

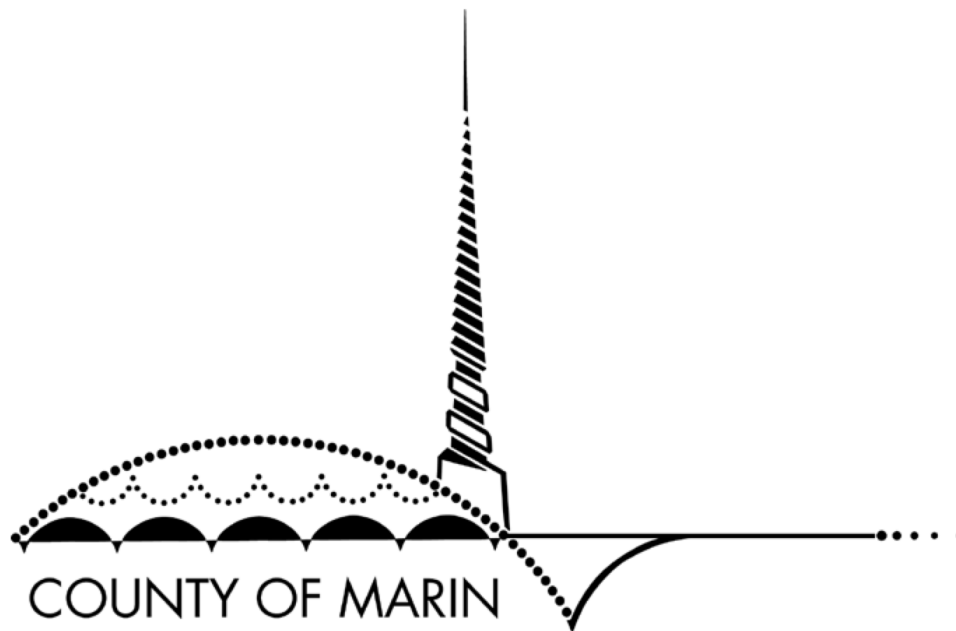
2016-2017 MARIN COUNTY CIVIL GRAND JURY

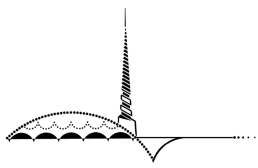
The Budget Squeeze

How Will Marin Fund Its Public Employee Pensions?

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How Will Marin Fund Its Public Employee Pensions?

SUMMARY

Twenty years ago, the only people who cared about public employee pensions were public employees. Today, taxpayers are keenly aware of the financial burden they face as unfunded pension liabilities continue to escalate. The Grand Jury estimates that the unfunded liability for public agencies in Marin County is approximately \$1 billion.

In 2012, the state passed the California Public Employees' Pension Reform Act of 2013 (PEPRA), which reduced pension benefits for new employees hired after January 1, 2013. PEPRA was intended to produce a modest reduction in the growth rate of these obligations but it will take years to realize the full impact of PEPRA. In the meantime, pension obligations already accumulated are undiminished.

This report will explore several aspects of this issue:

It's Worse than You Thought – While a net pension liability of \$1 billion may be disturbing, the true economic measure of the obligation is significantly greater than this estimate.

The Thing That Ate My Budget – The annual expense of funding pensions for current and future retirees has risen sharply over the past decade and this trend will continue; for many agencies, it is likely to accelerate over the next five years. This will lead to budgetary squeezes. While virtually every public agency in Marin has unfunded pension obligations, some appear to have adequate resources to meet them, while many do not. We will look at what agencies are currently doing to address the issues and what additional steps they should take.

The Exit Doors are Locked – Although there are no easy solutions, one way to reduce and eliminate unfunded pension liabilities in future years would be transitioning from the current system of *defined benefit pension* plans to *defined contribution pension* plans, similar to a 401(k). However, this approach is largely precluded by existing statutes and made impractical by the imposition of termination fees by the pension funds that manage public agency retirement assets.

The Grand Jury's aim is to offer some clarity to a complex issue and to encourage public agencies to provide greater transparency to their constituents.

BACKGROUND

Defined benefit pension plans are a significant component of public employee compensation. These plans provide the employee with a predictable future income stream in retirement that is protected by California Law.¹ However, the promise made by an employer today creates a liability that the employer cannot ignore until the future payments are due. The employer must contribute and invest funds today so that future obligations can be met when its employees retire. Failing to set aside adequate funds or investing in underperforming assets results in a funding gap often referred to as an *unfunded pension liability*. In order to be consistent with Governmental Accounting Standards Board's (GASB) terminology, this paper will refer to the funding gap as the *Net Pension Liability* (NPL).

Actuaries utilize complicated financial models to estimate the *Total Pension Liability*, the present value of the liabilities resulting from pension plan obligations. Pension plan administrators employ sophisticated asset management strategies in an effort to meet targeted returns required to fund future obligations. Nevertheless, the logic behind pension math can be summed up in a simple equation: $\text{Total Pension Liability (TPL)} - \text{Market Value of Assets (MVA)} = \text{The Net Pension Liability (NPL)}$. The NPL represents the funding gap between the future obligations and the funds available to meet those obligations. Conceptually, it is an attempt to answer the question: "How much would it be necessary to contribute to the plan today in order to satisfy all existing pension obligations?"

California is in the midst of an active public discussion about funding the retirement benefits owed to public employees. These retirement benefits have accumulated over decades and are now coming due as an aging workforce feeds a growing wave of retirements. The resulting financial demands will place stress on the budgets of public agencies and likely lead to reduced services, increased taxes or both.

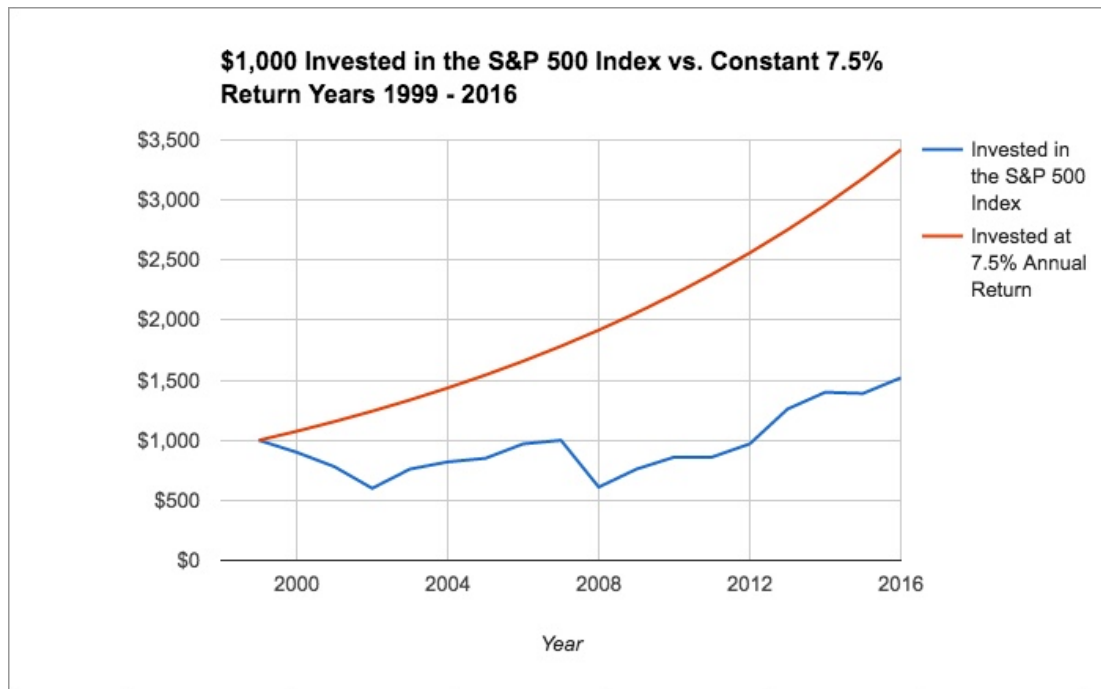
The roots of the current crisis in California stretch back to the late 1990's, when the California Public Employees Retirement System (CalPERS) held assets well in excess of its future pension obligations. The legislature approved and Governor Davis signed SB 400, which provided a retroactive increase in retirement benefits and retirement eligibility at earlier ages for many state employees. These enhancements were not expected to impose any cost on taxpayers because of the surplus assets held by the retirement fund. However, the value of those assets fell sharply as a consequence of the bursting of the dotcom bubble in the early 2000s and the Great Recession starting in 2008. (CalPERS suffered a 24% decline in the value of its holdings in 2009 alone.²) Where there had been surplus assets, the state now has large unfunded liabilities.

The following graph illustrates the problem. If you had invested \$1,000 in 1999, when the decision to enhance retirement benefits was made, and received a return of 7.50% annually — a

¹ "California Public Employee Retirement Law (PERL) January 1, 2016." CalPERS.

² Dolan, Jack. "The Pension Gap." LATimes.com. 18 Sept. 2016.

commonly used assumption of California's pension fund administrators — your investment would have grown to about \$3,500 by the end of 2016. By contrast, had you received the returns of the S&P 500 over that same period, you would have only about \$1,500, less than half of what had been assumed.



Last year, Moody's Investors Service reported that the unfunded pension liabilities of federal, state and local governments totaled \$7 trillion.³ Closer to home, the California Pension Tracker, published by the Stanford Institute for Economic Policy Research, places the state's aggregate unfunded pension liability at just under \$1 trillion.⁴

Marin has not been exempt. Recent published estimates put the NPL for public agencies in Marin at about \$1 billion. This is confirmed by our research.

The vast majority of employees of public agencies in Marin are covered by a pension plan. Three agencies administer these plans:

- California Public Employees Retirement System (CalPERS), a pension fund with \$300 billion in assets that covers employees of many public agencies, excluding teachers.
- California State Teachers Retirement System (CalSTRS), a pension fund with \$200 billion in assets that covers teachers.
- Marin County Employees' Retirement Agency (MCERA), a pension fund with \$2 billion in assets that provides services to a number of Marin public agencies, the largest being the County of Marin and the City of San Rafael.

³ Kilroy, Meghan., "Moody's: U.S. Pension Liabilities Moderate in Relation to Social Security, Medicare." *Pension & Investments*. 6 April 2016.

⁴ Nation, Joe. "[Pension Tracker](#)." *Stanford Institute for Economic Policy Research*. Accessed 5 March 2017.

The Grand Jury chose to address public employee pensions not because it is a new problem, but because it is so large that it is likely to have a material future impact on Marin's taxpayers, its public agencies and their employees.

METHODOLOGY

The Grand Jury chose to review and analyze the audited financial statements of the 46 agencies included in this report for the fiscal years (FY) 2012-2016 (see Appendix B, Methodology Detail). We captured a snapshot of the current financial picture as well as changes over this five-year period. In addition to reviewing net pension liabilities and yearly contributions of each agency, we collected key financial data from their balance sheets and income statements. We present all of this data both individually and in aggregate in the appendices.

The agencies were organized into three main types: municipalities, school districts and special districts. The special districts were further separated into safety (fire and police) and all other, which includes sanitary and water districts and the Marin/Sonoma Mosquito and Vector Control District. Evaluating the agencies in this way provided insight into which types of agencies were most impacted by pensions. Comparing agencies within those designations provided further clarity on which agencies may need to take specific action sooner rather than later. The school districts, which have some unique characteristics, require a separate discussion.

Financial Data and Standards

The Grand Jury analyzed data from the Comprehensive Annual Financial Reports (CAFR), Audited Financial Reports and actuarial reports from the pension fund administrators.

The Grand Jury analyzed the annual reports for each agency for the five fiscal years 2012 through 2016. A listing of the financial reports upon which the Grand Jury relied is presented in Appendix A, Public Sector Agencies.

Additional scrutiny was paid to the fiscal years 2015 and 2016 due to reporting changes required by the Governmental Accounting Standards Board (GASB),⁵ described in detail later in this report. For further information, see Appendix C.

The Grand Jury interviewed staff and management from selected public agencies and selected pension fund administrators.

The Grand Jury reviewed current law related to pensions.

Our investigation was to determine only the pension obligations of each agency. The Grand Jury

⁵ "[GASB 68](#)." *Governmental Accounting Standards Board*.

did not attempt to analyze the details of individual pension plans for any of the public agencies. The Grand Jury did not analyze the mix of pension fund investments; the investments for each public agency are managed by the appropriate pension fund according to standards and objectives established by that fund as contracted by their customers.

The Grand Jury did not investigate other employee benefits such as deferred compensation or inducements to early retirement.

Financial Data Consistency

The following agencies did NOT publish audited financial reports for FY 2016 in time for the Grand Jury to include those financial data in this report:

- City of Larkspur
- Town of Fairfax
- Central Marin Police Authority

The lack of a complete set of financial data for the fiscal years under investigation is reflected in this report in the following ways:

The financial tables below include an asterisk (*) next to the name of agencies for which financial data is missing. Table cells with data which is *Not Available* are marked as **N/A**.

Summary financial data totals do not include data for missing agencies for FY 2016. Percentages presented are calculated only with available data.

One agency, the Central Marin Police Authority (CMPA), presents other complications. The predecessor agency of CMPA, the Twin Cities Police Authority (TCPA), was a Joint Powers Authority of the City of Larkspur and the Town of Corte Madera. Subsequent to the publication of the TCPA FY 2012 audit report, a new Joint Powers Authority was created consisting of the former TCPA members plus the Town of San Anselmo. Thus, a strict comparison of financial condition over the full five year term of this report is not possible. The FY 2012 audit report for TCPA is included in the CMPA statistics as the predecessor agency.

DISCUSSION

It's Even Worse than You Thought

The Governmental Accounting Standards Board (GASB) establishes accounting rules that public agencies must follow when presenting their financial results. The recent implementation of GASB Statement 68 requires public agencies to report NPL as a liability on the balance sheet in their audited financial statements beginning with the fiscal year ended June 30, 2015.⁶ Prior to this accounting rule change, agencies only reported required yearly contributions to pension plans on the income statement, but NPL was not reflected on the balance sheet. The new method of reporting has provided greater transparency into the future impact of pension promises on current agency financials.

The addition of NPL as a liability on the balance sheet of government agencies has resulted in dramatic reductions to most agencies' *net positions*. The net position (assets minus liabilities, which is referred to as net worth in the private sector) is one metric used to evaluate the financial health of an organization. In the private sector, when net worth is negative, a company is considered insolvent, which is a signal to the investment community of potential financial distress. During the course of our research, the Grand Jury discovered many agencies that now have negative net positions following the addition of NPL to their balance sheets. We will discuss the possible implications of this new reality in the section entitled *The Thing That Ate My Budget*.

The calculation of the NPL involves complex actuarial modeling including many variables. Specific to each agency are the number of retirees, the number of employees, their compensation, their age and length of service, and expected retirement dates. Also included in the evaluation are general economic and demographic data such as prevailing interest rates, life expectancy and inflation. Actuaries base their assumptions on statistical models. But these assumptions can change over time as economic or demographic conditions change, which make regular updates to actuarial calculations essential. The total of all present and future obligations is calculated based on these assumptions. A discount rate is then applied to calculate the present value of the obligations and account for the time value of money.⁷ This calculation yields the Total Pension Liability (TPL). Put simply, the total pension liability is the total value of the pension benefits contractually due to employees by employers.

Agencies are required to make annual contributions to the pension plan administrator. A portion of the yearly contributions is used to make payments to current retirees and a portion is invested into a diversified portfolio of stocks, bonds, real estate and other investments. The investments are accounted for at market value (i.e. the current market price rather than book value or acquisition price.) In the calculation of NPL, the value of this investment portfolio is referred to

⁶ "[GASB 68](#)," *Governmental Accounting Standards Board*

⁷ See Appendix C

as Market Value of Assets (MVA). Consequently the $NPL = TPL - MVA$. The net pension liability is simply the difference between how much an entity should be saving to cover its future pension obligations and how much it has actually saved.

Although the NPL calculation depends on many variables, it is extremely sensitive to changes in the discount rate, the rate used to calculate the present value of future retiree obligations.⁸ The discount rate has an inverse relationship to the net pension liability (i.e. the higher the discount rate, the lower the NPL). GASB requires pension plan administrators to use a discount rate that reflects either the long-term expected returns on their investment portfolios or a tax-exempt municipal bond rate.⁹ It is common practice for government pension administrators to choose the higher discount rates associated with the expected return on their investment portfolios. Choosing the higher discount rate produces a lower NPL, which requires lower contributions from agencies today with the expectation that investment returns will provide the balance. While a portfolio mix that contains stocks and other alternative assets might produce a higher expected return, these portfolios are inherently more risky and will experience significantly more volatility, potentially leading to underfunding of the pension plans.

Until recently, the three pension administrators (CalPERS, CalSTRS and MCERA) that manage the assets on behalf of all of Marin's current employees and retirees used discount rates between 7.50% and 7.60%. Prolonged weak performance in financial markets has resulted in the long-term historical returns of pension funds falling below the discount rate. For example, CalPERS 20-year returns dropped to 7.00% following a few years of very poor investment performance, falling under the 7.50% discount rate.¹⁰ In response, CalPERS announced in December 2016 that it would cut its discount rate to 7.00% over the course of the next three years.¹¹ CalSTRS will cut its rate first to 7.25% and then to 7.00% by 2018.¹² In early 2015, MCERA cut its discount rate from 7.50% to 7.25%. As noted before, a lower discount rate results in a higher NPL. A higher NPL leads to increasing yearly contributions. So you see, it's worse than you thought. But keep reading, because it may be even worse than that.

Discount rates may yet be too high even at the new, lower 7.00-7.25% range.

At this point, it is helpful to provide some historical context. The risk-free rate,¹³ typically the US 10-Year Treasury note, yielded 2.37% as this report is written. (Real-time rates are available on Bloomberg.com.¹⁴) US Treasury securities are considered risk free because the probability of

⁸ "[Measuring Pension Obligations](#)," *American Academy of Actuaries Issue Brief*. November 2013, pg 1

⁹ "[GASB 68](#)," *Government Accounting Standards Board*

¹⁰ Gittelsohn, John. "[CalPERS Earns 0.6% as Long-Term Returns Trail Fund's Target](#)," *Bloomberg.com*. 18 July 2016.

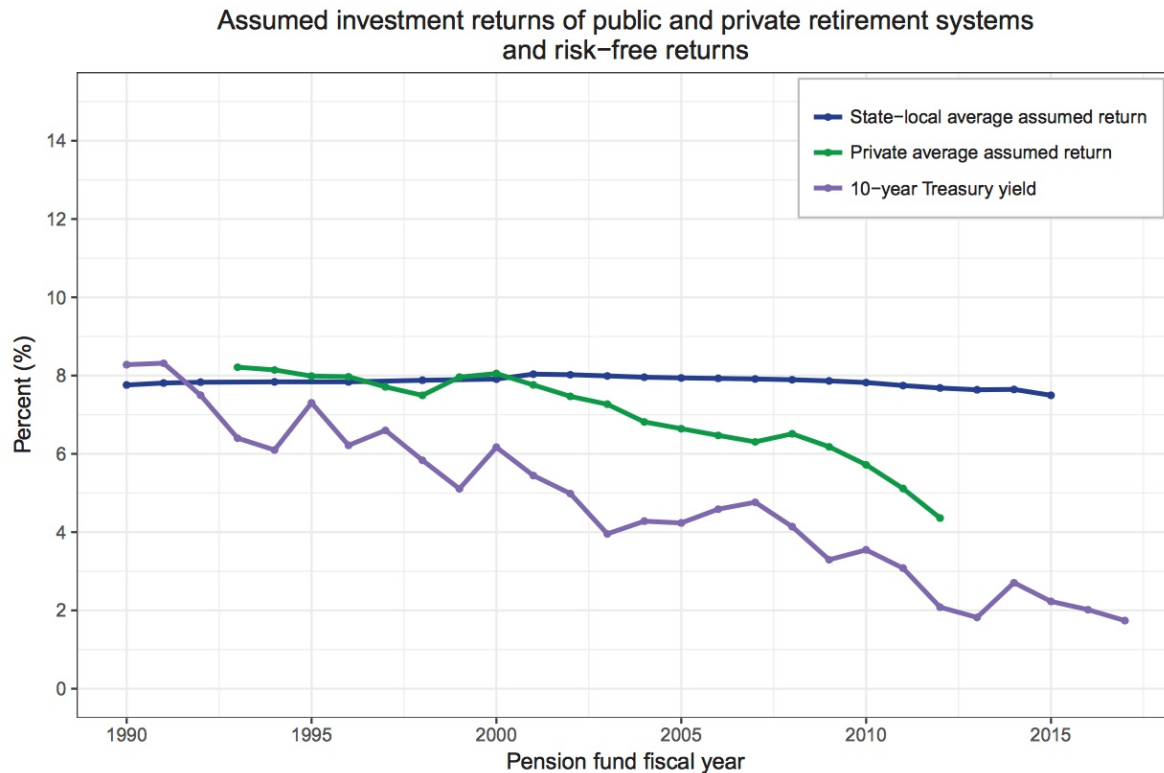
¹¹ Pacheco, Brad and Davis, Wayne and White, Megan. "[CalPERS to Lower Discount Rate to Seven Percent Over the Next Three Years](#)," *CalPERS.ca.gov*. 21 Dec. 2016.

¹² Myers, John. "[California Teacher Pension Fund Lowers its Investment Predictions, Sending a Bigger Invoice to State Lawmakers](#)," *LA Times.com*. 1 Feb. 2017.

¹³ "[Risk Free Rate of Return](#)," *Investopedia.com*

¹⁴ "[Treasury Yields](#)," *Bloomberg.com*

default by the US government is considered to be zero. Investment returns in the range of 7.00% - 8.00% were attainable with little volatility in the past because the risk-free rate was much higher. Between 1990 and 2016, risk-free rates have declined substantially, by around six percentage points.¹⁵ Discount rates in public sector pension plans have not declined proportionally. The following chart illustrates how the public sector has failed to reduce its assumed rates of return in response to the decline in risk-free rates.



From: [“The Pension Simulation Project: How Public Plan Investment Risk Affects Funding and Contribution Risk.”](#) Rockefeller Institute. Accessed on 23 March 17. pg.3.

In the aftermath of the 2008 financial crisis, central banks around the world engaged in the artificial support of lower interest rates through *quantitative easing* to boost global growth.¹⁶ Record-low interest rates followed, with interest rates on some sovereign debt even falling into negative territory. While easy monetary policy aided in spurring global growth, the prolonged period of low interest rates and weak investment returns has contributed to the dramatic underfunding of pension plans around the world.

¹⁵ Boyd, Donald J. and Yin, Yimeng. [“How Public Pension Plan Investment Risk Affects Funding and Contribution Risk.”](#) The Rockefeller Institute of Government State University of New York. Jan. 2017.

¹⁶ Martin, Timothy W. and Kantchev, Georgi and Narioka, Kosaku. [“Era of Low Interest Rates Hammers Millions of Pensions Around World.”](#) *WSJ.com* 13 Nov. 2016.

Pension plans in the private sector have lowered their discount rates in tandem with declining yields in the bond market. The Financial Accounting Standards Board (FASB) is the accounting rule-maker for for-profit corporations. FASB takes the view that, because there is a contractual requirement for the plan to make pension payments, the rate used to discount them should be comparable to the rate on a similar obligation. FASB Statement 87 says, "...employers may also look to rates of return on high-quality fixed-income investments in determining assumed discount rates."¹⁷ The effect is that pension obligations in the private sector are valued using a much lower discount rate than those used in the public sector. We looked at the ten largest pension funds of US corporations. Based on their 2015 annual reports, the average discount rate on pension assets was 4.30%.¹⁸

A significant body of research written by economists, actuaries and policy analysts has been devoted to the topic of whether discount rates used in public sector pensions are too high. Some suggest that the FASB approach is more appropriate, others believe the risk-free rate should be used, while still others contend that the current approach is perfectly reasonable. The Grand Jury cannot opine on which is the best and most accurate approach. Our research can only illuminate the financial impact of lower discount rates on Marin County agencies.

An additional reporting requirement of GASB 68 is the calculation of the NPL using a discount rate one percentage point higher and one percentage point lower than the current discount rate in order to show the sensitivity of the NPL to this assumption. The current financial statements reflect the following rates, which, due to the recent discount rate reductions noted above, are already outdated:

| Pension Fund | Discount Rate | + 1 Percentage Point | -1 Percentage Point |
|---------------------|----------------------|-----------------------------|----------------------------|
| CalPERS | 7.50% | 8.50% | 6.50% |
| CalSTRS | 7.60% | 8.60% | 6.60% |
| MCERA | 7.25% | 8.25% | 6.25% |

Because of this new disclosure requirement, the Grand Jury compiled the NPLs of the agencies at a discount rate range of between 6.25% - 6.60%. The individual results are presented in Appendix E; the total amount for the Marin agencies included in this report is \$1.659 billion.

In this discussion, we have focused on the risk of lower rates of return, but there is a possibility that investment returns could exceed the discount rates assumed by the pension administrators.

¹⁷ "[Statement of Financial Accounting Standards No. 87, Employers' Accounting for Pensions](#)" *Financial Accounting Standards Board*, paragraph 44.

¹⁸ See Appendix F

However, this possibility appears to be unlikely in that it would constitute a dramatic reversal of a decades-long trend. (See graph on page 7.) If that occurred, the effect would be lower NPLs and lower required contributions by employers. Regardless of investment returns, employers would still be required to make some contributions.

While the discussion of growing NPLs and lower discount rates may seem abstract, ultimately they lead to higher required contributions by public agencies to their pension plans. Because these payments are contractually required, they are not a discretionary item in the agency's budgeting process. Consequently, steadily increasing pension payments will squeeze other items in the budget. In the next section, we discuss the impact on Marin's public agencies' budgets.

The Thing That Ate My Budget

A budget serves the same purpose in a public agency as it does in a for-profit enterprise or a household. It is a statement of priorities in a world of finite resources. As growing pension expenses demand an increasing share of available funding, agencies must figure out how to stretch and allocate their resources.

This budgetary conundrum is not unique to Marin. A recent article in the *Los Angeles Times*¹⁹ discusses what can happen at the end stage of rising pension expenses. The City of Richmond has laid off 20% of its workforce since 2008 and projects pension expenses rising to 40% of revenue by 2021.

The explosion of pension expenses played a key role in three California cities that have filed for bankruptcy protection since 2008: Vallejo,²⁰ Stockton,²¹ and San Bernardino.²² Several factors played a role in these California bankruptcies. In the case of Vallejo, booming property tax revenues during the real estate bubble led city officials to offer generous salary and benefit increases. Property taxes plummeted after a wave of foreclosures during the financial crisis and city officials could not cut enough of the budget to meet obligations. In particular, the city's leadership was unable to negotiate cuts to pension benefits. This lack of flexibility forced Vallejo into bankruptcy. Further threats of litigation from CalPERS during the bankruptcy process kept the City from negotiating cuts to pension benefits as part of its bankruptcy plan. Despite exiting bankruptcy, Vallejo remains on unstable financial footing. Stockton and San Bernardino have similar stories: overly generous salary and benefits offered during boom times, some fiscal mismanagement (i.e. ill-timed bond offerings, failed redevelopment plans, etc.) followed by the inability to cut benefits when revenues declined.

¹⁹ Lin, Judy. "[Cutting jobs, street repairs, library books to keep up with pension costs.](#)" *Los Angeles Times* 6 Feb. 2017.

²⁰ Hicken, Melanie. "[Once bankrupt, Vallejo still can't afford its pricey pensions.](#)" *Cnn.com* 10 March 2014.

²¹ Stech, Katie. "[Stockton Calif., To Exit Bankruptcy Protection Wednesday.](#)" *WSJ.com* 24 Feb. 2015.

²² Christie, Jim. "[Judge Confirms San Bernardino, California's Plan to Exit Bankruptcy.](#)" *Reuters.com* 27 Jan 2017.

In budgeting for pension expense, agencies have two types of contributions to consider: the *Normal Cost* and the amortization of the NPL. The Normal Cost is the amount of pension benefits earned by active employees during a fiscal year. In addition, agencies must make a payment toward the NPL. A pension liability is created in every year the fund's investments underperform the discount rate. The liability for each underfunded year is typically amortized over an extended period, which may be as long as 30 years.

While the passage of PEPRA has reduced the Normal Cost somewhat, the payments needed to amortize the NPL have been rising and will continue to rise in the coming years. This trend will only be exacerbated by the recent decisions of CalPERS and CalSTRS to lower their discount rates. In this section, we will discuss the stress this is placing on the budgets of Marin public agencies.

Revenues of public agencies come from defined sources, including property taxes, sales taxes, parcel taxes, assessments and fees for services. Cash flow may be supplemented by the issuance of general obligation bonds, but these require repayment of principal along with interest.

The budgeting process of public agencies is not always transparent. Although final budgets are made public, the choices made along the way — specifically, which spending priorities did not make it into the final budget — are usually not disclosed.

In 2016, the Marin/Sonoma Mosquito and Vector Control District commissioned a study of the district's financial situation over a projected ten-year time frame, which concluded:

*In addition to the basic level of incurred and approved expenditures modeled ..., the District has long term pension liabilities. Budgets have been reduced in recent years, but without additional revenues, the District would be forced to implement severe cutbacks in services and staffing.*²³

The report concludes that expenses will exceed revenues beginning in FY 2018, with a deficit widening through FY 2027, the final year of the study, and that the district's reserves will be exhausted by FY 2024.

The Grand Jury commends the district for taking the responsible step of investigating its future financial obligations. We believe that a long term budgeting exercise — whether done internally or by an outside consultant — should be completed and made public by every agency every few years.

The Grand Jury chose several balance sheet and income statement items to provide context in calculating the relative burden that pension obligations placed on each agency. We felt a more

²³ Cover letter from NBS to the Board of Trustees and Phil Smith, Manager, Marin/Sonoma Mosquito Vector Control District dated November 9, 2016.

meaningful analysis could be gleaned from examining ratios rather than absolute numbers. For example, the \$48 million dollar pension contribution that the County made in 2016 might sound less shocking when presented as 8% of the county's revenues. The County's \$203 million NPL might be perceived as extraordinary, but not necessarily so when presented with a balance sheet that held \$400 million in cash.

We focused on two metrics: 1) The percentage of revenue spent on pension contributions each year over a five-year period, and 2) The percentage of NPL to cash on the balance sheet to for fiscal years 2015 and 2016. The first metric was an attempt to answer the question of how much of an agency's budget is spent on yearly pension contributions. The second metric addressed the question of whether an agency had financial resources to pay down pension liabilities in order to reduce their future yearly contributions.

The recent announcements of discount rate reductions at both CalPERS and CalSTRS will lead to increases in NPL, resulting in increasing contributions for their participating agencies. As CalPERS and CalSTRS have not yet implemented the discount rate reductions, the financial statistics we have used in the following discussion do not reflect these pending increases and, therefore, somewhat understate the budgetary impact.

Given the wide scope of public missions, responsibilities and funding sources of the agencies investigated in this report, it is not easy to generalize about the consequences of budgetary shortfalls for individual agencies. However, we found similarities among agencies with similar missions.

School Districts

School districts share many characteristics: They are included in a single pool (i.e., identical contribution rates for all districts) for both CalSTRS and CalPERS; they have similar missions and similar financial structures and are, therefore, homogeneous. This is the only category where the agencies contribute to two pensions administrators: CalSTRS for certificated employees and CalPERS for classified staff. Both CalSTRS and CalPERS place eligible school-district employees into a single pool for purposes of determining the annual required contribution. Consequently, we see that pension contributions as a percentage of revenue are fairly consistent across districts.

| School District | FY 2016 | FY 2015 | FY 2014 | FY 2013 | FY 2012 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Bolinas-Stinson Union School District | 6.2% | 5.1% | 5.3% | 4.4% | 5.0% |
| Dixie Elementary School District | 5.8% | 5.7% | 5.2% | 5.4% | 5.3% |
| Kentfield School District | 5.4% | 5.2% | 4.9% | 4.9% | 5.1% |
| Larkspur-Corte Madera School District | 5.5% | 5.3% | 5.0% | 4.6% | 5.0% |
| Marin Community College District | 5.8% | 6.0% | 4.7% | 3.9% | 3.6% |
| Marin County Office of Education | 3.3% | 2.9% | 2.8% | 2.8% | 2.7% |
| Mill Valley School District | 5.1% | 4.8% | 4.4% | 4.5% | 4.8% |
| Novato Unified School District | 4.4% | 4.4% | 4.9% | 4.8% | 4.8% |
| Reed Union School District | 5.2% | 4.8% | 4.7% | 4.6% | 4.4% |
| Ross School District | 5.0% | 4.7% | 4.6% | 4.6% | 4.3% |
| Ross Valley School District | 5.5% | 5.1% | 4.8% | 4.8% | 4.6% |
| San Rafael City Schools - Elementary | 4.6% | 4.4% | 4.1% | 4.1% | 4.0% |
| San Rafael City Schools - High School | 5.3% | 4.8% | 4.4% | 4.5% | 4.4% |
| Sausalito Marin City School District | 3.4% | 3.7% | 3.3% | 3.0% | 2.7% |
| Shoreline Unified School District | 4.9% | 5.0% | 5.0% | 3.8% | 4.1% |
| Tamalpais Union High School District | 5.7% | 4.6% | 4.9% | 5.0% | 4.9% |
| Total | 5.0% | 4.7% | 4.5% | 4.3% | 4.3% |

■ < 5% ■ 5% - 10% ■ 10% - 15% ■ > 15%

Pension contributions as a percentage of revenue for Marin's school districts have increased from 4.3% in FY 2012 to 5.0% in FY 2016. Increases will continue over the next five years, but at a much higher rate. CalSTRS contribution rates are governed by law and, under AB 1469²⁴, contribution rates are scheduled to increase from 10.73% of certificated payroll in FY 2016 to 19.10% in FY 2021 (and remain at that level for the next 25 years), an increase of 78%.²⁵ For classified employees, the CalPERS contribution rates will be increasing from 11.847% of payroll in FY 2016 to 21.50% in FY 2022, an increase of over 81%.²⁶ This implies that school districts will be spending 9% of their revenues on pension contributions within the next five years.

²⁴ [AB-1469 State teachers' retirement: Defined Benefit Program: funding](#), California Legislative Informative

²⁵ "CalSTRS Fact Sheet, CalSTRS 2014 Funding Plan," CalSTRS. July 8, 2014.

²⁶ "CalPERS Schools Pool Actuarial Valuation as of June 30, 2015," CalPERS. April 19, 2016.

School districts are already running on tight budgets, with the average Marin school district expenses having slightly exceeded revenues in fiscal year 2016. Thus, increases in outlays for pensions will necessitate service reductions, tax increases or a combination of the two.

Many of the school districts have General Obligation (GO) bonds outstanding, which contributes to their precarious financial position. With the recent addition of NPL to their balance sheets, most of the school districts have negative net positions. As discussed earlier, in the private sector a negative net position is considered a sign of financial distress and possible insolvency. When we asked whether the rating agencies had expressed concerns or threatened to downgrade their existing debt, the responses from several districts were that they had no difficulties refinancing their bonds and had all maintained their high credit ratings.

The Grand Jury found this particular issue perplexing. A healthy balance sheet is essential in the private sector to attaining a high credit rating. We learned, however, that this is not how rating agencies view a Marin County agency's credit worthiness. In addition to looking at a particular agency's financials, the rating firms also evaluate the likelihood of getting paid back in the event of a default from other resources, more specifically Marin taxpayers. GO bonds have a provision where, in the event of a shortfall or default on a bond, the agency can direct the tax assessor to increase property taxes to satisfy the obligation.²⁷ Consequently, a rating agency is really assessing the ability to collect directly from Marin County taxpayers. Given Marin's relatively high home values and incomes, collection from Marin taxpayers is a safe bet in the eyes of the rating agencies, thereby making it completely defensible to assign a AAA rating on a GO bond from an agency with a negative net worth. Thus, taxpayers, and not bondholders, bear the risk of an individual agency's insolvency.

Another concern for school districts is their reliance on parcel taxes to supplement revenue. Most Marin school districts have parcel taxes, which run as high as 20% of revenue in some districts and average 9.7%.²⁸ This important source of revenue is subject to periodic voter approval and requires a two-thirds vote to pass. Historically, parcel tax measures have seldom failed in Marin. In November 2016, both Kentfield and Mill Valley had ballot measures to renew existing parcel taxes. Kentfield failed to get the required two-thirds and Mill Valley's measure barely passed. This raises two concerns: 1) that parcel tax measures will face greater opposition if voters believe the money is going for pensions; and 2) that districts' already tight finances will be substantially worsened if this source of funding is reduced.

²⁷ "[California Debt Issuance Primer Handbook](#)." *California Debt and Investment Advisory Commission*. pg 134.

²⁸ Sources: parcel tax data from ed-data.org, revenue data from audit reports (see Appendix A)

| K-12 School District | Parcel Tax Revenue as % of Total Revenue |
|---------------------------------------|---|
| Bolinas-Stinson Union School District | 13.3% |
| Dixie Elementary School District | 7.6% |
| Kentfield School District | 20.0% |
| Larkspur-Corte Madera School District | 11.9% |
| Mill Valley School District | 20.0% |
| Novato Unified School District | 4.4% |
| Reed Union School District | 8.6% |
| Ross School District | 8.9% |
| Ross Valley School District | 12.5% |
| San Rafael City Schools - Elementary | 4.4% |
| San Rafael City Schools - High School | 7.0% |
| Sausalito Marin City School District | 0.0% |
| Shoreline Unified School District | 6.2% |
| Tamalpais Union High School District | 10.2% |
| Average | 9.3% |

Given these budget pressures, it is difficult to imagine how the impact of increasing pension contributions will not ultimately be felt in the classroom.

Municipalities & the County

The County and the 11 towns and cities in Marin County (we will refer to them collectively as the “municipalities”) have broad responsibilities. Within this group, however, there are important differences. Populations differ widely, from Belvedere at about 2,000 to San Rafael at 57,000. In some municipalities, police and/or fire protection services are provided by a separate agency. In others they fall under the municipality’s auspices. These factors lead to some variation among this category.

Unlike school districts, municipalities (and special districts, which we will discuss next) have individualized schedules for amortization of their NPLs. Although we can make overall statements about recent and expected increases in pension expense, there can be substantial variation among jurisdictions.. The following table shows the pension contribution as a percent of revenue for each municipality over the past 5 years.

| Municipality | FY 2016 | FY 2015 | FY 2014 | FY 2013 | FY 2012 |
|----------------------|-------------|-------------|-------------|--------------|--------------|
| City of Belvedere | 4.2% | 3.8% | 3.9% | 5.2% | 5.7% |
| City of Larkspur* | N/A | 3.8% | 5.0% | 6.0% | 7.0% |
| City of Mill Valley | 6.4% | 5.5% | 5.2% | 5.1% | 6.3% |
| City of Novato | 5.4% | 5.2% | 9.1% | 8.4% | 8.3% |
| City of San Rafael | 19.2% | 18.8% | 18.8% | 15.9% | 16.8% |
| City of Sausalito | 6.6% | 9.7% | 6.9% | 10.8% | 12.3% |
| County of Marin | 7.9% | 6.9% | 8.1% | 15.2% | 10.5% |
| Town of Corte Madera | 7.7% | 7.8% | 8.5% | 8.4% | 11.0% |
| Town of Fairfax* | N/A | 13.9% | 9.8% | 10.5% | 9.8% |
| Town of Ross | 14.5% | 2.2% | 3.9% | 7.2% | 13.0% |
| Town of San Anselmo | 2.4% | 1.9% | 2.5% | 4.3% | 7.2% |
| Town of Tiburon | 6.6% | 3.8% | 4.1% | 4.7% | 5.8% |
| Total | 8.8% | 7.9% | 8.9% | 13.6% | 10.7% |

■ < 5% ■ 5% - 10% ■ 10% - 15% ■ > 15%

In FY 2016, the City of San Rafael and the Town of Ross had the highest contribution percentages, 19.2% and 14.5% respectively. The City of San Rafael's contribution rate has been consistently high for the last five years. MCERA, San Rafael's pension administrator, projects that contributions will remain high with only a slight decline over the next 15 years.²⁹

In contrast, the Town of Ross had a relatively low contribution percentage through FY 2014 & FY 2015. The contribution rate would have remained low in FY 2016 but for a \$1 million voluntary contribution to pay down its NPL. Nevertheless, the Town's pension administrator (CalPERS), projects that pension contributions will rise sharply from FY 2014/FY 2015 levels over the next five years.³⁰

²⁹ "Actuarial Valuation Report as of June 30, 2016." *Marin County Employees' Retirement Association*. p.15.

³⁰ "Annual Valuation Report as of June 30, 2015." California Public Employees' Retirement System. Reports for Town of Ross - Miscellaneous Plan, Town of Ross - Miscellaneous Second Tier Plan, Town of Ross - PEPRM Miscellaneous Plan & Town of Ross - Safety Plan

Although Fairfax has not yet produced an audit report for FY 2016, we expect its required contributions will experience an increase over the next four to five years after which they are projected to decline somewhat over the following decade.³¹

Belvedere and San Anselmo had the lowest contribution percentages of 4.2% and 2.4% respectively.

Examining NPL as a percentage of cash (see Appendix E), Tiburon and Ross were in the best position, with Tiburon having 25.2% of NPL to cash and Ross having 33.7% of NPL to cash. The Grand Jury recommends that cash-rich agencies evaluate their reserve policies and discuss whether a contribution to pay down the NPL (as Ross did in FY 2016), should be prioritized. Conversely, San Rafael and Fairfax (based on FY 2015) are also in the worst position based on our balance sheet metric with a NPL that is more than double both municipalities' respective cash positions.

The County is in a strong financial position, spending 7.9% of its revenues on pension contributions. The County of Marin's balance sheet has assets of nearly \$2 billion, yearly revenues of over \$600 million and cash of over \$400 million. When viewed in the context of its ample financial resources, the County does not currently appear to be financially strained by its pension obligations. Furthermore, the county's significant assets and ample cash cushion should protect it from further pressure caused by increasing pension contributions. In 2013, the County made a significant extra contribution (\$30 million) to pay down its NPL and could do the same in future years to offset increasing contribution requirements from MCERA.

Special Districts

The Special Districts illustrate the stark differences among agencies. The safety districts (police and fire), out of all the agencies, spent the highest percentage of their revenues on pension contributions. The primary reason that safety agencies have high pension expenses relative to other agencies is that they are inherently labor intensive, with some of the most highly compensated public employees with the highest pension benefits (in terms of percentage of compensation for each year of service) and the earliest retirement ages. Other than some equipment, such as a fire engine, the bulk of the revenues are spent on employee compensation and benefits.

³¹ ["Annual Valuation Report as of June 30, 2015."](#) California Public Employees' Retirement System. Reports for Town of Fairfax - Miscellaneous First Tier Plan, Town of Fairfax - Miscellaneous Second Tier Plan, Town of Fairfax - PEPR Miscellaneous Plan, Town of Fairfax - PEPR Safety Plan, Town of Fairfax - Safety First Tier Plan & Town of Fairfax - Safety Second Tier Plan

| Safety District | FY 2016 | FY 2015 | FY 2014 | FY 2013 | FY 2012 |
|---|--------------|--------------|--------------|--------------|--------------|
| Central Marin Police Authority* | N/A | 13.4% | 20.1% | 17.7% | 16.8% |
| Kentfield Fire Protection District | 19.0% | 16.7% | 14.7% | 16.9% | 17.5% |
| Novato Fire Protection District | 17.4% | 18.2% | 17.5% | 18.1% | 19.1% |
| Ross Valley Fire Department | 11.7% | 10.9% | 9.1% | 16.3% | 61.8% |
| Southern Marin Fire Protection District | 13.9% | 5.4% | 12.6% | 13.8% | 13.9% |
| Tiburon Fire Protection District | 20.5% | 31.0% | 14.2% | 14.2% | 15.8% |
| Total | 16.2% | 15.2% | 15.5% | 16.5% | 22.2% |

■ < 5% ■ 5% - 10% ■ 10% - 15% ■ > 15%

The highest pension to revenue rates were in the Tiburon, Kentfield and Novato fire districts, which each spent more than 17% of their revenues on pension payments in FY 2016. Using the metric of NPL to cash on the balance sheet, the Ross Valley Fire Department had the highest ratio of nearly 600% (see Appendix E). However, Ross Valley Fire spent only 11.7% of its revenues on pension contributions in 2016.

The ratios for Tiburon Fire in FY 2015 and FY 2016 are inflated by the voluntary contributions it made, totaling approximately \$2 million over those two years.

Sanitary districts as a group appeared to be in the best financial condition based on both balance sheet and income statement data. Sanitary districts tend to have few employees and own significant assets that require capital investments to maintain. A capital-intensive business requires cash, but not many employees. Consequently, their pension plans appear not to be a financial burden on the agencies.

| Utility District | FY2016 | FY2015 | FY2014 | FY2013 | FY2012 |
|--|-------------|-------------|-------------|-------------|-------------|
| Central Marin Sanitation Agency | 5.5% | 13.0% | 16.6% | 7.6% | 7.4% |
| Las Gallinas Valley Sanitary District | 2.3% | 2.3% | 2.3% | 3.6% | 3.5% |
| Marin Municipal Water District | 9.2% | 7.5% | 6.5% | 5.7% | 6.4% |
| Marin/Sonoma Mosquito & Vector Control | 11.2% | 10.2% | 11.0% | 11.2% | 24.0% |
| Marinwood Community Services District | 5.5% | 5.2% | 8.0% | 8.7% | 10.7% |
| North Marin Water District | 4.6% | 3.6% | 3.9% | 8.6% | 6.5% |
| Novato Sanitary District | 1.5% | 0.9% | 1.4% | 1.8% | 1.3% |
| Richardson Bay Sanitary District | 2.6% | 2.4% | 3.2% | 2.3% | 2.3% |
| Ross Valley Sanitary District | 2.3% | 2.0% | 3.8% | 3.8% | 3.2% |
| Sanitary District # 5 Tiburon-Belvedere | 28.4% | 25.3% | 2.9% | 3.5% | 4.9% |
| Sausalito Marin City Sanitation District | 3.3% | 4.0% | 3.4% | 2.4% | 5.0% |
| Tamalpais Community Services District | 5.9% | 5.9% | 6.4% | 5.8% | 5.1% |
| Total | 6.5% | 6.4% | 6.0% | 5.5% | 6.1% |

■ < 5% ■ 5% - 10% ■ 10% - 15% ■ > 15%

Sanitary District #5 had a very high level of pension contributions at over 25% for each of the two most recent years. However, this is the result of large voluntary contributions. Further, the district had cash equal to three times its NPL. The Novato Sanitary District stood out as being in particularly good financial condition in that it spends less than 2% of its revenues on pension contributions and has a NPL that is 18% of its cash position.

The real question for Marin County taxpayers is not whether we are in dire straits because of pensions — for now, most of the agencies appear to be able to meet their pension obligations — but which services are going to be squeezed, which roads aren't going to be paved, which buildings aren't going to be updated because of growing pension contribution requirements. Alternatively, how many more parcel taxes, sales tax increases and fee hikes will be required because pension contributions continue to spiral upwards? In the next section, we will discuss possible alternatives to the current system of retiree pay.

The Exit Doors Are Locked

In 2011, Governor Jerry Brown announced a 12-point plan for pension reform. This plan included raising the retirement age for new employees, increasing employee contribution rates, eliminating “spiking” (where an employee uses special bonuses, unused vacation time and other pay perquisites to increase artificially the compensation used to calculate their future retirement benefit) and prohibiting retroactive pension increases. Most of these proposals were incorporated

into the Public Employees Pension Reform Act of 2013 (PEPRA).³² One that was not was Governor Brown's proposal for "hybrid" plans for new employees.

The hybrid proposal consisted of three components:

1. New employees would be offered pensions but with reduced benefits requiring lower contributions by both employer and employee.
2. New employees would also be offered defined contribution plans.
3. Most new employees would be eligible for Social Security. (Currently, employees not eligible for CalPERS or CalSTRS -- generally, part-time, seasonal and temporary employees -- are covered by Social Security.)

The Governor's proposal was for each of these three components to make up approximately equal parts of retirement income. (For those not eligible for Social Security, the pension would provide two-thirds and the defined contribution plan one-third.)

It may be helpful at this point to pause and define our terms. A traditional pension — like the plans covering public employees in Marin — is a *defined benefit* (DB) plan. Under a DB plan, the employee is eligible for a pension that pays a defined amount, typically a formula based on retirement age, years of service and average compensation. Because the benefit is defined, the contributions by employer and employee will be uncertain; they, along with the investment returns on the contributed assets, must be sufficient to fund the defined benefit.

Under a *defined contribution* (DC) plan, such as a 401(k), both employer and employee make an annual contribution. Typically, the employee chooses a portion of pre-tax salary that is contributed to the plan and the employer matches a percentage of the employee's contribution. The funds are placed in an investment account and the employee chooses how the funds are invested (usually from a range of choices established by the employer). What is undefined is the value of the account at the time the employee retires as this depends upon the total of contributions and the rates of return over the life of the account. By law, 401(k) plans are "portable"; they permit the employee to move the account to an Individual Retirement Account (IRA) should he/she change employers.

The primary difference between DB and DC plans is who assumes the risk of lower investment returns and greater longevity. In a DB plan, it is the employer; in a DC plan, it is the employee. Furthermore, a DB plan poses some risk to the employee: If the employer does not make the required contributions, the pension administrator will be required to reduce pension benefits to the retirees of the employer. In November 2016, CalPERS announced that it would cut benefits for the first time in its history. Loyaltton, California was declared in default by CalPERS after failing to make required contributions towards its pension plans. The CalPERS board voted to

³² "[Twelve Point Pension Reform Plan](#)." *Governor of the State of California*. 27 Oct. 2011.

reduce benefits to Loyalton retirees.³³ More recently, in March of 2017, CalPERS voted again to cut benefits for retirees of the East San Gabriel Valley Human Services Agency when it began missing required payments in 2015.³⁴

Over the past several decades, private industry in the US has moved decidedly toward DC and away from DB. In 1980, 83% of employees in private industry were eligible for a DB plan (either alone or in combination with a DC plan).³⁵ By March 2016, the Bureau of Labor Statistics reported that among workers in private industry, 62% had access to a DC plan while only 18% had access to a DB plan. This compares with workers in state and local government, where 85% had access to DB plans and 33% to DC plans (some workers are eligible for both).³⁶

Eliminating the risk of an underfunded plan is the primary reason that private employers have been moving away from DB plans, but there are several others. In a traditional DB plan, the employer is responsible for managing the assets held in trust for future retirees. This leads to costs for both investment management and oversight of their fiduciary duties. In addition, as the economy has shifted from manufacturing toward service and high technology, new firms have sprung up that did not have unionized work forces or legacy DB plans and chose the simplicity and lack of risk of DC. The shift from DB to DC may also reflect the preference of younger employees for the portability and transparency of DC.³⁷

In public employment, which has fewer competitive pressures and a higher percentage of workers represented by unions, these same trends have not occurred, leaving more DB plans in place.

Under PEPPRA, new employees hired after January 1, 2013 are still eligible for DB plans, but at a lower percentage of average compensation and a later retirement age (generally two years later). These important steps reduced the annual cost of employee pensions but still leave the employer with the administrative cost and fiduciary duty. While PEPPRA prohibits retroactive increases, which prevents the state from making the same mistake it made in the late 1990's, investment performance that is significantly below target could again produce a large unfunded liability.

It is argued by some³⁸ that everyone would benefit from a more secure retirement; rather than taking DB plans away from public employees, they should be made available to all workers.

³³ "[CalPERS Finds the City of Loyalton in Default for Non-Payment of Pension Obligation](#)." *CalPERS.ca.gov* 16 November, 2016.

³⁴ Dang, Sheila "[CalPERS Cuts Pension Benefits for East San Gabriel Valley Human Services](#)." *Institutionalinvestor.com* 16 March, 2017.

³⁵ "[Pensions: 1980 vs. Today](#)." *New York Times*, 3 Sep. 2009

³⁶ "[National Compensation Survey](#)." *Bureau of Labor Statistics*, March 2016

³⁷ Barbara A. Butrica and Howard M. Iams and Karen E. Smith & Eric J. Toder. "[The Disappearing Defined Benefit Pension and Its Potential Impact on the Retirement Incomes of Baby Boomers](#)." *Social Security Bulletin*, Vol. 69, No. 3, 2009

³⁸ Aaronson, Mel and March, Sandra and Romain, Mona. "[Everyone Should Have a Defined- Benefit Pension](#)." *New York Teacher*. 17 Feb. 2011.

While this argument has some appeal, it ignores the fact that US commerce has adopted DC plans as the de facto standard. Further, as DB plans for public employees exhibit significant unfunded liabilities, it stands to reason that DB programs for private employees with comparable benefits would suffer the same financial difficulties.

It is easy to understand why taxpayers, who have to manage the risks of their own retirements using DC plans, would object to guaranteeing the retirement income of public employees with DB plans. In a February 2015 nationwide poll, 67% of respondents favored requiring new public employees to have DC instead of DB plans.³⁹ A California poll in September 2015 put that number at 70%.⁴⁰

As noted above, the changes to state retirement law under PEPRA did not make DC or hybrid plans an option for public employees. While existing DC plans were grandfathered by PEPRA, any agency proposing to offer a new DC or hybrid plan in place of an existing DB plan would face a series of hurdles:

- According to the County Employees Retirement Law of 1937, the County of Marin would require specific legislative approval to amend the law to allow the introduction of a DC or hybrid DC/DB plan.
- For other public agencies, PEPRA did not create any approved DC or hybrid models; although neither did it explicitly prohibit them. Any changes by agencies that are participants in CalPERS would require approval of the CalPERS board. It appears likely that CalPERS would disapprove such a request under PEPRA section 20502, as an impermissible exclusion of a class of employees. (Some differentiations — by job classification, for example — are permissible.)

In addition, negotiations with the relevant collective bargaining unit would need to take place, a requirement that is made explicit in PEPRA section 20469.

An additional obstacle is termination fees. If a CalPERS participating agency chooses to terminate its DB plan, it must make a payment to CalPERS to satisfy any unfunded liability. This fee would be calculated by discounting the liability using a risk-free rate (see Glossary for definition), which might be four to five percentage points lower than the rate normally used to calculate the NPL.

The actual calculation of the termination liability is done at the time of the termination, but in its annual actuarial valuation reports CalPERS provides two estimates intended to describe the range in which the liability is likely to fall. While CalPERS has used a 7.50% discount rate to calculate NPL for active plans, it uses a combination of the yields on 10-year and 30-year

³⁹ [“Pension Poll 2015 Topline Result,”](#) Reason-Rupe Public Opinion Survey, 6 February 2015

⁴⁰ [“Californians and Their Government,”](#) Public Policy Institute of California Statewide Survey, September 2015

Treasury securities — which respectively yield 2.19% and 3.02% as this report is written — to calculate the termination liability. In its most recent actuarial reports, it provided estimates of agencies' termination liability using discount rates of 2.00% and 3.25%. To illustrate, at June 30, 2015 (reports for fiscal 2016 were not yet available as this was written), the City of Larkspur had a NPL of just over \$9 million, but Larkspur's termination liability was estimated at between \$46.8 million and \$64.1 million, or between five and seven times its NPL. This range is very typical.

Here, again, we should define our terms. When a pension plan is terminated, the claims of all eligible participants are satisfied, either through a lump-sum payment or through the purchase by the plan of annuities that pay all benefits to which the participants are entitled. The plan is then liquidated; no further benefits accrue to employees and retirees and no further contributions are required from the employer.

A pension plan freeze is different from a termination. A plan can be frozen in a variety of ways. A plan might terminate all future activity so that any benefits earned prior to the freeze are still due but no further benefits are earned by any employees. Alternatively, a pension plan might choose to keep all terms in place — including benefit accruals for future service and required future contributions — for existing employees and retirees but enroll all new hires in DC plans. Other variations are possible.

Currently, CalPERS does not distinguish between a termination and a freeze. If an employer were to propose converting new employees to a DC plan, CalPERS would treat it as a termination because it is impermissible for a CalPERS plan to differentiate between groups of employees on the basis of when they were hired.

Absent legislative action, an agency that wanted to freeze its current DB plan and make all new employees eligible for a DC-only or hybrid plan would make an application to CalPERS. The CalPERS board would conclude that excluding employees from the existing DB plan on this basis was impermissible and declare the plan terminated, triggering the imposition of a fee five to seven times the amount of the NPL. For an agency that wishes to take better control of its financial position, this would be a counter-productive endeavor.

CONCLUSION

The net pension liability of Marin's public agencies cannot be made to disappear. It represents benefits earned over several decades by public employees and constitutes a legal and ethical obligation. Some progress has been made to reduce growing liabilities (such as PEPRA's anti-spiking provisions, which are the subject of a lawsuit currently under appeal at the state Supreme Court).⁴¹ However, the vast bulk of this liability will need to be paid.

The recommendations proposed by the Grand Jury are intended to achieve three objectives:

1. Avoid further increasing the pension liabilities of Marin's public agencies by shifting from DB to DC-only and/or hybrid retirement plans.
2. Increase the rigor and extend the planning horizon of fiscal management by Marin's public agencies.
3. Improve the depth and quality of information provided to the public.

In the course of its investigation, the Grand Jury found two models that may help achieve these objectives, one from right next door and one from across the country.

In September 2015, Sonoma County empanelled the Independent Citizens Advisory Committee on Pension Matters consisting of seven members, "none of whom are members or beneficiaries of the County pension system."⁴² The panel conducted an investigation and published in June 2016 a comprehensive and highly readable report with recommendations for containing pension costs, public reporting and improving fiscal management.⁴³

In 2012, New York State Office of the State Controller introduced a Fiscal Monitoring System, which is intended to be an early-warning system for financial stress among the state's municipalities and school districts. It takes financial data from reports filed by the agencies and economic and demographic data to produce scores to identify fiscal stress. The OSC also offers advisory services to assist those agencies in developing plans to alleviate their financial stress.⁴⁴

We believe that these two models could be helpful as Marin's public agencies come to terms with the fiscal realities of the years ahead.

One final point: As bad as this report may make things look, they will almost certainly look worse in the next few years because of the lowering of discount rates by pension administrators. We believe that these actions by CalPERS, CalSTRS and MCERA are well founded and prudent, but they will result in increases to the NPLs of every agency, necessitating higher payments in

⁴¹ *Marin Association of Public Employees v. Marin County Employees Retirement Association*

⁴² "[Independent Citizens's Advisory Committee on Pension Matters](#)," *County of Sonoma*.

⁴³ "Report of Independent Citizens Advisory Committee on Pension Matters," *County of Sonoma*, June 2016.

⁴⁴ "Three Years of the Fiscal Stress Monitoring System," New York State Office of the State Controller, September 2015

the near term to amortize the higher NPLs. The result will be that budgets, already under pressure, will be squeezed further.

FINDINGS

- F1. All of the agencies investigated in this report had pension liabilities in excess of pension assets as of FY 2016.
- F2. A prolonged period of declining global investment returns has led pension plan assets to underperform their targeted expected returns.
- F3. MCERA, CalPERS and CalSTRS have lowered their discount rates, which will result in significantly higher required contributions by Marin County agencies in the next few years.
- F4. If pension plan administrators discounted net pension liabilities according to accounting rules used for the private sector, increases in required contributions would be vastly larger than those required by the recent lowering of discount rates.
- F5. Most Marin County school districts have a negative net position due in part to the addition of net pension liabilities to their balance sheets.
- F6. The required contributions of Marin school districts to CalSTRS and CalPERS will nearly double within the next five to six years due to legislatively (CalSTRS) and administratively (CalPERS) mandated contribution increases.
- F7. Pension contribution increases will strain Marin County agency budgets, requiring either cutbacks in services, new sources of revenue or both.
- F8. The private sector has largely moved away from defined benefit plans primarily due to the risk of underfunding, offering instead defined contribution plans to its employees.
- F9. Taxpayers bear most of the risk of Marin County employee pension plan assets underperforming their expected targets.
- F10. Retirees' pension benefits would be reduced if an agency was unable to meet its contribution obligations.

RECOMMENDATIONS

- R1. The Marin Board of Supervisors should empanel a commission to investigate methods to reduce pension debt and to find ways to keep the public informed. The panel should be comprised of Marin citizens with no financial interest in any public employee pension plan and should be allowed to engage legal and actuarial consultants to develop and propose alternatives to the current system.
- R2. CalSTRS and MCERA should provide actuarial calculations based on the risk-free rate as CalPERS does in its termination calculations.
- R3. Agencies should publish long-term budgets (i.e., covering at least five years), update them at least every other year and report what percent of total revenue they anticipate spending on pension contributions.
- R4. Each agency should provide 10 years of audited financial statements and summary pension data for the same period (or links to them) on the financial page of its public website.
- R5. For the purposes of transparency, MCERA, CalSTRS and CalPERS should publish an actuarial analysis of the effect of Cost of Living Allowances (COLA) on unfunded pension liabilities on an annual basis.
- R6. Elected state officials should support legislation to permit public agencies to offer defined contribution plans for new employees.
- R7. Elected state officials should support legislation to implement a statewide financial economic health oversight committee of all public entities similar to that implemented in NY.
- R8. Public agencies and public employee unions should begin to explore how introduction of defined contribution programs can reduce unfunded liabilities for public pensions.

REQUEST FOR RESPONSES

Pursuant to Penal code section 933.05, the grand jury requests responses as follows:

From the following governing bodies:

- Bolinas-Stinson Union School District (R3, R4, R8)
- Central Marin Police Authority (R3, R4, R8)
- Central Marin Sanitation Agency(R3, R4, R8)
- City of Belvedere (R3, R4, R8)
- City of Larkspur (R3, R4, R8)
- City of Mill Valley (R3, R4, R8)
- City of Novato (R3, R4, R8)
- City of San Rafael (R3, R4, R8)
- City of Sausalito (R3, R4, R8)

- Marin Community College District (R3, R4, R8)
- Dixie Elementary School District (R3, R4, R8)
- Kentfield Fire Protection District (R3, R4, R8)
- Kentfield School District (R3, R4, R5, R8)
- Larkspur-Corte Madera School District (R3, R4, R8)
- Las Gallinas Valley Sanitary District (R3, R4, R8)
- Marin County (R1, R3, R4, R8)
- MCERA (R2, R5, R8)
- Marin County Office of Education (R3, R4, R8)
- Marin Municipal Water District (R3, R4, R8)
- Marin/Sonoma Mosquito & Vector Control (R3, R4, R8)
- Marinwood Community Services District (R3, R4, R8)
- Mill Valley School District (R3, R4, R8)
- North Marin Water District (R3, R4, R8)
- Novato Fire Protection District (R3, R4, R8)
- Novato Sanitary District (R3, R4, R8)
- Novato Unified School District (R3, R4, R8)
- Reed Union School District (R3, R4, R8)
- Richardson Bay Sanitary District (R3, R4, R8)
- Ross School District (R3, R4, R8)
- Ross Valley Fire Department (R3, R4, R8)
- Ross Valley Sanitary District (R3, R4, R8)
- Ross Valley School District (R3, R4, R8)
- San Rafael City Schools - Elementary (R3, R4, R8)
- San Rafael City Schools - Secondary (R3, R4, R8)
- Sanitary District # 5 (R3, R4, R8)
- Sausalito Marin City Sanitation District (R3, R4, R8)
- Sausalito Marin City School District (R3, R4, R8)
- Shoreline Unified School District (R3, R4, R8)
- Southern Marin Fire Protection District (R3, R4, R8)
- Tamalpais Community Services District (R3, R4, R8)
- Tamalpais Union High School District (R3, R4, R8)
- Tiburon Fire Protection District (R3, R4, R8)
- Town of Corte Madera (R3, R4, R8)
- Town of Fairfax (R3, R4, R8)
- Town of Ross (R3, R4, R8)
- Town of San Anselmo (R3, R4, R8)
- Town of Tiburon (R3, R4, R8)

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted in accordance with Penal Code section 933 (c) and subject to the notice, agenda and open meeting requirements of the Brown Act.

The following individuals are invited to respond:

- California State Assemblymember Marc Levine (R6, R7)
- California State Senator Mike McGuire (R6, R7)
- California Governor Edmund G. Brown, Jr. (R6, R7)
- CalPERS Chief Executive Officer Marcie Frost (R5, R8)
- CalSTRS Chief Executive Officer Jack Ehnes (R2, R5, R8)

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| Note: At the time this report was prepared information was available at the websites listed. |
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| Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury <u>not</u> contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury. The California State Legislature has stated that it intends the provisions of Penal Code Section 929 prohibiting disclosure of witness identities to encourage full candor in testimony in Grand Jury investigations by protecting the privacy and confidentiality of those who participate in any Civil Grand Jury investigation. |
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GLOSSARY

401(k): A retirement savings plan sponsored by an employer. A 401(k) allows workers to save and invest a piece of their paycheck before taxes are deducted. Taxes aren't paid until the amounts are withdrawn.⁴⁵

Actuary: A professional specially trained in mathematics and statistics that gathers and analyzes data and estimate the probabilities of various risks, typically for insurance companies.⁴⁶

California Bill SB 400: A California statute⁴⁷ passed by the legislature and signed by then Governor Grey Davis in 1999 retroactively raising the pension benefits for public employees.

California Public Employees' Retirement System (CalPERS): An agency in the California executive branch that serves more than 1.7 million members in its retirement system and administers benefits for nearly 1.4 million members and their families in its health program.⁴⁸

California State Teachers' Retirement System: A pension fund in California established in 1913 to manage the retirement benefits of public school educators.

Cost of Living Allowance (COLA): An annual increase in pension benefits granted to retirees, typically based upon the rate of inflation in a specific geographic area.

Comprehensive Annual Financial Report (CAFR): A report issued by a government entity that includes the entity's audited financial statements for the fiscal year as well as other information about the entity. The report must meet accounting standards established by the Governmental Accounting Standards Board (GASB).⁴⁹ Audited financial reports may be referred to as "audit reports" or "financial statements" by various public agencies.

Defined Benefit (DB): A type of retirement plan in which an employer/sponsor promises a specified payments (or payments) on retirement that is predetermined by a formula based on factors including an employee's earnings history, tenure of service and age.⁵⁰

Defined Contribution (DC): A type of retirement plan in which the employer, employee or both contribute on a regular basis into an account where the funds may be invested. At retirement, the employee receives a benefit whose size depends on the accumulated value of the funds in the retirement account.⁵¹

Discount Rate: The interest rate used in present value calculations.

⁴⁵ "[What is a 401\(k\)?](#)" *WSJ.com*. Accessed 25 March 2017.

⁴⁶ Bodie, Zvi and Merton, Robert C. *Finance*. Upper Saddle River. Prentice-Hall Inc. 1998. Pg. 223

⁴⁷ [Senate Bill No. 400](#), *California Law*

⁴⁸ "[CalPERS Story](#)." *CalPERS*. Accessed March 2017.

⁴⁹ "[Comprehensive Annual Financial Report \(CAFR\)](#)." *Municipal Securities Rulemaking Board*.

⁵⁰ Bodie, Zvi and Merton, Robert C. *Finance*. Upper Saddle River. Prentice-Hall Inc. 1998. Pg. 50.

⁵¹ *Ibid*.

Financial Accounting Standards Board (FASB): “Established in 1973, the Financial Accounting Standards Board (FASB) is the independent, private-sector, not-for-profit organization based in Norwalk, Connecticut, that establishes financial accounting and reporting standards for public and private companies and not-for-profit organizations that follow Generally Accepted Accounting Principles (GAAP).”⁵²

Fiduciary Duty: A legal obligation of one party to act in the best interest of another. Typically, a fiduciary is entrusted with the care of money or other asset for another person.⁵³

Fiscal Year (FY): A term of one year, typically beginning on the 1st day of July extending through the last day of June.

Governmental Accounting Standards Board (GASB): “The independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments. Established in 1984 by agreement of the Financial Accounting Foundation (FAF) and ten national associations of state and local government officials, the GASB is recognized by governments, the accounting industry, and the capital markets as the official source of generally accepted accounting principles (GAAP) for state and local governments.”⁵⁴

Hybrid Plan: A pension plan that contains both defined benefit and defined contribution options.

Independent Retirement Account (IRA): Retirement accounts that permit and encourage savings by individuals through the pre-tax investment of wages and salaries. Such investment accounts accumulate returns that are not taxed until withdrawals at a later date.

Market Value of Assets (MVA): The value of accumulated assets at the current value of individual assets as opposed to the original cost.

Marin County Employees Retirement Association (MCERA): A pension fund in Marin County, CA that manages the retirement assets and benefits of several municipalities and public agencies.

Net Pension Liability (NPL): The total pension obligation of an organization for its employees less the value of assets held to fund those benefits.

Normal Cost: The present value of future pension benefits earned during the current accounting period.

⁵² [About the FASB](#), Financial Accounting Standards Board.

⁵³ “[Fiduciary Duty](#)” *Businessdictionary.com*.

⁵⁴ “[FACTS about GASB](#).” *Governmental Accounting Standards Board*. 2012–2014.

Present Value (PV): The current worth of a future sum of money or stream of cash flows given a specified rate of return.⁵⁵

Public Employees Pension Reform Act of 2013 (PEPRA): An act of State Legislature, which imposes certain limits on pension benefits for public employees hired after 2013.

Quantitative Easing: A monetary policy whereby a central bank, such as the Federal Reserve, creates money to fund the purchase of government securities - e.g. US Treasury Bonds - with the objective of stimulating the economy.

Risk-Free Rate: A discount rate considered to have no risk of default over time, typically a United States Treasury obligation backed by the full faith and credit of the United States.

Sensitivity Analysis: An analysis of the impact of different discount rates on unfunded liabilities. Typically, the discount rates used in the analysis are minus 1% and plus 1% of the stated discount rate of the liability.

Termination Fee: The fee levied by a pension fund against an agency for terminating the contract between the two parties. The fee amounts to the difference between the total liabilities calculated at the nominal discount rate versus the risk-free rate, typically a mix of 10-year and 30-year US Treasury bonds. The rationale for the fee is that as no additional contributions will be forthcoming from the agency to fund existing liabilities, a basket of securities without risk is required to prevent reductions of benefits.

Time value of money: The core principal of finance holds that money in hand today is worth more than the expectation of the same amount to be received in the future. First, money may be invested and earn interest, resulting in a larger amount in the future. Second, the purchasing power of money may decline over time due to inflation. Third, the receipt of money expected in the future is uncertain.⁵⁶

Total Pension Liability: The total obligation of an agency to fund pension benefits for active and retired employees.

Unfunded Actuarial Accrued Liability (UAAL): The excess of the Actuarial Accrued Liability (AAL) over the actuarial value of assets.⁵⁷

⁵⁵ Bodie, Zvi and Merton, Robert C. *Finance*. Upper Saddle River. Prentice-Hall Inc. 1998. Pg. 89.

⁵⁶ Bodie, Zvi and Merton, Robert C. *Finance*. Upper Saddle River. Prentice-Hall Inc. 1998. Pg. 82.

⁵⁷ [“Other Postemployment Benefits: A Plain-Language Summary of GASB Statements No. 43 and No. 45.”](#) *Governmental Accounting Standards Board*.

Appendix A: Public Sector Agencies

The table below contains the list of public agencies, school districts and municipalities investigated in this report, the corresponding pension fund(s) for each and the source of audited financial statements used in this report.

For each agency, the five fiscal years from 2012 through 2016 were examined. All agencies reviewed in this report use the calendar dates of July 1 through June 30 for the fiscal year. (Note: San Rafael City Schools is a single district, but it produces separate financial statements for the elementary schools and the high schools. This report presents them separately.)

| Municipality | Pension Funds | Audit Reports |
|----------------------|----------------------|---|
| County of Marin | MCERA | Comprehensive Annual Financial Report www.marincounty.org |
| City of Belvedere | CalPERS | Audited Financial Report www.ci.belb |
| City of Larkspur* | CalPERS | Audited Financial Report www.ci.larkspur.ca.us |
| City of Mill Valley | CalPERS | Audited Financial Report www.cityofmillvalley.org |
| City of Novato | CalPERS | Comprehensive Annual Financial Report www.novato.org |
| City of San Rafael | MCERA | Comprehensive Annual Financial Report www.cityofsanrafael.org |
| City of Sausalito | CalPERS | Comprehensive Annual Financial Report www.ci.sausalito.ca.us |
| Town of Corte Madera | CalPERS | Comprehensive Annual Financial Report www.ci.corte-madera.ca.us |
| Town of Fairfax* | CalPERS | Basic Financial Statements and Independent Auditor's Report www.town-of-fairfax.org |
| Town of Ross | CalPERS | Financial Report www.townofross.org |
| Town of San Anselmo | CalPERS | Annual Financial Report www.townofsananselmo.org |
| Town of Tiburon | CalPERS | Annual Financial Report www.townoftiburon.org |

Appendix A: Public Sector Agencies (cont'd)

| School District | Pension Funds | Audit Reports |
|---------------------------------------|----------------------|---|
| Bolinas-Stinson Union School District | CalSTRS CalPERS | Audit Report July 1, 2012 - June 30, 2016 www.bolinas-stinson.org |
| College of Marin | CalSTRS CalPERS | Financial Statements www.marin.edu |
| Dixie Elementary School District | CalSTRS CalPERS | Audit Report www.dixieschool.com |
| Kentfield School District | CalSTRS CalPERS | Audit Report http://www.kentfieldschools.org/pages/Kentfield_School_District |
| Larkspur-Corte Madera School District | CalSTRS CalPERS | Audit Report www.lcmschools.org |
| Marin County Office of Education | CalSTRS CalPERS | Audit Report www.marinschools.org |
| Mill Valley School District | CalSTRS CalPERS | Audit Report www.mvschools.org |
| Novato Unified School District | CalSTRS CalPERS | Audit Report www.nusd.org |
| Reed Union School District | CalSTRS CalPERS | Audit Report www.reedschools.org |
| Ross School District | CalSTRS CalPERS | Audit Report www.rossbears.org |
| Ross Valley School District | CalSTRS CalPERS | Audit Report www.rossvalleyschools.org |
| San Rafael City Schools - Elementary | CalSTRS CalPERS | Audit Report www.srcs.org |
| San Rafael City Schools - High School | CalSTRS CalPERS | Audit Report www.srcs.org |
| Sausalito Marin City School District | CalSTRS CalPERS | Audit Report www.smcsd.org |
| Shoreline Unified School District | CalSTRS CalPERS | Annual Financial www.shorelineunified.org |
| Tamalpais Union High School District | CalSTRS CalPERS | Audit Report www.tamdistrict.org |

| Safety District | Pension Funds | Audit Reports |
|---|----------------------|--|
| Central Marin Police Authority* | CalPERS | Twin Cities Police Authority (FY 2012) Financial Statements and Independent Auditor's Report http://centralmarinpolice.org |
| Kentfield Fire Protection District | CalPERS | Basic Financial Statements www.kentfieldfire.org |
| Novato Fire Protection District | CalPERS | Independent Auditor's Report www.novato.org |
| Ross Valley Fire Department | CalPERS | Basic Financial Statements www.rossvalleyfire.org |
| Southern Marin Fire Protection District | MCERA | Basic Financial Statements southernmarinfire.org |
| Tiburon Fire Protection District | CalPERS | Comprehensive Financial Report www.tiburonfire.org |

| Utility District | Pension Funds | Audit Reports |
|---|----------------------|---|
| Central Marin Sanitation Agency | CalPERS | Financial Statements and Independent Auditor's Report www.cmsa.us |
| Las Gallinas Valley Sanitary District | CalPERS | Comprehensive Annual Financial Report www.lgvsd.org |
| Marin Municipal Water District | CalPERS | Comprehensive Annual Financial Report www.marinwater.org |
| Marin/Sonoma Mosquito & Vector Control District | MCERA | Basic Financial Statements www.msosquito.com |
| Marinwood Community Services District | CalPERS | Basic Financial Statements www.marinwood.org |
| North Marin Water District | MCERA | Comprehensive Annual Financial Report www.nmwd.com |
| Novato Sanitary District | CalPERS | Comprehensive Annual Financial Report www.novatosan.com |
| Richardson Bay Sanitary District | CalPERS | Financial Statements www.richardsonbaysd.org |
| Ross Valley Sanitary District | CalPERS | Basic Financial Statements www.rvsd.org |
| Sanitary District # 5 Tiburon-Belvedere | CalPERS | Financial Statements www.sani5.org |
| Sausalito Marin City Sanitation District | CalPERS | Financial Statements and Independent Auditor's Report www.sausalitomarincitysanitarydistrict.com |
| Tamalpais Community Services District | CalPERS | Financial Statements and Independent Auditor's Report www.tcsd.us |

Appendix B: Methodology Detail

The Grand Jury collected data from the sources described above: over 200 audited financial reports alone published by the entities (see Appendix A). Multiple jurors participated in the collection and review of all financial data items according to the process and methods described above.

The collected data were entered into spreadsheets to allow the Grand Jury to analyze relevant financial statistics. In order to assure a consistent interpretation of the financial data from these audited reports, and to ensure the correct transcription of the data to spreadsheets used for the analysis, multiple jurors participated in validation of each data item. In those cases where data was provided in separate portions of the report (i.e. a school district's CalPERS and CalSTRS pensions reported separately), the Grand Jury performed the appropriate summations to aid in our analysis.

In examining the audited financial reports of the public entities, the Grand Jury captured basic financial data from multiple fiscal years to determine the relative health of the entities with regard to pensions. Audited reports tend to have a similar structure, containing the following four major sections:

- The Independent Auditors Report
- Management's Discussion and Analysis (MD&A)
- Basic Financial Statements
- Notes to Financial Statements

Specific financial data was retrieved from these sections as follows:

Basic Financial Statements

Total Revenue

Revenues are taken from the Statement of Revenues, Expenditures and Changes in Fund Balances using the Total Governmental Funds column. Revenue used in this investigation includes both operating revenue and non-operating revenue.

In some instances, non-operating revenue was stated net of interest expense. In those cases, the appropriate calculations were performed to reverse the reduction of non-operating revenue to provide a true total of revenue from all sources. Revenue totals were then reconciled with statistics provided in the Basic Financial Statements.

In the case of municipalities, which have diverse sources of revenue, we used revenue as stated in the MD&A section of the relevant audit report.

Total Expenses

Total Expenses came from the Statement of Activities. Expenses cited in this investigation include both operating expenses and non-operating expenses.

Financial data used in this investigation are derived primarily from balance sheets and statements of revenue and expenses.

In the case of municipalities, which have diverse expenses, we used expenses as stated in the MD&A section of the relevant audit report.

Total Assets

The total assets of each entity were collected. Total assets include both short-term assets, long-term assets and capital assets.

Cash Position

Cash positions were considered to include cash and cash equivalents, the standard method of reporting.

Net Position

Net position is the excess of total assets of an entity minus the total liabilities. In the instance where liabilities exceed assets, the net position is negative.

Net Pension Liability

The net pension liability is provided in the Notes section of the audit reports.

Net Pension Liability Sensitivity, +1%

The net pension liability sensitivity for +1% is provided in the Notes section of the audit reports.

Net Pension Liability Sensitivity, -1%

The net pension liability sensitivity for -1% is provided in the Notes section of the audit reports.

These statistics are provided in the Notes section of the audit report in compliance with GASB 68 requirements.

Pension contribution

The total contribution for pensions is included in the Notes section of the audit reports. The Grand Jury chose to use pension contributions, rather than pension expense (a new GASB 68 requirement) for comparison purposes with older financial reports.

Total pension contributions for municipalities were stated in at least three separate sections of the CAFR: as a contribution in the Notes section on pensions, in the table labeled “Contributions

subsequent to measurement date” and in the supplementary notes section. In most cases, the pension contribution was identical throughout the report. In some cases there were small differences among the values, and in one case (Town of Fairfax) there were material differences. In all of these cases the Grand Jury chose to use the “Contributions subsequent to measurement date” number and did not attempt to reconcile the differences.

The County of Marin changed its pension contribution reporting methodology in 2015 due to GASB 68. Prior to FY 2015, the County reported its pension contributions with a one-year lag. (For example, the FY 2014 report showed contributions for FY 2013). The result was that FY 2014 pension contributions were not included in either the FY 2014 or FY 2015 CAFR. Accordingly, the Grand Jury obtained FY 2014 pension contributions directly from the County Department of Finance. To address the one-year lag in reporting, the Grand Jury chose to use the contributions made in FY 2013 as provided by the Department of Finance rather than the number reported in the audit reports for FY 2012 & FY 2013.

An explanation of discount rates and present value calculations is presented as Appendix C, Discount Rate Primer.

Termination Statistics

Risk Free Liability of Termination

CalPERS provides to its participating agencies on an annual basis the one-time contribution required for the entity to terminate the pension plan. Under those circumstances, which are rare, CalPERS is no longer able to rely upon annual contributions by the entity to fund retirees and current employees.

CalPERS has determined under these circumstances that the discount rate for a termination must be “risk-free.” That is, CalPERS is not willing to assume the risk normally associated with investment of an entity’s assets in a balanced portfolio. Accordingly, CalPERS will price the termination discount rate using a combination of the 10-year and 30-year US Treasury obligations.

Neither CalSTRS nor MCERA provide a similar calculation.

Derived Statistics

The Grand Jury created several statistics from the basic financial data to assist in the evaluation of pension liabilities.

Pension Contributions as a Percentage of Revenue

Net Pension Liability as a Percentage of Cash

Net Pension Liability as a Percentage of Assets

Fiscal Year 2015 to Fiscal Year 2016 % Change in Net Pension Liabilities

Appendix C: Discount Rate Primer

Calculating Present Value of an Annuity⁵⁸

The calculation of the value of pension benefits offered to employees can be viewed simply as the present value of an annuity: how much should be paid for an investment at present to produce an expected payment stream in the future. The concept of present value is based on the idea that money has time value. For example, if an investor were offered \$1 today or \$1 in the future, the investor would choose the dollar today because it can be invested to earn interest and produce more than \$1 in the future. When determining how much should be paid today for an investment that is expected to produce income in the future, an adjustment, or discounting, must be applied to income received in the future to reflect the time value of money.

The calculation of present value (PV) for one time period is:

$$PV = FV \frac{1}{(1+i)^n}$$

Where:

FV = Future value

i = interest rate

n = number of years

Example: How much should an investor put into a savings account today, with a 5% expected return, in order to receive \$100 in a year?

$$PV = 100 \frac{1}{(1+.05)^1}$$
$$PV = 95.24$$

Answer: \$95.24

Expanding on this principle, the calculation of an annuity, which spans multiple years, follows:

$$PVA = R \frac{1}{(1+i)^1} + R \frac{1}{(1+i)^2} + R \frac{1}{(1+i)^3} \dots + R \frac{1}{(1+i)^n}$$

⁵⁸ Brueggeman, William B. and Fisher, Jeffrey D. (2005) Real Estate Finance and Investments. New York, NY McGraw Hill.

Alternatively:

$$PVA = R \sum_{t=1}^n \frac{1}{(1+i)^t}$$

Where:

PVA = Present value of an annuity

R = payment

i = interest rate

n = number of years

Example: How much would an investor need to set aside today in order to receive \$100 a year for five years if the interest rate was 5%?

$$PVA = 100 \frac{1}{(1+.05)^1} + 100 \frac{1}{(1+.05)^2} + 100 \frac{1}{(1+.05)^3} + 100 \frac{1}{(1+.05)^4} + 100 \frac{1}{(1+.05)^5}$$

Answer: \$432.95

Example: If the interest rate was 10%?

Answer: \$379.08

This simple example illustrates how a higher discount rate results in a much lower required initial investment to meet a particular future need.

Appendix D: GASB Primer

The Governmental Accounting Standards Board (GASB), founded in 1984, is an independent, nonprofit, non-governmental regulatory body charged with setting accounting and financial reporting standards for state and local governments. Prior to its founding, accounting standards for all types of enterprises were set by the Financial Accounting Standards Board (FASB).

In November 1994, GASB issued Statement 27, which established standards for accounting and financial reporting of pension benefits. Some of the key parts of GASB 27 were:

- The employer's expense for pensions was equal to the annual required contribution (ARC) as determined by the actuary in accordance with certain parameters, including the frequency of actuarial valuations and the methods and assumptions used.
- If the employer's actual contributions were different than the ARC, the accumulated difference plus interest was reported as the Net Pension Obligation in the employer's financial statements.
- Actuarial trend information was reported as Required Supplementary Information (RSI) to the financial statements, including note disclosures to the RSI.⁵⁹

In June 2012, GASB 68 extensively amended GASB 27:

- Net Pension Liability on the Balance Sheet – Government employers that sponsor DB plans will now recognize a net pension liability [on their] balance sheet.
- New Discount Rate – The discount rate can continue to be the expected long-term rate of return on plan investments where current assets plus future contributions are projected to cover all future benefit payments. However, plans where current assets plus future contributions are projected not to cover all future benefit payments must use a municipal bond rate to discount the noncovered payments.
- More Variable Pension Expense – Pension expense will now be based on the net pension liability change between reporting dates, with some sources of the change recognized immediately in expense and others amortized over years. Service cost, interest on net pension liability, and expected investment earnings — as well as liability for any plan benefit change related to past service since the last reporting period — must also be expensed immediately.

⁵⁹ Findlay, Gary. "GASB's Pension Accounting Standards: Déjà vu all over again.", *Pensions & Investments*, October 22, 2012

- Changes in actuarial assumptions and experience gains and losses must be amortized over a closed period equal to the average remaining service of active and inactive plan members (who have no future service) — a much shorter than typical period. Investment gains and losses must be recognized in pension expense over closed 5-year periods.
- Cost-sharing Employers (those in plans where assets are pooled and can be used to pay benefits of any employer in the pool) Report a Proportionate Liability – These employers will now report a net pension liability and pension expense equal to their proportionate share of the cost-sharing plan.
- More Extensive Disclosures and Required Supplementary Information – More extensive note disclosures are required, including types of benefits and covered employees, how plan contributions are determined, and assumptions/methods used to calculate the pension liability.⁶⁰

GASB 68 was effective for fiscal years beginning after June 15, 2014, which means that FY 2014-2015 was the first year for which it was reflected in the financial statements of the agencies that are the subject of this report.

⁶⁰ “GASB Approves New Pension Accounting Standards.”, *Bartel Associates, LLC*, August 5, 2012

Appendix E: Public Agency Balance Sheet Data

FY 2016

| Municipalities | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL% of Assets | NPL % of Cash |
|----------------------|------------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------|---------------|
| City of Belvedere | \$10,054,000 | \$3,595,630 | \$5,678,000 | \$3,080,855 | \$5,057,618 | \$1,451,306 | 30.6% | 85.7% |
| City of Larkspur* | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| City of Mill Valley | \$61,952,000 | \$17,919,732 | \$4,017,000 | \$25,010,100 | \$42,044,314 | \$10,993,085 | 40.4% | 139.6% |
| City of Novato | \$375,695,895 | \$59,936,536 | \$291,122,782 | \$32,111,535 | \$54,651,732 | \$13,464,873 | 8.5% | 53.6% |
| City of San Rafael | \$300,378,000 | \$66,009,979 | \$141,542,000 | \$142,323,127 | \$263,741,368 | \$42,614,784 | 47.4% | 215.6% |
| City of Sausalito | \$93,777,974 | \$28,955,501 | \$27,987,699 | \$19,635,621 | \$31,512,817 | \$9,872,158 | 20.9% | 67.8% |
| County of Marin | \$1,992,947,827 | \$408,896,116 | \$1,390,055,902 | \$203,688,484 | \$377,458,682 | \$60,988,969 | 10.2% | 49.8% |
| Town of Corte Madera | \$78,944,247 | \$15,323,517 | \$47,275,642 | \$14,263,877 | \$22,204,244 | \$7,732,353 | 18.1% | 93.1% |
| Town of Fairfax* | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Town of Ross | \$19,557,803 | \$10,528,331 | \$13,434,401 | \$3,548,143 | \$5,793,448 | \$1,701,623 | 18.1% | 33.7% |
| Town of San Anselmo | \$29,217,215 | \$6,606,250 | \$10,925,168 | \$5,299,442 | \$8,601,144 | \$2,573,504 | 18.1% | 80.2% |
| Town of Tiburon | \$63,662,493 | \$21,441,460 | \$52,944,160 | \$5,412,997 | \$10,066,334 | \$2,805,016 | 8.5% | 25.2% |
| Totals | \$3,026,187,454 | \$639,213,052 | \$1,984,982,754 | \$454,374,181 | \$821,131,701 | \$154,197,671 | 15.0% | 71.1% |

| School Districts | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL% of Assets | NPL % of Cash |
|---------------------------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------|---------------|
| Bolinas-Stinson Union School District | \$4,810,121 | \$2,828,769 | \$1,406,313 | \$3,039,017 | \$4,710,035 | \$1,649,952 | 63.2% | 107.4% |
| Dixie Elementary School District | \$32,522,470 | \$18,194,342 | -\$11,279,305 | \$18,296,623 | \$28,111,026 | \$10,138,805 | 56.3% | 100.6% |
| Kentfield School District | \$36,650,017 | \$16,899,110 | -\$6,602,777 | \$13,427,307 | \$20,538,517 | \$7,516,633 | 36.6% | 79.5% |
| Larkspur-Corte Madera School District | \$63,370,037 | \$6,262,719 | -\$20,314,913 | \$15,695,360 | \$24,040,435 | \$8,759,042 | 24.8% | 250.6% |
| Marin Community College District | \$297,031,000 | \$17,857,000 | -\$5,569,000 | \$45,723,000 | \$74,506,000 | \$24,466,000 | 15.4% | 256.1% |
| Marin County Office of Education | \$71,319,233 | \$44,767,583 | \$39,274,235 | \$21,263,747 | \$33,325,302 | \$11,236,462 | 29.8% | 47.5% |
| Mill Valley School District | \$90,032,772 | \$21,001,383 | -\$22,426,359 | \$33,102,435 | \$50,864,259 | \$18,356,989 | 36.8% | 157.6% |
| Novato Unified School District | \$144,877,763 | \$29,605,956 | -\$7,019,803 | \$60,585,951 | \$93,087,454 | \$33,570,412 | 41.8% | 204.6% |
| Reed Union School District | \$52,162,124 | \$10,224,426 | -\$650,150 | \$17,787,987 | \$27,309,547 | \$9,873,631 | 34.1% | 174.0% |
| Ross School District | \$35,969,694 | \$4,473,827 | \$7,390,298 | \$5,578,419 | \$8,558,914 | \$3,101,035 | 15.5% | 124.7% |
| Ross Valley School District | \$64,424,216 | \$18,159,492 | -\$13,237,323 | \$20,577,136 | \$31,530,697 | \$11,472,647 | 31.9% | 113.3% |
| San Rafael City Schools - Elementary | \$123,144,010 | \$50,000,124 | -\$15,195,483 | \$33,037,132 | \$50,443,688 | \$28,569,426 | 26.8% | 66.1% |
| San Rafael City Schools - High School | \$109,218,754 | \$54,037,304 | -\$17,227,292 | \$28,004,648 | \$43,124,257 | \$15,436,855 | 25.6% | 51.8% |
| Sausalito Marin City School District | \$27,255,480 | \$4,092,629 | \$2,360,366 | \$3,502,310 | \$5,426,137 | \$1,903,098 | 12.8% | 85.6% |
| Shoreline Unified School District | \$22,411,328 | \$7,043,760 | -\$2,374,726 | \$10,009,533 | \$15,448,543 | \$5,488,410 | 44.7% | 142.1% |
| Tamalpais Union High School District | \$203,339,657 | \$42,522,717 | \$7,712,183 | \$57,699,928 | \$88,683,304 | \$31,946,196 | 28.4% | 135.7% |
| Totals | \$1,378,538,676 | \$347,971,141 | -\$63,753,736 | \$387,330,533 | \$599,708,115 | \$223,485,593 | 28.1% | 111.3% |

Appendix E: Public Agency Balance Sheet Data (cont'd)

| Special Districts Safety | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL % of Cash |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|------------------|
| Central Marin Police Authority* | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Kentfield Fire Protection District | \$9,789,704 | \$3,507,855 | \$2,947,286 | \$4,310,797 | \$7,233,383 | \$1,913,867 | 44.0% | 122.9% |
| Novato Fire Protection District | \$35,403,303 | \$15,930,859 | \$10,305,465 | \$17,430,800 | \$32,301,320 | \$5,219,178 | 49.2% | 109.4% |
| Ross Valley Fire Department | \$3,008,924 | \$1,338,192 | -\$6,955,625 | \$7,800,931 | \$13,770,507 | \$2,905,473 | 259.3% | 582.9% |
| Southern Marin Fire Protection District | \$13,349,870 | \$9,102,154 | \$7,896,367 | \$6,033,143 | \$11,180,122 | \$1,806,460 | 45.2% | 66.3% |
| Tiburon Fire Protection District | \$11,652,619 | \$5,564,687 | \$5,444,495 | \$5,232,050 | \$10,007,964 | \$1,314,991 | 44.9% | 94.0% |
| Total | \$73,204,420 | \$35,443,747 | \$19,637,988 | \$40,807,721 | \$74,493,296 | \$13,159,969 | 55.7% | 115.1% |

| Special Districts Utility | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL % of Cash |
|---|------------------------|----------------------|----------------------|----------------------|----------------------|---------------------|--------------------|------------------|
| Central Marin Sanitation Agency | \$106,391,299 | \$14,974,538 | \$45,625,458 | \$6,643,602 | \$11,141,784 | \$2,929,830 | 6.2% | 14.6% |
| Las Gallinas Valley Sanitary District | \$81,480,447 | \$20,316,117 | \$63,883,215 | \$2,098,373 | \$3,571,571 | \$882,077 | 2.6% | 10.3% |
| Marin Municipal Water District | \$460,030,200 | \$16,947,252 | \$243,058,604 | \$69,753,895 | \$96,972,537 | \$47,010,300 | 15.2% | 411.6% |
| Marin/Sonoma Mosquito & Vector Control District | \$19,472,738 | \$11,634,371 | \$8,780,059 | \$4,135,340 | \$7,663,272 | \$1,238,215 | 21.2% | 35.5% |
| Marinwood Community Services District | \$6,784,666 | \$2,387,836 | -\$470,389 | \$3,322,116 | \$5,238,798 | \$1,624,470 | 49.0% | 139.1% |
| North Marin Water District | \$136,897,391 | \$5,411,426 | \$92,672,784 | \$8,619,837 | \$14,579,649 | \$3,833,847 | 6.3% | 159.3% |
| Novato Sanitary District | \$201,851,460 | \$19,742,079 | \$108,547,505 | \$3,528,249 | \$6,180,933 | \$1,338,148 | 1.7% | 17.9% |
| Richardson Bay Sanitary District | \$17,826,465 | \$1,595,379 | \$16,376,465 | \$1,101,797 | \$1,847,790 | \$485,893 | 6.2% | 69.1% |
| Ross Valley Sanitary District | \$122,064,345 | \$18,937,993 | \$66,824,699 | \$4,506,476 | \$7,557,675 | \$1,987,357 | 3.7% | 23.8% |
| Sanitary District # 5 Tiburon-Belvedere | \$30,527,780 | \$5,434,555 | \$20,083,181 | \$1,786,666 | \$2,996,362 | \$787,920 | 5.9% | 32.9% |
| Sausalito Marin City Sanitary District | \$46,001,842 | \$11,215,025 | \$39,986,927 | \$1,863,054 | \$3,124,472 | \$821,607 | 4.0% | 16.6% |
| Tamalpais Community Services District | \$8,062,948 | \$1,575,641 | \$1,239,870 | \$1,756,793 | \$3,255,545 | \$526,054 | 21.8% | 111.5% |
| Total | \$1,237,391,581 | \$130,172,212 | \$706,608,378 | \$109,116,198 | \$164,130,388 | \$63,465,718 | 8.8% | 83.8% |

Appendix E: Public Agency Balance Sheet Data (cont'd)

FY 2015

| Municipalities | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL% of Cash |
|----------------------|------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|-----------------|--------------|
| City of Belvedere | \$9,635,000 | \$2,981,537 | \$5,341,000 | \$2,821,673 | \$5,039,427 | \$986,027 | 29.3% | 94.6% |
| City of Larkspur* | \$45,030,851 | \$14,151,668 | \$24,277,367 | \$9,046,789 | \$15,797,243 | \$3,467,207 | 20.1% | 63.9% |
| City of Mill Valley | \$61,653,195 | \$20,419,625 | \$2,336,678 | \$21,174,403 | \$37,076,950 | \$8,022,272 | 34.3% | 103.7% |
| City of Novato | \$372,235,251 | \$60,646,987 | \$284,150,160 | \$29,915,448 | \$51,486,548 | \$11,986,247 | 8.0% | 49.3% |
| City of San Rafael | \$290,551,982 | \$65,829,733 | \$151,480,204 | \$74,253,787 | \$159,506,132 | \$3,692,492 | 25.6% | 112.8% |
| City of Sausalito | \$65,193,649 | \$11,696,520 | \$17,106,631 | \$17,741,671 | \$29,127,780 | \$8,335,668 | 27.2% | 151.7% |
| County of Marin | \$1,947,970,000 | \$367,440,909 | \$1,342,737,000 | \$142,013,491 | \$304,297,935 | \$7,062,046 | 7.3% | 38.6% |
| Town of Corte Madera | \$74,019,098 | \$9,073,608 | \$42,936,160 | \$12,146,336 | \$19,631,470 | \$5,958,264 | 16.4% | 133.9% |
| Town of Fairfax* | \$11,962,960 | \$2,463,991 | -\$1,376,349 | \$6,078,042 | \$9,422,128 | \$3,314,672 | 50.8% | 246.7% |
| Town of Ross | \$18,236,166 | \$10,234,934 | \$11,490,464 | \$3,465,264 | \$5,999,505 | \$1,374,389 | 19.0% | 33.9% |
| Town of San Anselmo | \$28,956,896 | \$5,822,276 | \$11,059,337 | \$4,002,434 | \$7,131,100 | \$1,405,939 | 13.8% | 68.7% |
| Town of Tiburon | \$62,234,833 | \$21,280,864 | \$52,632,219 | \$5,232,395 | \$9,162,200 | \$1,982,334 | 8.4% | 24.6% |
| Totals | \$2,987,679,881 | \$592,042,652 | \$1,944,170,871 | \$327,891,733 | \$653,678,418 | \$57,587,557 | 11.0% | 55.4% |

| School Districts | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL% of Cash |
|---------------------------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------|---------------|
| Bolinas-Stinson Union School District | \$4,866,633 | \$2,865,817 | \$1,587,636 | \$2,499,021 | \$4,063,986 | \$1,192,965 | 51.4% | 87.2% |
| Dixie Elementary School District | \$32,345,802 | \$20,512,452 | -\$12,361,898 | \$14,791,102 | \$23,752,949 | \$7,405,888 | 45.7% | 72.1% |
| Kentfield School District | \$36,671,347 | \$16,481,560 | -\$7,350,022 | \$11,241,124 | \$17,845,987 | \$5,731,639 | 30.7% | 68.2% |
| Larkspur-Corte Madera School District | \$67,710,441 | \$20,180,460 | -\$18,662,067 | \$13,339,460 | \$21,229,928 | \$6,757,236 | 19.7% | 66.1% |
| Marin Community College District | \$296,646,697 | \$16,563,890 | -\$1,453,534 | \$35,165,000 | \$57,576,000 | \$16,323,000 | 11.9% | 212.3% |
| Marin County Office of Education | \$65,200,872 | \$40,080,879 | \$35,148,165 | \$18,141,000 | \$29,793,000 | \$8,340,000 | 27.8% | 45.3% |
| Mill Valley School District | \$88,076,729 | \$17,389,526 | -\$25,517,249 | \$26,623,202 | \$42,487,967 | \$13,316,095 | 30.2% | 153.1% |
| Novato Unified School District | \$147,677,796 | \$30,810,042 | -\$9,238,177 | \$51,786,928 | \$82,735,169 | \$25,967,877 | 35.1% | 168.1% |
| Reed Union School District | \$52,705,559 | \$9,360,996 | -\$1,378,282 | \$13,830,041 | \$22,131,664 | \$6,904,029 | 26.2% | 147.7% |
| Ross School District | \$36,049,201 | \$3,875,832 | \$7,486,041 | \$4,733,569 | \$7,568,886 | \$2,368,118 | 13.1% | 122.1% |
| Ross Valley School District | \$58,186,120 | \$12,864,248 | -\$12,811,202 | \$16,841,437 | \$26,841,518 | \$8,499,130 | 28.9% | 130.9% |
| San Rafael City Schools - Elementary | \$90,671,410 | \$18,526,824 | -\$21,324,673 | \$26,576,187 | \$42,069,163 | \$13,668,565 | 29.3% | 143.4% |
| San Rafael City Schools - High School | \$57,092,257 | \$17,649,236 | -\$32,610,889 | \$21,868,291 | \$35,163,300 | \$10,775,267 | 38.3% | 123.9% |
| Sausalito Marin City School District | \$27,343,812 | \$3,879,729 | \$2,795,062 | \$2,990,897 | \$4,824,034 | \$1,461,280 | 10.9% | 77.1% |
| Shoreline Unified School District | \$22,894,320 | \$6,451,291 | -\$2,544,996 | \$8,800,020 | \$14,190,098 | \$4,302,465 | 38.4% | 136.4% |
| Tamalpais Union High School District | \$207,432,180 | \$44,567,689 | \$3,702,851 | \$46,266,492 | \$74,079,210 | \$23,062,248 | 22.3% | 103.8% |
| Totals | \$1,291,571,176 | \$282,060,471 | -\$94,533,234 | \$315,493,771 | \$506,352,859 | \$156,075,802 | 24.4% | 111.9% |

Appendix E: Public Agency Balance Sheet Data (cont'd)

| Special Districts Safety | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL % of Cash |
|---|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|--------------------|------------------|
| Central Marin Police Authority* | \$16,470,963 | \$178,725 | -\$1,124,490 | \$11,532,085 | \$18,375,103 | \$5,889,395 | 70.0% | 6452.4% |
| Kentfield Fire Protection District | \$9,630,272 | \$3,261,202 | \$1,651,848 | \$5,202,429 | \$8,026,436 | \$2,875,079 | 54.0% | 159.5% |
| Novato Fire Protection District | \$37,252,657 | \$17,461,022 | \$3,778,037 | \$15,014,710 | \$32,172,613 | \$746,651 | 40.3% | 86.0% |
| Ross Valley Fire Department | \$2,499,767 | \$912,212 | -\$8,316,114 | \$7,679,794 | \$13,318,349 | \$3,033,390 | 307.2% | 841.9% |
| Southern Marin Fire Protection District | \$12,413,494 | \$7,865,476 | \$5,848,381 | \$3,845,243 | \$8,239,354 | \$191,216 | 31.0% | 48.9% |
| Tiburon Fire Protection District | \$11,338,453 | \$5,938,906 | \$4,874,704 | \$6,315,892 | \$10,889,109 | \$2,546,208 | 55.7% | 106.3% |
| Total | \$89,605,606 | \$35,617,543 | \$6,712,366 | \$49,590,153 | \$91,020,964 | \$15,281,939 | 55.3% | 139.2% |

| Special Districts Utility | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL % of Cash |
|---|------------------------|----------------------|----------------------|---------------------|----------------------|---------------------|--------------------|------------------|
| Central Marin Sanitation Agency | \$109,050,874 | \$15,998,126 | \$45,345,155 | \$6,024,473 | \$10,784,954 | \$2,073,726 | 5.5% | 37.7% |
| Las Gallinas Valley Sanitary District | \$77,052,295 | \$19,742,483 | \$58,063,598 | \$1,693,868 | \$3,065,929 | \$555,188 | 2.2% | 8.6% |
| Marin Municipal Water District | \$462,338,812 | \$19,959,569 | \$243,685,640 | \$62,139,077 | \$87,637,727 | \$40,725,228 | 13.4% | 311.3% |
| Marin/Sonoma Mosquito & Vector Control District | \$18,321,390 | \$10,672,765 | \$7,632,034 | \$3,378,396 | \$7,239,023 | \$168,001 | 18.4% | 31.7% |
| Marinwood Community Services District | \$6,030,417 | \$1,858,999 | -\$294,365 | \$3,142,286 | \$4,975,627 | \$1,628,944 | 52.1% | 169.0% |
| North Marin Water District | \$134,483,309 | \$4,943,414 | \$88,155,270 | \$6,701,264 | \$12,079,630 | \$2,237,730 | 5.0% | 135.6% |
| Novato Sanitary District | \$203,141,502 | \$18,102,303 | \$105,599,405 | \$3,335,896 | \$5,943,534 | \$1,171,804 | 1.6% | 18.4% |
| Richardson Bay Sanitary District | \$17,887,393 | \$1,303,363 | \$16,613,138 | \$901,425 | \$1,793,212 | \$161,327 | 5.0% | 69.2% |
| Ross Valley Sanitary District | \$119,157,291 | \$14,295,359 | \$62,983,772 | \$3,708,693 | \$6,068,264 | \$1,750,473 | 3.1% | 25.9% |
| Sanitary District # 5 Tiburon-Belvedere | \$30,993,246 | \$3,622,532 | \$18,117,614 | \$2,757,064 | \$3,943,406 | \$1,772,512 | 8.9% | 76.1% |
| Sausalito Marin City Sanitary District | \$39,718,939 | \$9,218,762 | \$32,797,172 | \$1,759,386 | \$3,134,682 | \$618,021 | 4.4% | 19.1% |
| Tamalpais Community Services District | \$8,676,425 | \$1,662,061 | \$1,698,672 | \$1,028,347 | \$2,203,480 | \$51,138 | 11.9% | 61.9% |
| Total | \$1,226,851,893 | \$121,379,736 | \$680,397,105 | \$96,570,175 | \$148,869,468 | \$52,914,092 | 7.9% | 79.6% |

Appendix E: Public Agency Balance Sheet Data (cont'd)**2016 Totals**

| Agencies | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL % of Cash |
|------------------------------|------------------------|------------------------|------------------------|----------------------|------------------------|----------------------|----------------------------|--------------------------|
| Municipalities | \$3,026,187,454 | \$639,213,052 | \$1,984,982,754 | \$454,374,181 | \$821,131,701 | \$154,197,671 | 15.0% | 71.1% |
| School Districts | \$1,378,538,676 | \$347,971,141 | -\$63,753,736 | \$387,330,533 | \$599,708,115 | \$223,485,593 | 28.1% | 111.3% |
| Special Districts Safety | \$73,204,420 | \$35,443,747 | \$19,637,988 | \$40,807,721 | \$74,493,296 | \$13,159,969 | 55.7% | 115.1% |
| Special Districts Utility | \$1,237,391,581 | \$130,172,212 | \$706,608,378 | \$109,116,198 | \$164,130,388 | \$63,465,718 | 8.8% | 83.8% |
| Total | \$5,715,322,131 | \$1,152,800,152 | \$2,647,475,384 | \$991,628,633 | \$1,659,463,500 | \$454,308,951 | 17.4% | 86.0% |

2015 Totals

| Agencies | Assets | Cash | Net Position | NPL | NPL -1% | NPL +1% | NPL % of Assets | NPL % of Cash |
|-----------------------------|------------------------|------------------------|------------------------|----------------------|------------------------|----------------------|----------------------------|--------------------------|
| Municipalities | \$2,987,679,881 | \$592,042,652 | \$1,944,170,871 | \$327,891,733 | \$653,678,418 | \$57,587,557 | 11.0% | 55.4% |
| School Districts | \$1,291,571,176 | \$282,060,471 | -\$94,533,234 | \$315,493,771 | \$506,352,859 | \$156,075,802 | 24.4% | 111.9% |
| Special Districts Safety | \$89,605,606 | \$35,617,543 | \$6,712,366 | \$49,590,153 | \$91,020,964 | \$15,281,939 | 55.3% | 139.2% |
| Special Districts Safety | \$1,226,851,893 | \$121,379,736 | \$680,397,105 | \$96,570,175 | \$148,869,468 | \$52,914,092 | 7.9% | 79.6% |
| Total | \$5,595,708,556 | \$1,031,100,402 | \$2,536,747,108 | \$789,545,832 | \$1,399,921,709 | \$281,859,390 | 14.1% | 76.6% |

Appendix: F: Public Agency Income Statement Data

FY 2016

| Municipalities | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|----------------------|----------------------|----------------------|----------------------|--------------------------------------|
| City of Belvedere | \$7,855,000 | \$7,404,000 | \$327,816 | 4.2% |
| City of Larkspur* | N/A | N/A | N/A | N/A |
| City of Mill Valley | \$39,916,000 | \$38,133,000 | \$2,551,885 | 6.4% |
| City of Novato | \$47,954,000 | \$42,687,000 | \$2,604,320 | 5.4% |
| City of San Rafael | \$100,490,000 | \$110,893,000 | \$19,339,577 | 19.2% |
| City of Sausalito | \$26,588,325 | \$24,491,036 | \$1,763,040 | 6.6% |
| County of Marin | \$611,801,000 | \$554,877,000 | \$48,302,323 | 7.9% |
| Town of Corte Madera | \$23,593,928 | \$20,264,214 | \$1,810,099 | 7.7% |
| Town of Fairfax* | N/A | N/A | N/A | N/A |
| Town of Ross | \$9,264,385 | \$7,320,448 | \$1,339,398 | 14.5% |
| Town of San Anselmo | \$19,216,454 | \$19,350,623 | \$466,182 | 2.4% |
| Town of Tiburon | \$11,341,758 | \$11,029,817 | \$753,153 | 6.6% |
| Totals | \$898,020,850 | \$836,450,138 | \$79,257,793 | 8.8% |

| School Districts | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---------------------------------------|----------------------|----------------------|----------------------|--------------------------------------|
| Bolinas-Stinson Union School District | \$4,070,898 | \$4,252,221 | \$254,367 | 6.2% |
| Dixie Elementary School District | \$25,361,193 | \$24,220,753 | \$1,463,819 | 5.8% |
| Kentfield School District | \$19,712,081 | \$18,964,836 | \$1,065,278 | 5.4% |
| Larkspur-Corte Madera School District | \$21,966,152 | \$23,618,998 | \$1,214,607 | 5.5% |
| Marin Community College District | \$67,403,849 | \$82,922,415 | \$3,922,649 | 5.8% |
| Marin County Office of Education | \$56,776,827 | \$55,642,573 | \$1,851,569 | 3.3% |
| Mill Valley School District | \$50,815,837 | \$47,724,947 | \$2,592,161 | 5.1% |
| Novato Unified School District | \$94,185,666 | \$91,973,207 | \$4,150,779 | 4.4% |
| Reed Union School District | \$25,711,228 | \$24,983,096 | \$1,333,084 | 5.2% |
| Ross School District | \$8,748,369 | \$8,844,112 | \$440,091 | 5.0% |
| Ross Valley School District | \$29,323,920 | \$29,952,113 | \$1,621,067 | 5.5% |
| San Rafael City Schools - Elementary | \$62,306,271 | \$59,610,089 | \$2,888,024 | 4.6% |
| San Rafael City Schools - High School | \$37,919,147 | \$39,926,631 | \$2,009,294 | 5.3% |
| Sausalito Marin City School District | \$7,421,237 | \$7,798,127 | \$253,588 | 3.4% |
| Shoreline Unified School District | \$14,823,677 | \$14,594,704 | \$723,686 | 4.9% |
| Tamalpais Union High School District | \$92,371,238 | \$88,169,381 | \$5,256,408 | 5.7% |
| Totals | \$618,917,590 | \$623,198,203 | \$31,040,471 | 5.0% |

Appendix: F: Public Agency Income Statement Data (cont'd)

| Special Districts Safety | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|--|---------------------|---------------------|-------------------------|---|
| Central Marin Police Authority* | N/A | N/A | N/A | N/A |
| Kentfield Fire Protection District | \$5,014,333 | \$4,243,041 | \$951,986 | 19.0% |
| Novato Fire Protection District | \$27,838,320 | \$21,367,857 | \$4,848,895 | 17.4% |
| Ross Valley Fire Department | \$9,598,396 | \$8,237,907 | \$1,119,907 | 11.7% |
| Southern Marin Fire Protection District | \$14,911,632 | \$12,863,646 | \$2,072,079 | 13.9% |
| Tiburon Fire Protection District | \$7,184,792 | \$7,604,639 | \$1,471,646 | 20.5% |
| Total | \$64,547,473 | \$54,317,090 | \$10,464,513 | 16.2% |

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|----------------------|----------------------|-------------------------|---|
| Central Marin Sanitation Agency | \$16,952,527 | \$16,834,929 | \$936,613 | 5.5% |
| Las Gallinas Valley Sanitary District | \$12,976,695 | \$7,881,853 | \$295,427 | 2.3% |
| Marin Municipal Water District | \$62,502,430 | \$68,704,175 | \$5,725,637 | 9.2% |
| Marin/Sonoma Mosquito & Vector Control District | \$8,638,747 | \$8,584,599 | \$968,417 | 11.2% |
| Marinwood Community Services District | \$5,837,007 | \$6,013,031 | \$321,909 | 5.5% |
| North Marin Water District | \$17,912,719 | \$17,534,252 | \$828,792 | 4.6% |
| Novato Sanitary District | \$19,299,289 | \$16,587,829 | \$280,935 | 1.5% |
| Richardson Bay Sanitary District | \$2,993,714 | \$3,239,823 | \$77,297 | 2.6% |
| Ross Valley Sanitary District | \$23,623,985 | \$19,998,903 | \$543,759 | 2.3% |
| Sanitary District # 5 Tiburon-Belvedere | \$6,264,746 | \$4,558,920 | \$1,781,586 | 28.4% |
| Sausalito Marin City Sanitary District | \$8,391,876 | \$5,167,530 | \$276,804 | 3.3% |
| Tamalpais Community Services District | \$5,245,439 | \$5,655,202 | \$308,274 | 5.9% |
| Total | \$190,639,174 | \$180,761,046 | \$12,345,450 | 6.5% |

Appendix: F: Public Agency Income Statement Data (cont'd)

FY 2015

| Municipalities | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|----------------------|----------------------|----------------------|----------------------|--------------------------------------|
| City of Belvedere | \$7,475,000 | \$7,191,000 | \$280,813 | 3.8% |
| City of Larkspur* | \$21,009,094 | \$16,693,255 | \$802,226 | 3.8% |
| City of Mill Valley | \$37,844,000 | \$36,158,000 | \$2,077,981 | 5.5% |
| City of Novato | \$46,154,000 | \$41,545,000 | \$2,421,183 | 5.2% |
| City of San Rafael | \$94,752,000 | \$80,572,000 | \$17,802,358 | 18.8% |
| City of Sausalito | \$20,603,504 | \$17,970,673 | \$2,007,707 | 9.7% |
| County of Marin | \$602,627,000 | \$538,354,000 | \$41,871,696 | 6.9% |
| Town of Corte Madera | \$21,324,184 | \$16,988,011 | \$1,667,545 | 7.8% |
| Town of Fairfax* | \$9,212,366 | \$8,630,597 | \$1,276,895 | 13.9% |
| Town of Ross | \$10,081,926 | \$6,667,416 | \$217,566 | 2.2% |
| Town of San Anselmo | \$18,707,969 | \$15,807,161 | \$359,492 | 1.9% |
| Town of Tiburon | \$12,271,586 | \$9,589,263 | \$463,611 | 3.8% |
| Totals | \$902,062,629 | \$796,166,376 | \$71,249,073 | 7.9% |

| School Districts | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---------------------------------------|----------------------|----------------------|----------------------|--------------------------------------|
| Bolinas-Stinson Union School District | \$4,133,985 | \$3,839,557 | \$212,334 | 5.1% |
| Dixie Elementary School District | \$21,577,176 | \$23,137,648 | \$1,223,806 | 5.7% |
| Kentfield School District | \$17,024,884 | \$16,763,254 | \$879,311 | 5.2% |
| Larkspur-Corte Madera School District | \$19,285,300 | \$22,676,756 | \$1,016,124 | 5.3% |
| Marin Community College District | \$65,743,077 | \$76,103,061 | \$3,955,070 | 6.0% |
| Marin County Office of Education | \$53,863,696 | \$53,522,613 | \$1,571,597 | 2.9% |
| Mill Valley School District | \$46,142,878 | \$44,916,603 | \$2,194,414 | 4.8% |
| Novato Unified School District | \$84,447,074 | \$86,629,909 | \$3,710,767 | 4.4% |
| Reed Union School District | \$23,536,480 | \$22,614,955 | \$1,130,735 | 4.8% |
| Ross School District | \$7,831,472 | \$8,062,949 | \$367,499 | 4.7% |
| Ross Valley School District | \$26,202,736 | \$26,800,628 | \$1,343,461 | 5.1% |
| San Rafael City Schools - Elementary | \$53,530,867 | \$52,374,844 | \$2,370,708 | 4.4% |
| San Rafael City Schools - High School | \$34,638,111 | \$35,691,740 | \$1,672,501 | 4.8% |
| Sausalito Marin City School District | \$6,650,074 | \$7,478,427 | \$243,111 | 3.7% |
| Shoreline Unified School District | \$13,717,171 | \$15,547,928 | \$684,755 | 5.0% |
| Tamalpais Union High School District | \$84,711,887 | \$82,324,797 | \$3,866,993 | 4.6% |
| Totals | \$563,036,868 | \$578,485,669 | \$26,443,186 | 4.7% |

Appendix: F: Public Agency Income Statement Data (cont'd)

| Special Districts Safety | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|---------------------|---------------------|-------------------------|---|
| Central Marin Police Authority* | \$11,087,891 | \$12,682,790 | \$1,486,735 | 13.4% |
| Kentfield Fire Protection District | \$4,949,898 | \$4,477,793 | \$828,090 | 16.7% |
| Novato Fire Protection District | \$25,295,007 | \$21,313,411 | \$4,604,649 | 18.2% |
| Ross Valley Fire Department | \$8,900,504 | \$9,225,977 | \$973,697 | 10.9% |
| Southern Marin Fire Protection District | \$14,038,197 | \$14,067,722 | \$759,752 | 5.4% |
| Tiburon Fire Protection District | \$6,966,748 | \$7,294,411 | \$2,159,000 | 31.0% |
| Total | \$71,238,245 | \$69,062,104 | \$10,811,923 | 15.2% |

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|----------------------|----------------------|-------------------------|---|
| Central Marin Sanitation Agency | \$17,873,113 | \$16,220,247 | \$2,319,236 | 13.0% |
| Las Gallinas Valley Sanitary District | \$11,621,316 | \$7,930,633 | \$266,914 | 2.3% |
| Marin Municipal Water District | \$61,455,537 | \$69,478,882 | \$4,633,745 | 7.5% |
| Marin/Sonoma Mosquito & Vector Control District | \$8,396,908 | \$9,652,593 | \$856,583 | 10.2% |
| Marinwood Community Services District | \$5,224,022 | \$4,919,009 | \$269,828 | 5.2% |
| North Marin Water District | \$18,506,716 | \$17,456,194 | \$669,066 | 3.6% |
| Novato Sanitary District | \$18,571,214 | \$15,799,078 | \$173,410 | 0.9% |
| Richardson Bay Sanitary District | \$2,874,017 | \$2,976,836 | \$69,002 | 2.4% |
| Ross Valley Sanitary District | \$22,228,230 | \$20,570,289 | \$443,292 | 2.0% |
| Sanitary District # 5 Tiburon-Belvedere | \$6,316,447 | \$4,500,449 | \$1,600,837 | 25.3% |
| Sausalito Marin City Sanitary District | \$7,640,843 | \$5,596,332 | \$302,863 | 4.0% |
| Tamalpais Community Services District | \$5,161,781 | \$5,086,144 | \$306,954 | 5.9% |
| Total | \$185,870,144 | \$180,186,686 | \$11,911,730 | 6.4% |

Appendix: F: Public Agency Income Statement Data (cont'd)

FY 2014

| Municipalities | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|----------------------|----------------------|----------------------|----------------------|--------------------------------------|
| City of Belvedere | \$7,151,000 | \$7,771,000 | \$280,312 | 3.9% |
| City of Larkspur* | \$23,430,272 | \$16,496,021 | \$1,174,703 | 5.0% |
| City of Mill Valley | \$35,104,000 | \$36,651,000 | \$1,832,914 | 5.2% |
| City of Novato | \$45,725,000 | \$42,849,000 | \$4,167,992 | 9.1% |
| City of San Rafael | \$93,536,000 | \$90,637,000 | \$17,576,796 | 18.8% |
| City of Sausalito | \$19,374,007 | \$18,302,083 | \$1,339,935 | 6.9% |
| County of Marin | \$578,298,000 | \$566,596,000 | \$46,803,624 | 8.1% |
| Town of Corte Madera | \$18,827,611 | \$16,188,853 | \$1,591,599 | 8.5% |
| Town of Fairfax | \$9,854,550 | \$8,703,418 | \$964,694 | 9.8% |
| Town of Ross | \$7,521,177 | \$5,161,437 | \$292,890 | 3.9% |
| Town of San Anselmo | \$17,157,724 | \$15,292,443 | \$426,878 | 2.5% |
| Town of Tiburon | \$11,283,722 | \$9,040,229 | \$460,630 | 4.1% |
| Totals | \$867,263,063 | \$833,688,484 | \$76,912,967 | 8.9% |

| School Districts | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---------------------------------------|----------------------|----------------------|----------------------|--------------------------------------|
| Bolinas-Stinson Union School District | \$3,682,417 | \$3,611,583 | \$195,036 | 5.3% |
| Dixie Elementary School District | \$20,650,150 | \$21,303,737 | \$1,075,058 | 5.2% |
| Kentfield School District | \$15,874,438 | \$15,651,915 | \$782,734 | 4.9% |
| Larkspur-Corte Madera School District | \$18,407,176 | \$18,693,706 | \$919,073 | 5.0% |
| Marin Community College District | \$58,598,119 | \$69,675,296 | \$2,747,044 | 4.7% |
| Marin County Office of Education | \$54,109,107 | \$53,845,241 | \$1,488,826 | 2.8% |
| Mill Valley School District | \$43,586,940 | \$40,709,942 | \$1,931,950 | 4.4% |
| Novato Unified School District | \$76,012,499 | \$80,693,043 | \$3,710,767 | 4.9% |
| Reed Union School District | \$21,716,462 | \$22,510,117 | \$1,022,230 | 4.7% |
| Ross School District | \$7,437,995 | \$7,755,357 | \$342,318 | 4.6% |
| Ross Valley School District | \$25,052,122 | \$25,063,637 | \$1,202,960 | 4.8% |
| San Rafael City Schools - Elementary | \$48,715,280 | \$48,643,315 | \$2,003,613 | 4.1% |
| San Rafael City Schools - High School | \$33,065,771 | \$32,764,963 | \$1,458,967 | 4.4% |
| Sausalito Marin City School District | \$6,831,391 | \$7,212,560 | \$223,849 | 3.3% |
| Shoreline Unified School District | \$13,215,928 | \$14,468,849 | \$660,935 | 5.0% |
| Tamalpais Union High School District | \$80,916,231 | \$78,209,897 | \$3,931,527 | 4.9% |
| Totals | \$527,872,026 | \$540,813,158 | \$23,696,887 | 4.5% |

Appendix: F: Public Agency Income Statement Data (cont'd)

| Special Districts Safety | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|---------------------|---------------------|-------------------------|---|
| Central Marin Police Authority* | \$10,971,094 | \$12,540,840 | \$2,202,617 | 20.1% |
| Kentfield Fire Protection District | \$4,346,334 | \$4,410,646 | \$640,419 | 14.7% |
| Novato Fire Protection District | \$24,921,522 | \$27,094,328 | \$4,365,000 | 17.5% |
| Ross Valley Fire Department | \$8,319,924 | \$8,100,563 | \$757,240 | 9.1% |
| Southern Marin Fire Protection District | \$13,177,067 | \$12,739,358 | \$1,661,560 | 12.6% |
| Tiburon Fire Protection District | \$6,338,309 | \$5,793,305 | \$901,000 | 14.2% |
| Total | \$68,074,250 | \$70,679,040 | \$10,527,836 | 15.5% |

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|----------------------|----------------------|-------------------------|---|
| Central Marin Sanitation Agency | \$16,421,864 | \$18,386,011 | \$2,724,054 | 16.6% |
| Las Gallinas Valley Sanitary District | \$11,490,884 | \$8,624,424 | \$262,743 | 2.3% |
| Marin Municipal Water District | \$70,673,150 | \$70,431,104 | \$4,576,450 | 6.5% |
| Marin/Sonoma Mosquito & Vector Control District | \$7,861,221 | \$8,860,632 | \$865,130 | 11.0% |
| Marinwood Community Services District | \$5,096,846 | \$5,133,110 | \$408,037 | 8.0% |
| North Marin Water District | \$20,817,357 | \$20,329,069 | \$819,854 | 3.9% |
| Novato Sanitary District | \$17,963,721 | \$19,865,633 | \$258,904 | 1.4% |
| Richardson Bay Sanitary District | \$2,824,511 | \$3,009,245 | \$88,999 | 3.2% |
| Ross Valley Sanitary District | \$20,868,467 | \$18,309,740 | \$796,725 | 3.8% |
| Sanitary District # 5 Tiburon-Belvedere | \$5,963,722 | \$4,748,503 | \$172,890 | 2.9% |
| Sausalito Marin City Sanitary District | \$7,486,444 | \$5,131,337 | \$258,040 | 3.4% |
| Tamalpais Community Services District | \$5,149,167 | \$5,396,435 | \$328,757 | 6.4% |
| Total | \$192,617,354 | \$188,225,243 | \$11,560,583 | 6.0% |

Appendix: F: Public Agency Income Statement Data (cont'd)

FY 2013

| Municipalities | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|-----------------------|----------------------|----------------------|-----------------------------|---|
| City of Belvedere | \$6,898,000 | \$7,778,000 | \$360,315 | 5.2% |
| City of Larkspur* | \$18,603,639 | \$15,991,539 | \$1,117,173 | 6.0% |
| City of Mill Valley | \$32,911,000 | \$35,373,000 | \$1,690,435 | 5.1% |
| City of Novato | \$42,845,000 | \$40,203,000 | \$3,600,767 | 8.4% |
| City of San Rafael | \$97,329,000 | \$84,881,000 | \$15,522,832 | 15.9% |
| City of Sausalito | \$17,435,854 | \$19,290,681 | \$1,885,718 | 10.8% |
| County of Marin | \$539,291,000 | \$578,123,000 | \$82,141,000 | 15.2% |
| Town of Corte Madera | \$16,917,648 | \$15,662,631 | \$1,420,037 | 8.4% |
| Town of Fairfax* | \$8,185,597 | \$8,393,424 | \$861,992 | 10.5% |
| Town of Ross | \$5,954,371 | \$6,908,283 | \$426,227 | 7.2% |
| Town of San Anselmo | \$16,613,802 | \$15,335,139 | \$706,204 | 4.3% |
| Town of Tiburon | \$10,080,056 | \$8,564,576 | \$473,302 | 4.7% |
| Totals | \$813,064,967 | \$836,504,273 | \$110,206,002 | 13.6% |

| School Districts | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---------------------------------------|----------------------|----------------------|-----------------------------|---|
| Bolinas-Stinson Union School District | \$4,166,654 | \$3,431,372 | \$181,797 | 4.4% |
| Dixie Elementary School District | \$19,038,568 | \$20,037,236 | \$1,025,538 | 5.4% |
| Kentfield School District | \$15,347,703 | \$14,949,309 | \$751,520 | 4.9% |
| Larkspur-Corte Madera School District | \$16,692,448 | \$17,232,998 | \$760,498 | 4.6% |
| Marin Community College District | \$73,695,039 | \$78,071,240 | \$2,867,705 | 3.9% |
| Marin County Office of Education | \$53,965,926 | \$55,824,402 | \$1,537,897 | 2.8% |
| Mill Valley School District | \$37,909,411 | \$36,847,491 | \$1,708,730 | 4.5% |
| Novato Unified School District | \$74,691,071 | \$78,375,760 | \$3,564,105 | 4.8% |
| Reed Union School District | \$20,866,279 | \$20,722,970 | \$954,501 | 4.6% |
| Ross School District | \$7,208,553 | \$7,757,976 | \$328,289 | 4.6% |
| Ross Valley School District | \$23,544,533 | \$23,706,265 | \$1,126,078 | 4.8% |
| San Rafael City Schools - Elementary | \$45,813,222 | \$45,904,573 | \$1,891,069 | 4.1% |
| San Rafael City Schools - High School | \$29,829,654 | \$30,110,447 | \$1,349,835 | 4.5% |
| Sausalito Marin City School District | \$7,348,906 | \$7,412,975 | \$222,638 | 3.0% |
| Shoreline Unified School District | \$15,141,029 | \$13,384,148 | \$582,511 | 3.8% |
| Tamalpais Union High School District | \$75,744,653 | \$73,616,062 | \$3,790,319 | 5.0% |
| Totals | \$521,003,649 | \$527,385,224 | \$22,643,030 | 4.3% |

Appendix: F: Public Agency Income Statement Data (cont'd)

| Special Districts Safety | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|---------------------|---------------------|-------------------------|---|
| Central Marin Police Authority* | \$8,760,972 | \$9,741,410 | \$1,546,456 | 17.7% |
| Kentfield Fire Protection District | \$4,266,495 | \$4,027,584 | \$719,000 | 16.9% |
| Novato Fire Protection District | \$23,981,238 | \$22,959,399 | \$4,347,000 | 18.1% |
| Ross Valley Fire Department | \$8,283,616 | \$8,324,612 | \$1,352,592 | 16.3% |
| Southern Marin Fire Protection District | \$13,009,009 | \$12,479,816 | \$1,798,760 | 13.8% |
| Tiburon Fire Protection District | \$5,935,355 | \$5,505,107 | \$843,000 | 14.2% |
| Total | \$64,236,685 | \$63,037,928 | \$10,606,808 | 16.5% |

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|----------------------|----------------------|-------------------------|---|
| Central Marin Sanitation Agency | \$15,760,045 | \$16,292,627 | \$1,202,050 | 7.6% |
| Las Gallinas Valley Sanitary District | \$11,585,053 | \$8,366,225 | \$411,624 | 3.6% |
| Marin Municipal Water District | \$69,738,216 | \$63,938,837 | \$3,963,600 | 5.7% |
| Marin/Sonoma Mosquito & Vector Control District | \$7,957,709 | \$8,665,503 | \$891,511 | 11.2% |
| Marinwood Community Services District | \$4,770,868 | \$5,053,618 | \$414,833 | 8.7% |
| North Marin Water District | \$18,605,081 | \$16,568,138 | \$1,608,211 | 8.6% |
| Novato Sanitary District | \$17,332,035 | \$15,759,901 | \$316,059 | 1.8% |
| Richardson Bay Sanitary District | \$2,646,912 | \$2,867,406 | \$61,929 | 2.3% |
| Ross Valley Sanitary District | \$20,314,968 | \$16,831,688 | \$778,004 | 3.8% |
| Sanitary District # 5 Tiburon-Belvedere | \$5,409,761 | \$3,786,385 | \$186,990 | 3.5% |
| Sausalito Marin City Sanitary District | \$6,804,580 | \$5,047,168 | \$165,778 | 2.4% |
| Tamalpais Community Services District | \$4,782,049 | \$4,925,928 | \$278,274 | 5.8% |
| Total | \$185,707,277 | \$168,103,424 | \$10,278,863 | 5.5% |

Appendix: F: Public Agency Income Statement Data (cont'd)

FY 2012

| Municipalities | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|----------------------|----------------------|----------------------|----------------------|--------------------------------------|
| City of Belvedere | \$6,809,417 | \$7,082,918 | \$386,682 | 5.7% |
| City of Larkspur* | \$17,286,549 | \$18,920,650 | \$1,216,411 | 7.0% |
| City of Mill Valley | \$30,695,904 | \$32,412,000 | \$1,939,954 | 6.3% |
| City of Novato | \$47,129,000 | \$44,317,469 | \$3,897,198 | 8.3% |
| City of San Rafael | \$87,243,000 | \$84,304,491 | \$14,627,709 | 16.8% |
| City of Sausalito | \$19,515,672 | \$20,402,997 | \$2,407,997 | 12.3% |
| County of Marin | \$452,987,000 | \$461,104,000 | \$47,541,000 | 10.5% |
| Town of Corte Madera | \$15,809,424 | \$14,025,216 | \$1,734,141 | 11.0% |
| Town of Fairfax* | \$8,032,233 | \$8,190,115 | \$783,933 | 9.8% |
| Town of Ross | \$5,711,293 | \$6,086,653 | \$744,696 | 13.0% |
| Town of San Anselmo | \$15,240,865 | \$15,053,414 | \$1,103,350 | 7.2% |
| Town of Tiburon | \$8,838,698 | \$8,520,072 | \$509,588 | 5.8% |
| Totals | \$715,299,055 | \$720,419,995 | \$76,892,659 | 10.7% |

| School Districts | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---------------------------------------|----------------------|----------------------|----------------------|--------------------------------------|
| Bolinas-Stinson Union School District | \$3,366,497 | \$3,171,763 | \$168,417 | 5.0% |
| Dixie Elementary School District | \$19,027,021 | \$19,498,458 | \$1,000,029 | 5.3% |
| Kentfield School District | \$14,441,839 | \$14,841,354 | \$731,248 | 5.1% |
| Larkspur-Corte Madera School District | \$16,554,817 | \$16,167,730 | \$833,718 | 5.0% |
| Marin Community College District | \$73,985,992 | \$76,108,423 | \$2,628,704 | 3.6% |
| Marin County Office of Education | \$56,294,422 | \$56,662,756 | \$1,537,812 | 2.7% |
| Mill Valley School District | \$34,740,584 | \$35,382,157 | \$1,657,232 | 4.8% |
| Novato Unified School District | \$72,505,743 | \$77,553,300 | \$3,453,655 | 4.8% |
| Reed Union School District | \$20,662,117 | \$19,941,589 | \$918,955 | 4.4% |
| Ross School District | \$6,834,205 | \$7,670,742 | \$296,989 | 4.3% |
| Ross Valley School District | \$22,059,245 | \$21,179,617 | \$1,023,687 | 4.6% |
| San Rafael City Schools - Elementary | \$43,858,815 | \$43,856,979 | \$1,774,074 | 4.0% |
| San Rafael City Schools - High School | \$29,847,934 | \$29,862,827 | \$1,311,053 | 4.4% |
| Sausalito Marin City School District | \$7,285,990 | \$6,899,490 | \$197,027 | 2.7% |
| Shoreline Unified School District | \$13,436,120 | \$12,479,865 | \$546,884 | 4.1% |
| Tamalpais Union High School District | \$73,882,043 | \$71,289,091 | \$3,630,314 | 4.9% |
| Totals | \$508,783,384 | \$512,566,141 | \$21,709,798 | 4.3% |

Appendix: F: Public Agency Income Statement Data (cont'd)

| Special Districts Safety | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|---------------------|---------------------|-------------------------|---|
| Central Marin Police Authority* | \$6,845,710 | \$7,930,868 | \$1,152,082 | 16.8% |
| Kentfield Fire Protection District | \$4,040,717 | \$3,935,793 | \$706,000 | 17.5% |
| Novato Fire Protection District | \$23,162,755 | \$23,503,892 | \$4,420,000 | 19.1% |
| Ross Valley Fire Department | \$6,188,574 | \$6,222,678 | \$3,822,902 | 61.8% |
| Southern Marin Fire Protection District | \$9,514,727 | \$8,852,899 | \$1,321,376 | 13.9% |
| Tiburon Fire Protection District | \$5,692,247 | \$5,532,857 | \$900,000 | 15.8% |
| Total | \$55,444,730 | \$55,978,987 | \$12,322,360 | 22.2% |

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|---|----------------------|----------------------|-------------------------|---|
| Central Marin Sanitation Agency | \$15,242,715 | \$15,762,771 | \$1,130,652 | 7.4% |
| Las Gallinas Valley Sanitary District | \$11,493,702 | \$6,665,852 | \$403,005 | 3.5% |
| Marin Municipal Water District | \$61,957,837 | \$60,474,500 | \$3,962,731 | 6.4% |
| Marin/Sonoma Mosquito & Vector Control District | \$7,573,456 | \$8,219,315 | \$1,820,548 | 24.0% |
| Marinwood Community Services District | \$4,115,789 | \$4,592,674 | \$438,549 | 10.7% |
| North Marin Water District | \$15,972,477 | \$16,405,522 | \$1,031,112 | 6.5% |
| Novato Sanitary District | \$16,313,384 | \$16,052,483 | \$215,351 | 1.3% |
| Richardson Bay Sanitary District | \$2,672,170 | \$2,658,572 | \$60,129 | 2.3% |
| Ross Valley Sanitary District | \$22,056,782 | \$18,228,904 | \$702,054 | 3.2% |
| Sanitary District # 5 Tiburon-Belvedere | \$4,927,600 | \$3,612,300 | \$240,305 | 4.9% |
| Sausalito Marin City Sanitary District | \$6,350,068 | \$4,319,548 | \$315,887 | 5.0% |
| Tamalpais Community Services District | \$4,938,176 | \$4,935,448 | \$249,495 | 5.1% |
| Total | \$173,614,156 | \$161,927,889 | \$10,569,818 | 6.1% |

Appendix: F: Public Agency Income Statement Data (cont'd)

Totals 2016

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|------------------------------|------------------------|------------------------|-------------------------|--|
| Municipalities | \$898,020,850 | \$836,450,138 | \$79,257,793 | 8.8% |
| School Districts | \$618,917,590 | \$623,198,203 | \$31,040,471 | 5.0% |
| Special Districts Safety | \$64,547,473 | \$54,317,090 | \$10,464,513 | 16.2% |
| Special Districts Utility | \$190,639,174 | \$180,761,046 | \$12,345,450 | 6.5% |
| Total | \$1,772,125,087 | \$1,694,726,477 | \$133,108,227 | 7.5% |

Totals 2015

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|------------------------------|------------------------|------------------------|-------------------------|--|
| Municipalities | \$902,062,629 | \$796,166,376 | \$71,249,073 | 7.9% |
| School Districts | \$563,036,868 | \$578,485,669 | \$26,443,186 | 4.7% |
| Special Districts Safety | \$71,238,245 | \$69,062,104 | \$10,811,923 | 15.2% |
| Special Districts Utility | \$185,870,144 | \$180,186,686 | \$11,911,730 | 6.4% |
| Total | \$1,722,207,886 | \$1,623,900,835 | \$120,415,912 | 7.0% |

Totals 2014

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|------------------------------|------------------------|------------------------|-------------------------|--|
| Municipalities | \$867,263,063 | \$833,688,484 | \$76,912,967 | 8.9% |
| School Districts | \$527,872,026 | \$540,813,158 | \$23,696,887 | 4.5% |
| Special Districts Safety | \$68,074,250 | \$70,679,040 | \$10,527,836 | 15.5% |
| Special Districts Utility | \$192,617,354 | \$188,225,243 | \$11,560,583 | 6.0% |
| Total | \$1,655,826,693 | \$1,633,405,925 | \$122,698,273 | 7.4% |

Appendix: F: Public Agency Income Statement Data (cont'd)

Totals 2013

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|------------------------------|------------------------|------------------------|-------------------------|--|
| Municipalities | \$813,064,967 | \$836,504,273 | \$110,206,002 | 13.6% |
| School Districts | \$521,003,649 | \$527,385,224 | \$22,643,030 | 4.3% |
| Special Districts Safety | \$64,236,685 | \$63,037,928 | \$10,606,808 | 16.5% |
| Special Districts Utility | \$185,707,277 | \$168,103,424 | \$10,278,863 | 5.5% |
| Total | \$1,584,012,578 | \$1,595,030,849 | \$153,734,703 | 9.7% |

Totals 2012

| Special Districts Utility | Revenue | Expenses | Pension Contribution | Pension Contribution as % of Revenue |
|------------------------------|------------------------|------------------------|-------------------------|--|
| Municipalities | \$715,299,055 | \$720,419,995 | \$76,892,659 | 10.7% |
| School Districts | \$508,783,384 | \$512,566,141 | \$21,709,798 | 4.3% |
| Special Districts Safety | \$55,444,730 | \$55,978,987 | \$12,322,360 | 22.2% |
| Special Districts Utility | \$173,614,156 | \$161,927,889 | \$10,569,818 | 6.1% |
| Total | \$1,453,141,325 | \$1,450,893,012 | \$121,494,635 | 8.4% |

Appendix G: CalPERS Termination Fees

The table below lists the estimated termination payments at assumed rates of 2.00% and 3.25% for participating agencies, excepting school districts, per the annual CalPERS Actuarial Report for 6/30/2015.

| AGENCY | NPL as Reported in FY 2015 Financials | Assumed Discount Rate 2.00% | Assumed Discount Rate 3.25% |
|--|---|-----------------------------------|-----------------------------------|
| Central Marin Police Authority* | \$6,024,473 | \$71,565,039 | \$51,696,369 |
| Central Marin Sanitation Agency | \$3,324,578 | \$45,302,181 | \$33,168,333 |
| City of Belvedere | \$2,821,673 | \$22,330,041 | \$16,034,899 |
| City of Larkspur | \$9,046,789 | \$64,068,837 | \$46,794,380 |
| City of Mill Valley | \$21,174,403 | \$164,006,306 | \$119,143,571 |
| City of Novato | \$29,915,448 | \$210,899,167 | \$154,434,070 |
| City of Sausalito | \$17,741,671 | \$111,095,700 | \$80,854,968 |
| College of Marin - CalPERS | \$14,503,000 | \$4,413,804 | \$3,117,900 |
| Kentfield Fire Protection District | \$5,202,429 | \$25,682,839 | \$18,599,480 |
| Las Gallinas Valley Sanitary District | \$1,693,868 | \$12,363,061 | \$9,004,250 |
| Marin Municipal Water District | \$62,139,077 | \$291,279,084 | \$222,708,365 |
| Marinwood Community Services District | \$3,142,286 | \$19,402,506 | \$13,677,782 |
| North Marin Water District | \$6,701,264 | \$46,278,897 | \$34,041,789 |
| Novato Sanitary District | \$3,335,896 | \$23,194,067 | \$17,250,223 |
| Richardson Bay Sanitary District | \$901,425 | \$6,964,774 | \$5,134,984 |
| Ross Valley Fire Department | \$7,679,794 | \$56,572,810 | \$40,834,714 |
| Ross Valley Sanitary District | \$3,708,693 | \$21,982,458 | \$16,055,544 |
| Sanitary District # 5 | \$2,757,064 | \$11,272,815 | \$8,312,243 |
| Sausalito Marin City Sanitation District | \$1,759,386 | \$12,874,490 | \$9,642,427 |
| Tiburon Fire Protection District | \$6,315,892 | \$42,833,280 | \$30,695,410 |
| Town of Corte Madera | \$12,146,336 | \$77,386,425 | \$56,430,103 |
| Town of Fairfax | \$6,078,042 | \$40,460,118 | \$29,676,098 |
| Town of Ross | \$3,465,264 | \$24,932,090 | \$17,959,639 |
| Town of San Anselmo | \$4,002,434 | \$59,135,515 | \$44,288,748 |
| Town of Tiburon | \$5,232,395 | \$38,702,774 | \$28,540,001 |
| TOTAL | \$240,813,580 | \$1,504,999,078 | \$1,108,096,290 |

Appendix J: Private Pension Discount Rates

The table below lists the discount rates used by the 10 largest US corporate pension funds by total assets under management. Information was obtained from the 2015 Annual Reports and 10K filings of the listed corporations.

| Corporation | Pension Fund Assets (\$Mils.) | Pension Discount Rate | OPEB Discount Rate |
|--------------------|--------------------------------------|------------------------------|---------------------------|
| Boeing | \$101,931 | 4.20% | 3.80% |
| IBM | \$96,382 | 4.00% | 3.70% |
| AT&T | \$83,414 | 4.60% | 4.50% |
| General Motors | \$82,427 | 3.73% | 3.83% |
| General Electric | \$70,566 | 4.38% | NA |
| Lockheed Martin | \$63,370 | 4.38% | 4.25% |
| Ford | \$55,344 | 4.27% | 4.22% |
| Bank of America | \$51,000 | 4.51% | 4.32% |
| UPS | \$46,443 | 4.40% | 4.18% |
| Northrop Grumman | \$43,387 | 4.53% | 4.47% |
| Average | | 4.30% | 4.14% |