retain a qualified workforce. According to his research, growth in the public sector workforce has outpaced the private sector and the public sector jobs are projected to expand rapidly over the next decade. Much of the expansion will be a result of increased demand for education and healthcare professionals. His research also shows that public sector employers are currently

offering a competitive mix of compensation benefits for specialized occupations such as finance and information technology. Franzel's analysis of wages and benefits for finance and information technology employees showed that the public sector is in an advantageous position to compete for professional skills due to defined benefit plans and relative job security. However, his analysis also showed that the financial and technical demands on public sector employers will continue to increase as the public demands more efficiency and transparency in their operations (Franzel, 2009). As was the case with the Economic Policy Institute's study, Franzel does not specifically address pension reform; however, his analysis shows that potential reductions to public sector benefits may inhibit local governments from attracting and retaining qualified employees to deliver services to their residents.

In this era of increasing demands and limited resources, local governments must devise strategies to operate more efficiently. At the very least, the public sector should examine their personnel budgets to ensure they are operating at full capacity. A recent article in *Government Finance Review* offers guidance for increasing efficiency. In the article, John Fishbein and David Vebaun focus on developing more accurate expenditure forecasting models and achieving greater control over expenditures in order to effectively manage personnel budgets (Fishbein & Vebaun, 2009).

According to Fishbein and Vebaun, a key area of personnel budgeting is managing vacant positions. Since not all positions are continually filled, policies should be enacted that define how much money is designated toward anticipated vacancies. Accurate projections of anticipated start dates can help avoid large shortfalls or surpluses. Analyzing past trends to determine the organizational or departmental turnover rate is also helpful. Finally, tracking and quantifying

unfunded, frozen or eliminated positions are effective ways to ensure greater budget accuracy (Fishbein & Vehaun, 2009).

Another component of effective budget management is determining the organization's optimal staffing level. This can be achieved by comparing an organization to other similar organizations in the area. An important metric for comparison can be a population to employee ratio for jurisdictions of similar size or service levels. An alternative strategy could include classifying positions by goal whereby hiring decisions and staffing models are based on specific functions or initiatives (Fishbein & Vehaun, 2009).

When attempting to reduce the cost of service provision, the use of seasonal or temporary employees can be effective. These types of employees work less hours and are often provided limited benefits compared to full time employees. Utilizing volunteers in certain functions can also help reduce the costs associated with providing services (Fishbein & Vehaun, 2009).

In addition to analyzing staffing models, the article suggests examining compensation levels. The continual process of evaluating step and grade systems can include wage surveys to determine the level of compensation that is provided by similar organizations. The final strategy recommended by Fishbein and Vehaun is privatization and shared services. These alternate service delivery models can be an effective strategy for reducing the costs of service provision and increasing the efficiency of the organization (Fishbein & Vehaun, 2009).

Although improving personnel budgeting can be an effective strategy for improving efficiency and reducing employee compensation costs, it is clear that the current defined benefit pension plans offered by local governments are becoming increasingly burdensome. The recent macroeconomic events have spurred a debate on the wisdom of offering defined benefit plans to

public servants and many have suggested that public sector pension plans be changed to defined contribution plans that are common in the private sector.

This debate is not unique to the present time. In a 2005 study published in *Government Finance Review*, Kenneth Brainard and Sandra Fabry discussed the relative merits of each type of retirement plan. According to Brainard, 91 percent of federal employees believe that defined benefit pension plans were an important factor in their decision to work for the federal government and he claims that the costs associated with administering defined benefit plans are significantly less than defined contribution plans. In addition, defined benefit plans are a more effective means of providing financial security to retired employees because they earn higher investment returns and have fewer assets borrowed or cashed out before retirement. He also believes that the government has a dual role as an employer and a policy maker and therefore should strive to promote the retirement security of its employees (Brainard & Fabry, 2005).

Brainard also claims that although many private sector employers choose to offer defined contribution plans, larger private sector employers continue to offer defined benefit plans because the economy of scale leads to smaller administrative costs per employee. Since many government organizations would be comparable to large private sector employers, the costs per employee are minimized in the public sector. Furthermore, he says that the size and scope of large pension funds allows them to smooth out gains and losses over a larger time period which creates more consistency and reliability of expenses and benefits. Interestingly, Brainard claims that a portion of the public opposition to defined benefit plans is motivated by interest groups that would benefit from the transfer of nearly \$2 trillion in public retirement assets to the private sector. He also claims that the corporate governance leverage exerted by large pension funds

provides an incentive for large corporations to attempt to undermine the influence of public pension funds (Brainard & Fabry, 2005).

On the other hand, Sandra Fabry claims that state and local public pension plans are a “ticking time bomb that is set to explode” and that the problem becomes more serious as policymakers delay meaningful reforms (Brainard & Fabry, 2005, p.25). She claims that state and local governments are accumulating massive unfunded liabilities and that the resulting cost increases must be borne by taxpayers. Fabry also claims that a transition to defined contribution plans would not only eliminate unfunded liabilities and investment risks for public employers, but would also provide public sector employees with more flexibility and control over their retirement finances. Moreover, she claims that the current system disproportionately rewards long term employees at the expense of shorter term workers (Brainard & Fabry, 2005). Brainard and Fabry provide good arguments for both sides of the pension reform debate but do not analyze specific cities or states, nor do they provide any specific strategies for enacting reform.

In support of the California’s defined benefit plans, CalPERS provides a list of the benefits associated with defined benefits plan in its guidance for local officials. In terms of recruitment tools, CalPERS claims that defined benefit plans are a major consideration for prospective employees as more than 30 percent of employees at companies that offer such plans cite the pension benefits as an important factor in their employment decision compared to only 20 percent at companies that only offer defined contribution plans. Moreover, CalPERS claims that long-term employees are more likely to stay with their current organizations when defined benefit plans are offered, thereby increasing institutional knowledge and reducing training and recruitment costs. In terms of the broader economic impact, CalPERS claims that the fund’s

investments and benefits provide support to California by generating about \$35 billion in statewide economic activity. In addition to generating economic activity, benefits received by retired employees reduces the cost of social service programs and creates more job opportunities for younger workers, because older workers can afford to retire earlier (CalPERS, 2011b).

In a 2012 study in *The Political Quarterly*, John Hutton provides a comprehensive and balanced perspective on the status of public sector benefits in the United Kingdom. Although, there are differences between the CalPERS program and the benefits offered in other countries, many of the recommendations that Hutton offers may have relevance in California. Hutton argues that a fundamental measure of decency in developed nations is the quality of life that they provide for their older citizens, and he acknowledges that this is a shared responsibility between the individual and the state. However, he also argues that the dramatic increase in life expectancies has produced a situation that is unsustainable. Moreover, he notes that private sector defined benefit pension plans have rapidly diminished and, as a result, many citizens are left with inadequate retirement savings (Hutton, 2012).

Hutton's recommendations are based on the concept that pension reform should not focus solely on the mathematical costs, but should be based on social equity. He claims that reform strategies that only reduce benefits will create unforeseen problems for the state and that reform efforts should focus on keeping defined benefit pensions affordable and sustainable. Using these concepts, Hutton argues that defined benefit pensions should not be based on final year salary but should be based on career average earnings. He claims that this change would reduce much of the volatility associated with late-career promotions and would be more equitable for taxpayers and beneficiaries. He also argues that employees should bear more of the longevity

risk and that the retirement age should increase to keep pace with increasing life expectancies (Hutton, 2012).

A recent study published in *Government Finance Review* claims that the current economic situation has resulted in what many are calling the “New Normal”, meaning that we can no longer expect the economy to return to previous growth rates. Public pension benefits seem to be unsustainable and, in the new normal economic environment, government finance officers should no longer expect tax revenues or financial markets to have a significant resurgence. The slumping housing market makes it unlikely that property taxes will increase significantly in the next few years. Moreover, the levels of consumer spending that were spurred by easy credit are unlikely to return in the short term and will result in lower sales tax revenues for the foreseeable future. The study also provides an outline for government finance officers to follow when adjusting employee benefits to the new economic reality. The key steps for adjusting benefits include developing a clear understanding of revenue projections, conducting a sustainability assessment, and creating a strategic plan for benefit amendments (Miller & Link, 2009).

If the ‘new normal’ theory is true, even if local governments enact pension reform, there is a possibility that the fiscal savings will not be sufficient to realign expenditures and revenues on a long-term basis. If this is the case, policymakers and organizational leaders will be forced to explore alternative strategies to find a prudent level of service offerings. In an article published in *Public Administration Review*, Barry Bozeman explores the theory and practice of managing decline in public administration. He finds that research on organizational decline was prevalent in the recessions of the 1970s and 1980s, and research has continued in the private sector; however, recent public sector research is lacking. One reason for the lack of current public sector

research is that scholars seem to have concluded that the principles of managing decline in the public sector are not relevant to the private sector. In the private sector, organizational decline tends to be focused on managing and emerging from bankruptcy, dealing with debt-based funding and forced-growth strategies, and focusing on shareholder relations. Bozeman claims that although some of the mainstream research may have limited relevance, there are enough similarities that should inspire more public administration research on the topic. In particular, he cites the human costs of decline, organizational structure, and strategic objectives as three main topics that have direct relevance to public administration. As local agencies consider layoffs, Bozeman argues that paying attention to employee morale, ensuring efficient reorganizations, and planning for long-term revitalization are key concepts that are often overlooked (Bozeman, 2010).

Given that revenues have declined, personnel costs have increased, and there may be a shift toward a “new normal” economic environment, pension reform is a prudent solution to consider; however, a more fundamental shift in the nature of local government may be required to sustain the services provided to California communities. Even if local governments choose to reform pension plans for current and future employees, they still must deal with the financial liabilities associated with their current retirees. A 2008 article by Jeffery Chapman, written before the economic downturn, concluded that state and local governments were already on an unsustainable trajectory. He showed how structural pressures such as demographic changes, increased mobility among residents and businesses, and the movement from consumption of goods toward consumption of services have created an unsustainable environment for local governments. Chapman also examined the impending strain of pension costs for local governments and found that the cyclical nature of local revenues and investment returns forces

state and local governments to make large contributions to pension plans when local revenues are declining. He concluded that state and local governments must make long-term adjustments toward sustainability by increasing revenue, making adjustments to defined benefit plans and committing to long-term reserves and automatic expenditure triggers (Chapman, 2008).

Research on defined benefit plans in the public sector shows that the unfunded liabilities are contributing to an increasingly unsustainable fiscal situation. However, many believe that reducing benefits will compound the problem by limiting the ability of government agencies to compete for qualified labor. This may diminish the quality of services provided to the public unless pension reform is combined with other structural and operational changes. In order to implement prudent reforms, decision makers need more specific information regarding the potential outcomes of pension reform. Current research focuses mainly on aggregated unfunded liability statistics and fails to address specific agencies that will be affected by the proposed reforms. In addition, much of the research has been derived on data from 2008 and 2009. In many cases this is the most current data available; however, the tenuous economic recovery that began in 2010 may significantly affect the fiscal situation. Future research on this topic should focus on specific government agencies that have proposed or implemented pension reform and should demonstrate the fiscal and operational impacts of reducing public employee benefits. Furthermore, data on unfunded liabilities should be updated annually to document the effects of macroeconomic cycles on public pension funds.

PROBLEM STATEMENT

The recent economic downturn resulted in decreased revenues and increased defined benefit pension costs for local governments. The purpose of this study is to evaluate the fiscal

impact of pension reform on two mid-sized local governments in Santa Clara County: Palo Alto and Sunnyvale. This study quantifies the costs and benefits of pension reform alternatives for employers and employees, and provides a framework for decision makers to use when considering changes to local pension plans.

METHODOLOGY

This analysis focuses on the policies associated with offering pension benefits to local government employees and uses the eightfold path for policy analysis as defined by Eugene Bardach (Bardach, 2005). In defining the problem, this study analyzes the decisions made by public officials that have led to the pension crisis, and includes quantitative analyses of projected pension expenditures for two local governments in Santa Clara County. Evidence is taken from city budget documents, study-issue reports, CalPERS publications and other public financial reports. Alternatives include continuing with current benefits, increasing employee contribution rates for all employees, reducing pension benefits for all employees, reducing pension benefits for new employees only, and implementing a hybrid plan for new employees only. The criteria used for each alternative includes the fiscal impact on the employer and the fiscal impact on the employee.

In projecting the outcomes, this study uses a projection model that simulates costs and benefits for the average employee under each scenario. It evaluates the employer and employee cost share under various pension plans and analyzes the impact on each city for the next 5, 10 and 20-year periods. With these projections, this study quantifies the strategies available to public officials and provides an analysis of tradeoffs that helps decision makers determine which outcome is most effective.

Estimates of future costs are based on five scenarios: continuing the current pension plan for all employees, increasing the current employee contribution rate by 1 percent for all employees, changing the current pension formulas for all employees, changing the current pension formulas for new employees, and implementing a hybrid plan for new employees.

Unless there are changes to the California constitution, it will be illegal to change the current pension formula for all employees because the retirement plans are considered to be contractually binding for current employees (CalPERS, 2011e). This study will estimate the fiscal impact of this type of change for comparison purposes only.

When simulating a change in pension plans, this model uses 2.5 percent at 55 for miscellaneous employees and 3 percent at 55 for safety employees. This represents a modest change to the current plans in Sunnyvale and Palo Alto. When simulating a hybrid plan, this model uses the pension plan that provides the lowest defined benefit and assumes the city will provide a 3 percent salary match in a 401(k) style plan for new employees only. The model also assumes that the normal employer cost for current plans will remain constant at current levels and that employees pay their full contribution as determined by CalPERS. Although Palo Alto and Sunnyvale have different agreements with their employees with respect to the employee contribution percentage, this analysis assumes that any amount of the employee contribution percentage that is covered by the city is considered to be supplemental salary and is not counted as a part of the city's pension funding equation.

The analysis of different pension plans relies on the actuarial data provided by CalPERS as of June 30, 2009, and simulates the costs and benefits that result from different plan options. For each city's plan, the data is based on the average employee and projections are based on the

assumption that the average employee will retire at the retirement eligibility age for each plan. It focuses solely on the normal cost portion of the actuarial valuation which represents the costs for current employees. It does not address the unfunded liability of each city because these costs are not affected by changes to plans for new employees. Although pension funding formulas are derived from projected benefits, market gains or losses, and demographic changes, this analysis assumes that these factors will remain the same under each scenario. For the purpose of this study, the life expectancy is 82 years old and annual turnover rate is assumed to be 10 percent. The turnover rate is based on the updated actuarial values for miscellaneous plans and is comprised of a 3 percent separation rate and a 7 percent retirement rate. The total number of employees is assumed to remain constant at FY 2008-09 levels, salary increases are assumed to be 3.25 percent per year, and the cost of living adjustment for retirees is assumed to be 2 percent

CalPERS currently offers five different plans for miscellaneous employees and five different benefit plans for public safety employees. Table 3 summarizes the current CalPERS plans:

Table 3: CalPERS Defined Benefit Plans

Miscellaneous	2% at 60	2% at 55	2.5% at 55	2.7% at 55	3% at 60
Safety	50% at 55	2% at 55	2% at 50	3% at 55	3% at 50

Source: CalPERS. (2010a).

For the purpose of this study, the 3 percent at 60 plan for miscellaneous employees is not considered because it would be an increase to current plan offerings. Additionally, the 50 percent at 55 plan for safety employees is not considered because it is administered under different guidelines than standard plans.

In 2010, the City of Palo Alto and the City of Sunnyvale both offered the same retirement plans for their respective employees: 2.7 percent at 55 for miscellaneous employees and 3.0 percent at 50 for public safety employees. The key figures for each city’s pension plan are summarized in Table 4.

Table 4: Summary of Valuation Data for Palo Alto and Sunnyvale Pension Plans

	Palo Alto Public Safety	Sunnyvale Public Safety	Palo Alto Miscellaneous	Sunnyvale Miscellaneous
Active Members	192	218	820	712
Average Entry Age	28.62	28.01	34.63	35.46
Average Salary	\$115,036	\$144,121	\$80,003	\$80,153
FY 07-08 Normal Cost	16.768%	15.511%	10.858%	7.503%
FY 08-09 Normal Cost	16.788%	15.579%	10.574%	9.733%
FY 09-10 Normal Cost	16.812%	15.763%	10.142%	9.730%
FY 07-08 Unfunded Rate	6.843%	10.707%	6.579%	3.397%
FY 08-09 Unfunded Rate	7.724%	11.458%	6.431%	6.286%
FY 09-10 Unfunded Rate	7.126%	11.188%	6.921%	5.524%

Source: CalPERS. (2010a); CalPERS. (2010b); CalPERS. (2010c), CalPERS. (2010d).

Table 5 and Table 6 show the approximate difference in employer contribution percentages that would result from altering retirement benefit plans for miscellaneous and safety employees:

Table 5: Approximate Changes to Employer Contribution Percentage for Miscellaneous Employees

Benefit Plan	2.0% at 60	2.0% at 55	2.5% at 55	2.7% at 55
% (+/-)	-7.95%	-4.80%	-1.65%	0%

Source: Uppendahl projection model

Table 6: Approximate Changes to Employer Contribution Percentage for Safety Employees

Benefit Plan	2.0% at 55	2.0% at 50	3.0% at 55	3.0% at 50
% (+/-)	-9.30%	-8.45%	-4.30%	0%

Source: Uppendahl projection model

FINDINGS:

Palo Alto is a city of approximately 65,400 residents and, according to the CalPERS Actuarial Valuation as of June 30, 2009, had 192 active safety members and 820 active miscellaneous employees. The average safety employee started at the age of 28 and currently earns \$115,000 per year. The average miscellaneous employee started at the age of 35 and currently earns \$80,000 per year. Table 7 demonstrates the total cost of each pension plan option for Palo Alto.

Table 7: Projected Normal Costs for Palo Alto Pension Plans

	1 Year	5 Years	10 Years	20 Years	% Change
Current Plan	\$11,247,986	\$59,999,700	\$130,372,993	\$309,846,402	0%
Contribution +1%	\$10,314,864	\$55,020,811	\$119,551,817	\$284,125,613	(8.30)%
Reduce for all	\$9,340,330	\$49,794,541	\$108,189,047	\$257,112,890	(17.02)%
Reduce for new	\$11,247,986	\$58,131,957	\$122,373,573	\$278,269,643	(10.19)%
Hybrid for new	\$11,247,986	\$56,578,695	\$115,723,040	\$252,019,236	(18.66)%

Source: Uppendahl projection model

As can be seen in Table 7, changing the pension plans for all employees results in the greatest immediate savings as expense reductions in the first year amount to \$1.9 million. The hybrid model results in the most savings over a 20-year period, with expense reductions totaling nearly \$58 million. It is important to note that the savings for changing pension plans for new employees are not fully realized until after the fifth year, as it takes time for new employees to replace existing employees. Increasing the employee contribution rate is the most effective method to reduce costs in the short term with annual savings of approximately \$1 million, however; it is not as effective in the long term.

Sunnyvale is more than twice the size of Palo Alto with 140,000 residents and according to the CalPERS Actuarial Valuation as of June 30, 2009, had 218 active safety members and 712 active miscellaneous employees. The average safety employee started at the age of 28 and currently earns \$144,000 per year. The average miscellaneous employee started at the age of 35

and currently earns \$80,000 per year. Table 8 demonstrates the total cost of each pension plan option for Sunnyvale.

Table 8: Projected Normal Costs for Sunnyvale Pension Plans

	1 Year	5 Years	10 Years	20 Years	% Change
Current Plan	\$10,903,033	\$61,435,906	\$134,098,486	\$319,410,278	0%
Contribution +1%	\$9,979,671	\$56,509,092	\$123,390,492	\$293,958,508	(7.97)%
Reduce for all	\$8,877,529	\$49,900,831	\$108,869,492	\$259,257,603	(18.83)%
Reduce for new	\$10,903,033	\$59,298,386	\$124,951,350	\$283,309,979	(11.30)%
Hybrid for new	\$10,903,033	\$57,829,619	\$118,689,903	\$258,619,862	(19.03)%

Source: Uppendahl projection model

The results for Sunnyvale are very similar to the results for Palo Alto. Changing the pension plan for all employees results in the greatest immediate savings with a first year cost reduction of \$2 million. Changing to a hybrid plan is the most effective cost reduction strategy over the 20 year period, with a total savings of nearly \$61 million. As with Palo Alto, increasing employee contributions results in significant immediate savings but is not as effective in the long term.

Hybrid plans are the most effective cost reduction strategies for employers because their annual expenses are limited to a fixed percentage of payroll for the defined contribution portion. By limiting the employer expense to the lowest benefit plan plus a 3 percent salary match, employer contributions are much less than the current plan.

Reducing the pension plan for all employees appears to be a very effective strategy for reducing costs in the short and long term; however, as previously noted, the current regulations of CalPERS pension plans do not permit reductions to current employee benefit plans. Furthermore, even if laws were changed and bargaining units agreed to switch to a defined contribution plan, it is nearly impossible for cities to implement because GASB rules would require a change to the amortization schedule. Since there would be no new entrants to the defined benefit plan, the current rolling amortization, which accounts for new entrants, would be fixed to 30 years. This change to the amortization base can result in a short-term cost increase of 30 to 40 percent (CalPERS, 2011e). Even if these cities desired to offer defined contribution plans for new employees only, CalPERS regulations would be prohibitive. In order to offer CalPERS pension plans, all eligible employee groups are required to participate and contribute to the retirement pool (CalPERS, 2011c).

The fact that pension plan options for municipalities are significantly restricted by California's Public Employment Retirement Law (PERL) is not lost upon local administrators. A recent report to the League of California Cities addressed the key issues surrounding pension reform. While it acknowledges that there are certain strategies that can be undertaken by local governments and bargaining units, a key theme of the report is the need for changes to the state constitution. Among the League of California Cities' recommendations are a repeal of SB400/AB616 that would reduce the maximum benefit formula to 2 percent at 60 for miscellaneous employees and 2 percent at 55 for safety employees, a prohibition of retroactive pension increases, an increase to the vesting period, an updated benefit structure with more choices for local agencies, and an option for employers to offer a hybrid plan that caps the defined benefit to 65 percent of eligible pay and supplements the remainder with a defined

contribution plan. The most significant recommendation is for a State Constitutional Amendment that would allow for changes to pension benefit formulas for current employees (Cities Association of Santa Clara County, 2011).

Analyzing the fiscal impacts of modifying public pension plans shows that the cost of providing retirement benefits for Palo Alto and Sunnyvale employees can be reduced. Further, it shows that the potential savings associated with reduced benefits is more than \$50 million for each city over the next twenty years. However, in each scenario, the savings to the cities comes at a cost to employees. Table 9 demonstrates the costs and benefits to employees under the three scenarios.

Table 9: Employee Costs and Benefits of Selected Pension Plans

	Safety 3% @50	Safety 3% @55	Safety Hybrid	Misc. 2.7% @55	Misc. 2.5% @55	Misc. Hybrid
Employee Contribution	\$261,393	\$348,431	\$444,168	\$132,851	\$132,851	\$295,788
Employee Benefit	\$5,226,555	\$6,015,044	\$4,494,320	\$2,080,440	\$1,926,333	\$2,209,090
Cost: Benefit Ratio	19.99	17.26	10.12	15.66	14.50	7.47
Benefit per year of service	\$237,571	\$222,779	\$166,456	\$104,022	\$96,317	\$88,364

Source: Uppendahl projection model

Table 9 shows that the employee benefits for alternative pension plans are significantly less than the current plans. For miscellaneous employees, a change from 2.7 percent to 2.5 percent results in a lifetime loss of more than \$150,000 per employee. For safety employees, the lifetime benefit increases when plans are changed from 3 percent at 50 to 3 percent at 55, but it comes at the cost of 5 more years of work. When viewed as a total benefit per years worked, the

reduced plan for safety members results in a reduction of nearly \$15,000. Hybrid plans result in even lower benefits for employees, especially when compared to years of service. For safety employees, the benefit per year of service drops by over \$70,000. For miscellaneous employees, the benefit reduction is more than \$15,000 per year of service.

An essential aspect of switching to a hybrid model is the transfer of risk from the municipality to the employee. Each of the calculations above are based on an assumption of 7.75 percent annual return on investment. As was the case during the recent economic downturn, when investment returns fall below 7.75 percent, future costs can dramatically increase. When municipalities offer defined benefit plans, they bear all of the risk and must increase annual contributions to cover any losses. If municipalities choose to offer hybrid plans, a portion of the investment risk would be borne by the new employees. Under this scenario, employers would not see their contribution rates increase for the defined contribution portion, however, the guaranteed benefit provided to employees would decrease, thereby reducing the retirement security of municipal employees. Of course, the opposite is also true. If investment returns were to outperform the current assumptions, employees would reap the rewards as their retirement portfolios would increase and it is possible that they could achieve greater retirement security with a hybrid plan.

In addition to projecting the fiscal impact of pension reform, one of the key findings of this analysis is the relative cost of public services. In particular, the cost differential between safety and miscellaneous employees is striking. In addition to salary differences, where the average public safety employee salary is \$130,000 and the average miscellaneous employee salary is \$80,000, the normal cost for public safety pension benefits is significantly higher than

all other employees. Using data as of June 30, 2009, Palo Alto and Sunnyvale spend \$21,612 and \$23,917, respectively, per year on the normal cost for each public safety employee. The annual normal cost for miscellaneous employees is much less, with Palo Alto and Sunnyvale spending \$8,657 and \$7,990 per employee, respectively. The differences are similar on the benefit side of the equation. The average benefit for a public safety employee is currently over \$5 million, while the average benefit for a miscellaneous employee is \$2 million, or less than half of what public safety officers receive. While it is clear that a fundamental function of local government is the provision of law and order, it is also clear that the costs associated with providing this function are currently much greater than all other local priorities.

ANALYSIS AND CONCLUSIONS

A crucial factor in the current fiscal crisis is the importance of prudent revenue forecasting. In 2007, when Sunnyvale and Palo Alto provided enhanced benefits, the revenue forecasts showed that the benefits were affordable. However, as has been shown, many of those forecasts turned out to be flawed. Not only has the experience of the last decade shown that local revenues were not perpetually increasing, but the costs were also greater than anticipated. Part of the problem in the pension funding equation is the fact that revenues and expenses are intertwined. By relying on the assumption that the economy will experience perpetual growth, municipalities over-leveraged their budgetary assumptions. When the economy failed to grow, local revenues declined. At the same time, the economic stagnation also affected stock market values, which, in turn, caused the costs of providing defined benefits to increase. By linking both revenue and expense forecasts to the assumption that the economy would experience perpetual growth, the cities became extremely vulnerable to external economic changes.

It should be noted that both cities were somewhat aware of the economic impacts of the external economic environment before deciding to offer enhanced benefits. In Palo Alto's 2007 financial forecast they said "the Forecast assumes continued slow but steady economic growth over the next few years, followed by a recession beginning in 2010-11" (City of Palo Alto, 2007, p 7). Sunnyvale's FY 2007-08 budget also included caution as they said "National economic factors are expected to moderate the City's economic growth rate" and "recent changes in the mortgage market may affect consumers' willingness to purchase 'big ticket' items" (City of Sunnyvale, 2007, p. 23) Yet, despite these words of caution, Palo Alto assumed a steady 3 percent revenue growth for the next ten years, and Sunnyvale projected a 2.5 to 3.5 percent growth in sales tax revenues through FY 2010-11, followed by 4 percent thereafter (City of Palo Alto, 2007; City of Sunnyvale, 2007).

Recently, both cities took steps toward modifying their pension benefits and reducing personnel expenses. Since 2008, the City of Palo Alto has eliminated the equivalent of 77 full time general fund positions, which represents about 10 percent of their general fund workforce. In addition, after a period of labor negotiations, Palo Alto imposed a change in retirement benefits for miscellaneous employees from the current 2.7 percent at 55 formula to the 2.0 percent at 60 retirement formula for new hires. Palo Alto is also currently in negotiations with safety employees (City of Palo Alto, 2011a) The City of Sunnyvale has eliminated or frozen 54 positions since 2009 and is currently operating at its lowest level staffing level since 1995. Additionally, Sunnyvale's public safety retirement plan has been changed to a 3 percent at 55 formula and negotiations are currently underway with miscellaneous employees. In the city's long term forecast, they have assumed that the retirement plan will be changed for all miscellaneous employees beginning in 2012 (City of Sunnyvale, 2011).

In preparing for changes to employee benefits, both cities have provided good examples of how to involve their employees and the public in the decision making process. During labor negotiations with their miscellaneous employees, Palo Alto developed a website dedicated to tracking and explaining the process. The website included links to public documents, summaries of financial data, meeting minutes and clear explanations of the fiscal conditions. In addition to the website, Palo Alto produces a ten-year financial forecasting document prior to each year's budget process. This document is made available to the public and is a tool used by city leaders to inform their decisions (City of Palo Alto Labor Negotiations Website, 2011).

Although Sunnyvale has not created a website, their unique 20 year budgeting philosophy has enabled the city to avoid drastic changes in the short term while prudently planning for future changes. Over the past three years, the City Manager's budget message has included a discussion of the rising personnel costs and the impact that these costs have upon the city's finances. More importantly, Sunnyvale's adherence to maintaining a balanced budget over 20 years has provided the city with sufficient reserves to permit a careful evaluation of the recent financial downturn. An April 2010 article in *Government Finance Review* outlines Sunnyvale's budget strategy and shows how their long-term planning strategy has provided the city with sufficient reserves to maintain a consistent level of services throughout the various economic cycles that have affected the Silicon Valley (Bradley & Corbett, 2010).

However, despite the strategies used by Sunnyvale and Palo Alto, both cities were unprepared for the recent revenue declines and personnel cost increases. As a result, both cities have been forced to reduce services to their residents and, perhaps more importantly, have delayed major infrastructure improvements. The City of Sunnyvale has reduced funding for

improvements to street repairs and park facilities, while the City of Palo Alto has identified an infrastructure investment backlog of nearly \$500 million over the next twenty years (City of Palo Alto, 2011a; City of Sunnyvale, 2011).

In 2011 the United States economy appears to be stabilizing and, while stock market values have not recovered to pre-recession levels, they have significantly increased from the lows seen in 2009. CalPERS reported a 21.7 percent gain for FY 2010-11 and many of the doomsday predictions about pension costs have been temporarily abated (CalPERS, 2012). However, it is likely that municipalities will continue to face a new fiscal reality for the foreseeable future as revenues will take years to recover to the projections made in 2007 and expenditures are likely to remain unsustainably high for years to come. Municipal leaders will be forced to decide whether they believe that the economy will recover and return to the perpetual growth assumptions that were used to endorse current benefit levels. In addition, leaders will have to decide whether current service levels are fiscally sustainable. If leaders do not believe that the economy will rebound to previous levels, then pension reform is clearly a prudent and necessary strategy. However, pension expenses are only a portion of the fiscal and budgetary issues facing local governments. Modifying pension plans, whether it is by increasing employee contributions or by implementing a hybrid plan, will only save Sunnyvale and Palo Alto about \$5 million each over the next five years. While this is a significant dollar amount, it is unlikely to be enough to offset the miscalculated revenue projections used in 2007. Furthermore, the infrastructure needs of each city are significant and any change to pension plans will not be the all-encompassing strategy that solves the fiscal crisis.

Unless the economy rapidly recovers and begins a new era of expansion, local leaders should assume that they are operating in a “new normal” fiscal environment as described by Miller and Link (2009). Under this scenario, local governments should continue to use hiring freezes, furloughs and potentially more layoffs to reset their expenditure levels. It is also imperative to implement many of the strategies outlined by Fishbein and Vebaun (2009), such as managing vacancies, determining optimal staffing levels, utilizing shared service agreements and considering privatization policies for functions that can be delivered by the private sector. At the same time, more consideration should be given to the practice of managing decline and creating a more capable and adaptable workforce to provide services with reduced staffing.

A recent policy position paper by the Santa Clara County City Managers Association also provides a comprehensive list of effective strategies for containing compensation costs. Among these strategies are limiting labor agreements to allow for timely adjustments to economic conditions, avoiding compensation formulas that are tied to other agencies, creating regional consistency in compensation packages, and requiring employees to pay their full share of pension funding obligations (Santa Clara County/City Management Association, 2011).

Yet, at the same time, it is important to realize that public administrators provide value to communities and that the public sector must remain competitive in the local labor market. Research by the Economic Policy Institute showed that public sector employees tend to be more highly educated than their private sector counterparts; yet even current public sector compensation levels are lower than the private sector when adjusted for organizational size and education levels (Keefe, 2010). Despite the recent headlines documenting lavish pension benefits for a select few, according to CalPERS the average public pension benefit for miscellaneous

employees is only \$28,356 annually, and these employees have worked an average of 20 years (CalPERS, 2011b). In addition, demands on the public sector will continue to increase and the impending retirement of the Baby Boomer generation threatens to diminish much of the institutional knowledge within the public administration sphere (Chapman, 2008). If this problem is compounded by over-correcting current compensation levels, municipalities may soon lack qualified employees and may be unable to provide vital public services.

At the heart of this issue is the value of professional public servants that have the institutional knowledge that is essential to sustained effective government. In the current fiscal environment it is convenient to look at municipal budgets and see that personnel costs are rapidly increasing and that pension benefits are a primary driver of the expenses. However, it is also convenient to forget how local governments ended up in this situation. During the dot-com boom, many local governments had difficulty recruiting and retaining capable professional administrators because the labor market was extremely competitive and public sector compensation was perceived to be insufficient. In order to attract and retain qualified personnel, especially in the Bay Area, municipalities increased compensation packages (Santa Clara County Civil Grand Jury, 2010). As more municipalities choose to reduce pension benefits, the public sector will become a less desirable profession for potential employees, and the quality of public service may diminish. Furthermore, in an era of 'new normal' fiscal conditions, residents and elected officials must decide whether they expect the government to have two roles as both an employer and a policy maker, and to operate under higher standards than their private sector counterparts. If higher standards are expected from local governments, then communities should expect to pay a higher price for qualified employees.

Nonetheless, it is clear that without significant increases to local revenue in the Silicon Valley, municipalities like Palo Alto and Sunnyvale should reduce pension plans for new employees and should require larger contributions from current employees. Palo Alto has already taken these steps with its miscellaneous employees, and they should continue this policy for safety employees as well. Since they chose to reduce their miscellaneous plan to 2 percent at 60, they should make similar reductions to their public safety plan by imposing a 2 percent at 55 plan. Sunnyvale has reduced its public safety plan to 3 percent at 55, and should make equitable reductions to its miscellaneous plan by insisting upon a 2.5 percent at 55 plan. Employee contributions should be increased in both cities, and policy makers should enact policies that incrementally increase employee contributions over the next few years until employees pay their full share. If economic conditions improve, policy makers could choose to reward long-term employees by incrementally covering portions of their employee share instead of granting salary increases.

More importantly, policies should be enacted to revise revenue projection methodologies. The recent recessions caused by the dot-com bust and the housing crisis show that sales tax revenues are extremely volatile. Therefore, cities in the Silicon Valley should never assume that sales tax revenues will perpetually increase. Revenue projections should never exceed the average of a complete business cycle and should always assume near-zero growth rates in the short-term. Furthermore, policies should be enacted to deposit any short-term revenue windfalls into long-term reserves for personnel expenses and infrastructure funding. Such a policy could mandate that any sales tax windfalls be placed in an emergency reserve for at least five years. During the five year period, these windfalls should be used to mitigate future sales tax shortfalls. If revenues are steadily increasing after five years, the windfall reserves should be used solely for

one-time infrastructure investments or payments toward unfunded pension liabilities. If these types of policies were in place in 2007, it is highly unlikely that policy makers would have been able to grant enhanced benefits and the current fiscal crisis would be substantially less daunting.

Finally, municipal leaders should continue working toward regional and state-level reforms that will create a more equitable and stable compensation structure. Efforts by the Civil Grand Jury, the Santa Clara County City Managers Association, and the League of California Cities have been instrumental in bringing clarity to the current fiscal crisis and these efforts should continue. Regional consistency is also critical because fiscal issues and labor markets vary widely across the state and therefore any state-level solution will likely be insufficient for certain regions. Additional research is needed to analyze the long-term impacts of recent reform efforts, and should focus on the actual savings achieved by municipalities after implementing reforms, as well as the impacts on employee morale and workforce turnover rates.

As the economy begins to recover from the “Great Recession” municipalities are confronted with the daunting reality that administering an effective government will be fiscally challenging for the foreseeable future. Even if the stock market produces consistent returns at or above the current assumptions, it is likely that pension plans will remain woefully underfunded. This study shows that pension reform is necessary, although the reforms will take years to result in significant cost reductions for local governments. Therefore, pension reform is just one of the fiscal strategies that will be required for municipalities to become sustainable. This study also showed that pension reform will significantly reduce the financial benefits associated with public service and may constrain the ability of local governments to remain competitive in local labor markets. Policy makers will face difficult decisions regarding employee compensation and public

administrators will need to adapt to this new fiscal reality in order to meet escalating demands with less resources at their disposal.

Sources Consulted

- Bardach, E. (2005). *A practical guide for policy analysis: The eightfold path to more effective problem solving*. Washington, DC: CQ Press.
- Bozeman, B. (2010). Hard lessons from hard times: Reconsidering and reorienting the “Managing Decline” literature. *Public Administration Review*, 70, 557-563.
- Bradley, M., & Corbett, D. (2010). Sunnyvale’s tool for surviving fiscal challenges. *Government Finance Review*, (26), 28-32.
- Brainard, K., & Fabry, S. (2005). Revisiting the DB-DC question. *Government Finance Review*, (21), 24-29.
- Bureau of Labor Statistics. (2011). *Consumer price index: all urban consumers* [Data file]. Retrieved September 22, 2011, from <http://www.bls.gov/cpi/>
- California Board of Equalization. (2012). *California city and county sales and use tax rate* (Publication No. 71). Retrieved March 15, 2012, from <http://www.boe.ca.gov/pdf/pub71.pdf>
- CalPERS. (2009, August 25). *Impact of economic environment on employer rates and new board approved smoothing modifications*. Retrieved November 17, 2011, from <http://www.calpers.ca.gov/eip-docs/employer/cir-ltrs/2009/200-056-09.pdf>
- CalPERS. (2010a). Actuarial valuation as of June 30, 2009 for the miscellaneous plan of the City of Palo Alto (employer #14): Required contribution for fiscal year July 1, 2011 – June 30, 2012. Retrieved December 19, 2010, from the city of Palo Alto website: <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=25667>

- CalPERS. (2010b). Actuarial valuation as of June 30, 2009 for the miscellaneous plan of the City of Sunnyvale (employer #312): Required contribution for fiscal year July 1, 2011 – June 30, 2012. Sacramento, CA: California Public Employees' Retirement System.
- CalPERS. (2010c). Actuarial valuation as of June 30, 2009 for the safety plan of the City of Palo Alto (employer #14): Required contribution for fiscal year July 1, 2011 – June 30, 2012. Retrieved December 19, 2010, from the city of Palo Alto website:
<http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=25667>
- CalPERS. (2010d). Actuarial valuation as of June 30, 2009 for the safety plan of the City of Sunnyvale (employer #312): Required contribution for fiscal year July 1, 2011 – June 30, 2012. Sacramento, CA: California Public Employees' Retirement System
- CalPERS. (2011a). *Facts at a glance: Investments*. Retrieved July 25, 2011, from <http://www.calpers.ca.gov/eip-docs/about/facts/investments.pdf>
- CalPERS. (2011b). *Local elected official toolkit: Pension funding and retiree health benefits funding*. Retrieved July 25, 2011, from <http://www.calpers.ca.gov/eip-docs/about/pubs/employer/er-pubs/misc-pubs/local-toolkit.pdf>
- CalPERS. (2011c). *Optional benefits listing*. Retrieved December 12, 2011, from <http://www.calpers.ca.gov/eip-docs/employer/program-services/retirement/contract-info/optional-benefits/optional-benefits-listing-2011.pdf>
- CalPERS. (2011d). *Public agency employer contribution rate search*. Retrieved June 3, 2011, from <http://www.calpers.ca.gov/index.jsp??bc=/employer/actuarial-gasb/contrib-rates/rates/home.xml>

CalPERS. (2011e). *The impact of closing the defined benefit plan at CalPERS*.

Retrieved December 12, 2011, from <http://www.calpers.ca.gov/eip-docs/about/press/pr-2012/feb/closing-impact.pdf>

CalPERS. (2012). *Facts at a glance: Investments*. Retrieved March 13, 2012, from

<http://www.calpers.ca.gov/eip-docs/about/facts/investments.pdf>

CalPERS Actuarial Office. (2010). *CalPERS experience study 1997 to 2007*. Retrieved July 25,

2011, from <http://www.calpers.ca.gov/eip-docs/about/board-cal-agenda/agendas/bpac/201004/item03b-01.pdf>

Chapman, J. (2008). State and local fiscal sustainability: The challenges [December special issue]. *Public Administration Review*, 115-131.

City of Palo Alto. (2007). City of Palo Alto 2007-17 long range financial forecast. Retrieved

December 19, 2010, from <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6931>

City of Palo Alto. (2008). 2008-18 Long range financial forecast. Retrieved

December 19, 2010, from <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=10142>

City of Palo Alto. (2009). City of Palo Alto 2009-19 long range financial forecast. Retrieved

December 19, 2010, from <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=14461>

City of Palo Alto. (2010). City of Palo Alto long range financial forecast: Fiscal years 2010 to

2020. Retrieved December 19, 2010, from <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=19036>

City of Palo Alto. (2011a). Fiscal Year 2012: Adopted operating budget. Retrieved September 24, 2011, from <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=28179>

City of Palo Alto. (2011b). Long range financial forecast: Fiscal years 2011 to 2021. Retrieved September 24, 2011, from <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=26167>

City of Palo Alto Labor Negotiations Website. (2011). Retrieved December 20, 2011 from http://www.cityofpaloalto.org/knowzone/labor_negotiations/

City of Sunnyvale. (2007). Adopted budget and resource allocation plan: Fiscal year 2007/08 twenty-year financial plan. Retrieved December 29, 2010, from <http://sunnyvale.ca.gov/Portals/0/sunnyvale/FIN/07-08a%20Volume%20I.pdf>

City of Sunnyvale. (2008). Adopted 2008/2009 budget and twenty-year resource allocation plan. Retrieved December 29, 2010 from <http://sunnyvale.ca.gov/Portals/0/sunnyvale/FIN/08-09a%20Volume%20I.pdf>

City of Sunnyvale. (2009). Adopted budget and resource allocation plan: Fiscal year 2009/2010 twenty-year financial plan Retrieved December 29, 2010 from <http://sunnyvale.ca.gov/Portals/0/sunnyvale/FIN/09-10a%20Volume%20I.pdf>

City of Sunnyvale. (2010). Adopted budget and resource allocation plan: Fiscal year 2010/2011 twenty-year financial plan. Retrieved December 29, 2010 from http://sunnyvale.ca.gov/Portals/0/sunnyvale/fin/fy%2010-11%20Adopted%20Budget%20Volume%20I_Part%20I.pdf

- City of Sunnyvale. (2011). Adopted 2011/2012 budget and twenty-year resource allocation plan. Retrieved December 3, 2011 from http://sunnyvale.ca.gov/Portals/0/sunnyvale/fin/FY%2011-12a%20Vol%20I%20Part%20I_TL.pdf
- Cities Association of Santa Clara County. (2011). Proceedings from May 2011 Legislative Action Committee Meeting: *Pension reform action plan*. Retrieved May 28, 2011, from [http://www.sccca.gov/files/DRAFT%20PENSION%20REFORM%20ACTION%20PLAN%20\(NK\).pdf](http://www.sccca.gov/files/DRAFT%20PENSION%20REFORM%20ACTION%20PLAN%20(NK).pdf)
- Cogburn, J., & Kearney, R. (2010). Trouble keeping promises? An analysis of underfunding in state retiree benefits. *Public Administration Review*, 70(1), 97-108.
- Coleman, M. (2005). *A primer on California city finance*. Retrieved February 3, 2011, from the League of California Cities website: http://www.cacities.org/resource_files/23442.FinancePrimer05.pdf
- Hill, E. (2007). *California's tax system: A primer*. Retrieved January 27, 2011, from the California Legislative Analyst Office website: Retrieved from http://www.lao.ca.gov/2007/tax_primer_040907.pdf
- Hoene, C., & Pagano, M. (2010). *City fiscal conditions in 2010*. Retrieved August 7, 2011, from the National League of Cities website: <http://nlc.prod.bridgelinesw.net/news/news-center/press-room/research-and-publications>
- Hoene, C., & Pagano, M. (2011). *City fiscal conditions in 2011*. Retrieved March 7, 2012, from the National League of Cities website: <http://nlc.prod.bridgelinesw.net/news/news-center/press-room/research-and-publications>
- Hutton, J. (2012). The future of public sector pensions. *The Political Quarterly*, 83, 311-316.

- Fishbein, J., & Vebaun, D. (2009). Managing the personnel budgeting process. *Government Finance Review, 25*, 67-73.
- Franzel, J. (2009). Future compensation of the state and local workforce. *The Public Manager, 38* (2), 58-64.
- Keefe, J. (2010). *Debunking the myth of the overcompensated public employee*. Retrieved February 27, 2011 from the Economic Policy Institute website: http://www.epi.org/publication/debunking_the_myth_of_the_overcompensated_public_employee/
- League of California Cities. (2011). *Pension Reform Action Plan*. Retrieved November 19, 2011, from http://www.cacities.org/resource_files/29939July%202011%20Pension%20Reform%20Action%20Plan.pdf
- Little Hoover Commission. (2011). *Public pensions for retirement security*. Retrieved February 27, 2011, from <http://www.lhc.ca.gov/studies/204/report204.html>
- Miller, G., & Link, J. (2009). "New Normal" retirement plan designs: Re-engineering and installing sustainable pension and OPEB plans. *Government Finance Review, 25*, 16-24.
- Neiman, M., & Krimm, D. (2009). *Perceptions of local fiscal stress during a state budget crisis*. Retrieved September 24, 2011, from the Public Policy Institute of California website: <http://www.ppic.org/main/publication.asp?i=889>
- San Mateo County City Managers Association. (2009). *Policy statement on local government retirement benefits*. Retrieved September 13, 2011, from http://www.cacities.org/resource_files/29640.CMPolicyStatementonRetirementBenefits7.2009.pdf

- San Mateo County Civil Grand Jury. (2009). *Summary of reversing the upward trajectory of employee costs in the cities of San Mateo County*. Retrieved October 15, 2011, from http://www.sanmateocourt.org/court_divisions/grand_jury
- Santa Clara County/City Management Association. (2011). *Santa Clara County city manager's association compensation policy position paper*. Retrieved January 18, 2012, from [http://www.citiesassociation.org/files/12\)SCCCMA%20Comp%20Position%20Paper.pdf](http://www.citiesassociation.org/files/12)SCCCMA%20Comp%20Position%20Paper.pdf)
- Santa Clara County Civil Grand Jury. (2010). *Cities must rein in unsustainable employee costs*. Retrieved October 15, 2011, from http://www.sccscourt.org/court_divisions/civil/cgj/grand_jury
- United States Census Bureau. (2010a). *Finances of selected state and local government employee retirement systems* [Data file]. Retrieved August 14, 2011, from <http://www.census.gov/govs./qpr>
- United States Census Bureau. (2010b). *State and local public employee retirement systems assets drop nearly \$ 180 billion in 2008 census bureau reports* [Press release]. Retrieved May 28, 2011, from <http://www.census.gov/govs/retire>
- United States Census Bureau. (2011). *Quarterly summary of state and local taxes* [Data file]. Retrieved July 27, 2011, from <http://www.census.gov/govs/qtax>