REPORT

The Carmel CalPERS Pension Committee
September 27, 2011

The Committee and This Report

In October 2011, at the request of Mayor Sue McCloud an ad hoc committee was formed to review the City's pension retirement plans provided by the California Public Employees' Retirement System (CalPERS) and to make recommendations to the City concerning those and alternative plans.

Mayor McCloud charged the committee with understanding issues, developing options and recommendations and advising the Council of its findings. While the committee was initiated by Mayor McCloud, it has operated independently (at her request) since its inception.

The members of the Committee are:

Richard Borda
Joseph Mark
Barbara Santry
William Sharpe
Laura Zehm

Committee members have significant experience concerning pension and money management. Richard Borda and Joseph Mark are retired financial executives. Barbara Santry and Laura Zehm currently serve as financial executives. William Sharpe is a retired Professor of Finance. Short biographies are provided in Appendix A.

Shortly after its formation, the committee began its work, studying available documents and data and requesting additional information from CalPERS and from the City's Administration. At different times, information was obtained from City Administrator Richard Gillen, Assistant City Administrator Heidi Burch, and Interim City Administrator John Goss. Since its inception the Committee has held numerous meetings in person, by telephone and via email.

On several occasions the Committee communicated by phone or email with Barbara Ware, the CalPERS actuary responsible for the City's actuarial reports and estimates. She was extremely cooperative, provided important information and greatly helped the members of the Committee understand the nature of the CalPERS plans.

The Grand Jury Report

In January 2011, the 2010 Monterey County Civil Grand Jury issued a Report on the CalPERS retirement system for public employees of the County of Monterey and the twelve cities within the county. At the request of the City, in March, 2011, this Committee provided suggestions concerning the City's required responses to the Grand Jury Report. Those recommendations, which were adopted with minor changes by the administration, are contained in Appendix B.

The Interim Report

On September 13th, 2011 in a public meeting this Committee presented an interim report to the Carmel-by-the-Sea City Council. The report was presented orally by William Sharpe, with the PowerPoint slides included as Appendix C to this report. A video of the Council meeting, including the presentation can be viewed at the Council's web site.

This Report

This is the committee's final report. It covers some of the issues raised by the Grand Jury, the findings and recommendations included in the Committee's Interim Report, and provides additional background information.

The Committee's Investigative Procedures

The committee worked with City Administration. At different times its meetings were attended by Richard Gillen, City Administrator, Heidi Burch, Assistant City Administrator, and John Goss, Interim City Administrator. The committee asked for information from, and shared findings with the City Administration. It also obtained and reviewed extensive information from public sources.

On numerous occasions the committee asked questions of, and received data and explanations from Barbara Ware, Senior Pension Actuary, Actuarial Services, CalPERS. Ms. Ware was responsive and helpful. We are grateful for her time and attention. The committee vetted its understandings with Ms. Ware.

The City's Pension Plans

CalPERS offers a series of defined pension benefit plans that are differentiated, in the City's case, between safety employees (e.g. police and firefighters) and miscellaneous employees. In addition, CalPERS also offers "optional" benefits which amend the terms of the defined benefit plans.

For each plan, the employee's annual benefit is based on his or her *years of service*, a *salary base* computed from recent pay before retirement and a specified *percentage factor*. For example, a safety employee retiring at age 50 would receive annual payments in retirement equal to the product of:

> *3 %* times *salary base* times *years of service*

For convenience, this is generally termed a "3% at 50" plan. However, all such plans include provision for retirement other ages, often with different percentage factors.

After the first year in retirement, benefits are adjusted either partially or fully for inflation. The Cost-of-Living Adjustment increases the amount paid each year by the smaller of (a) 2% per year compounded annually or (b) the cumulative change in the Consumer Price Index. In addition there is a *Purchasing Power Protection Allowance* which provides the additional guarantee that the payment in any year will not fall below 80% of the initial amount adjusted for inflation since retirement.

The City's pension plans for current employees hired before August, 2011 are as follows.

- For safety employees, the City had selected a "3% at 50" standard plan. It pays the employer contribution to this plan, with the safety employees paying the employee contribution.
- For miscellaneous employees, the City had selected a "2% at 55" standard plan. It pays the employer contribution to this plan, with the miscellaneous employees paying the employee contribution.
- The City had selected an "optional" benefit which allows the pension obligation for retiring employees to be based on the highest 12 months of full time equivalent monthly pay (which may include some unused sick leave and vacation leave). If this benefit had not been selected, the pension obligation would be based on the highest three years of equivalent monthly pay (which may include some unused sick leave and vacation leave). To pay for this optional benefit, the City makes the entire additional contribution.

There are three key aspects of the City's current pension plans.

- The Pension Obligation. When the City chooses a defined benefit plan for an employee, it incurs an obligation to pay that employee's pension, providing additional money if and when prior contributions are insufficient to cover the promised payments. This liability remains with the City, typically extends far into the future, and is not insured by any third party. No other entity participates in the obligation to make current and future pension payments to current and past employees of the City based on their service to the City. (However, when employees leave the City then work elsewhere in the CalPERS system, or when employees come to the City after working elsewhere, CalPERS allocates the pension obligation among the affected municipalities or agencies.)

- The Contribution Rate. CalPERS calculates a contribution rate for the City annually. This contribution rate is generally expressed as a percentage of payroll. Carmel is "pooled" with a large number of other small municipalities for purposes of CalPERS' administration. The pooled entities are reviewed together and contribution rates are set accordingly. However, the liability to pay its' pensions remains with each individual municipality in the pool. CalPERS does not currently provide the values of the individual obligations of each municipality on a regular basis.

- Portfolio Performance. CalPERS manages the City's funds, as well as those of hundreds of other municipalities and agencies, in a single large, diversified, professionally managed portfolio. The performance of this portfolio can vary greatly from year to year. The City has, in effect, hired an investment adviser to manage its accumulated pension contributions within a larger fund. This provides administrative cost savings and diversification opportunities. However, the City has no influence over the portfolio's management.

Fiscal Year 2011/2012 contribution rates paid by the City and its employees are summarized below:

	Miscellaneous 2% at 55	Safety 3% at 50
Employer Contributions (% of payroll)		
Normal Cost	7.684 %	17.164 %
Amortization Payments	1.855 %	5.927 %
Optional benefits	0.520 %	1.021 %
Side Fund Payments	9.435 %	10.756 %
Total Employer Contributions	**19.494 %**	**34.868 %**
Employee Contributions (% of salary)	**7.000 %**	**9.000 %**

Importantly, when the performance of the portfolio, plus the current contribution rate, does not keep pace with the accumulating pension obligation, additional future contributions are required to make the promised pension payments.

The Side Fund Debt

In 2003, when Carmel's pension plans were pooled with other small cities and agencies, CalPERS reviewed the contributed assets and estimated liabilities of Carmel's pension plans. It determined that at the time the liability values for the two plans exceeded the asset values by roughly $6 million.

At the time, other small cities also had assets that were not equal to their liabilities. CalPERS dealt with this by creating what it calls Side Funds, representing the differences between assets and liabilities. At inception in 2003, Carmel's Side Fund balances were equal to approximately -$ 6 million. Thus Carmel had "Side Fund Debts" (this Committee's term) of approximately $ 6 million.

The Side Fund Debts were treated as loans from CalPERS to Carmel for unfunded liabilities at the inception in 2003. These loans bear an interest rate of 7.75% (the return that CalPERS expects to earn in the long run on its portfolio). CalPERS established a payment schedule for the Side Fund Debts such that payments in the past several years have not exceeded the accruing interest. As of June 30, 2011 Side Fund Debts for the two funds totaled $6.2 million.

While Side Fund Debt contributions are charged to the City as percentages of estimated payroll, these constitute payments toward the interest and possibly principal on loans made at an above-market interest rate.

The Side Funds are analogous to revolving debt on a consumer credit card. In the last eight years, the required payments have primarily covered only interest charges and the balances have grown. Thus, while the City has made all required payments, the Side Fund Debts are approximately the same as they were in 2003.

Carmel is permitted to pay the Side Fund Debts in whole or in part at any time. We understand that the City of Pacific Grove has used this ability to pay its entire Side Fund Debt.

The City's cash reserves currently equal $ 8.9 million and earn interest at a rate averaging approximately 0.50 % (one-half of one percent), well below the Side Fund interest rate. Some of these reserves are required by law, but it is possible that some of these funds could be used to pay off a part of the Side Fund Debts. Additional funds could be raised by issuing bonds.

The City's Interim Administrator has obtained estimates from investment bankers that the City could raise funds for this purpose by participating in a pool of Pension Obligation Bonds carrying an average interest rate of approximately 6.0% -- less than the current cost of 7.75% for the Side Fund Debts.

Recommendation 1: Pay the Side Fund Debt

The Committee recommends that the City actively explore the possibility of using a portion of its current reserves plus new debt obligations to pay the Side Fund Debts. This would be equivalent to refinancing a mortgage at a lower interest rate. Importantly, no benefit payments to current or past employees would be affected.

A question has been raised concerning the possibility that CalPERS could lower the interest rate charged for Side Fund Debts, either prospectively or retrospectively. The Committee has learned that in a recent email to Joe Nation of Stanford University, David Lamoureux, CalPERS Deputy Chief Actuary, stated that this would not happen since side fund terms were fixed at the time when employers were assigned to risk pools. This said, the Committee recommends that before issuing any new bonds, the City administration independently evaluate the risk that CalPERS might lower the interest rate charged on these debts at some time in the future.

Terminating CalPERS Pension Plans

All participating cities are able to terminate their participation in CalPERS. However, this has been rare.

Fortunately, participating cities can elect to exit the CalPERS pension system and, with the appropriate Council resolution, be permitted to remain in the CalPERS health insurance system.

To terminate the CalPERS pension system, a city or agency must pay an amount determined sufficient by CalPERS to cover any difference between the value of the subsequent benefit payments and the accumulated assets. This may be paid in a lump sum on the date of termination or in a series of payments thereafter. In the latter event, CalPERS will charge interest on the unpaid balances until the termination cost is paid in full.

- From the termination date forward, CalPERS will make the same payments to retired employees that they would have received if the plans had not been terminated.

- Payments to all employees who worked for the City and have left but have not yet retired will be made in exactly the same manner as if the plans had not been terminated.

- To cover extra obligations that can arise when an employee leaves Carmel-by-the-Sea, then works for another city or agency that uses CalPERS pension plans, the City can elect a "non-frozen" option, at a somewhat higher termination cost.

- After termination, CalPERS will make all benefit payments for which current employees would be eligible if they were to terminate their service with Carmel-by-the-Sea on the date of termination of the CalPERS plans. However, CalPERS is not liable for any additional benefits that would have been accrued had the City remained in the CalPERS system after the date of termination.

The process required for termination takes a considerable amount of time. To begin, Carmel-by-the-Sea must pass a resolution to terminate the CalPERS pension plans. For each plan, CalPERS will then prepare two *termination unfunded liability* estimates – one for the "frozen" option, the other for the "non-frozen" alternative. These provide estimates of the payments that the City would be required to pay to terminate the plans. However, the exact amounts would only be determined at a later date if the City chose to actually terminate the plans.

The preparation of the initial termination unfunded liability estimates by CalPERS typically requires six or more months. After it receives the estimates, the Council may choose to proceed with the termination process or not. If the City chooses to proceed, CalPERS then prepares a final calculation and arrangements are made for the actual payments and termination, requiring additional months of elapsed time.

Recommendation 2: Pass a Non-binding Resolution to Terminate the CalPERS Pension Plans

The Committee recommends that the Council pass a non-binding resolution to terminate the CalPERS pension plans in order to obtain estimates of the termination unfunded liabilities and to make it possible to subsequently terminate the plans if this appears to be desirable at that time.

A key reason to pass such a resolution at this time is to obtain formal estimates of the extent to which the City's pension assets are insufficient to cover the costs of the benefits already earned by current and past employees. While CalPERS has recently announced that such estimates may be included in future actuarial reports, this is not guaranteed. Moreover, at the earliest, estimates would be provided in October, 2012 based on the values of assets and liabilities at the end of June, 2011.

Termination Unfunded Liabilities

Defined benefit pension plans such as those employed by the City and administered by CalPERS guarantee employees benefits based on their service and salaries. The current plans also provide for increases in payments to compensate for future inflation. To cover these costs, a pool of assets is created. Ideally, the value of the assets would be sufficient to cover the accumulated benefit obligations.

In the CalPERS plans, contributions are invested in a pool of assets that includes marketable and non-marketable securities. At any given time, the market values of most of these assets can be determined and the values of the remainder estimated with reasonable accuracy. At present the CalPERS actuarial reports are not fully transparent with regard to such *termination asset values*.

It is not a simple matter to determine the amount of money that would be required to cover a plan's accumulated benefit obligations with certainty or near-certainty. Until very recently, CalPERS used an actuarial method that estimated benefit liabilities by discounting expected future cash flows with an interest rate based on the expected return on the funds' assets (currently 7.75%). However, beginning on August 18th, 2011 CalPERS adopted a very different procedure, using a discount rate based on U.S. Treasury bond yields (currently 3.8%). Henceforth, as shown in Appendix D, assets of terminated plans plus cash from any payments required to be made by cities and agencies to terminate such plans will be placed in a pool invested in a combination of U.S. Treasury Bonds and U.S. Treasury Inflation-protected Securities. Accordingly, CalPERS will value the liabilities of a terminated plan based on the estimated cost of placing an amount of money in such a pool of Treasury securities that should be sufficient to cover the required benefit payments with a high degree of confidence, since it is a larger and lower-risk pool. At present, CalPERS actuarial reports are not transparent with regard to such *termination liability values*.

If the termination asset value of a plan is smaller than its termination liability value, the plan is underfunded; the difference is the *termination unfunded liability* (sometimes called the termination net liability). At present, CalPERS actuarial reports are not transparent with regard to such values.

If a city or agency wishes to terminate an underfunded plan, CalPERS will require a payment equal to the termination unfunded liability plus a *load charge* of 7% of that amount, designed to cover possible increases in participants' life spans.

While many alternative measures are used by the actuarial profession to measure aspects of the funding of a pension plan, the Committee believes that the most relevant for the City is the termination unfunded liability plus the associated load charge. This is the amount of money that would be required to terminate a CalPERS plan and insure that all benefits earned to date would be paid by CalPERS.

In April 2011, the Committee requested an estimate of the termination costs for its two pension plans from Barbara Ware, the CalPERS actuary who prepares the City's annual actuarial reports. Using the method in place at that time, she provided a "very rough" estimate that the total cost for the two plans at the end of June, 2009 would have been approximately $14.4 million (over and above the costs of paying the Side Fund Debts). Subsequently, based on the change in termination procedures made by CalPERS on August 18, 2011, she informed the Committee that ".. the estimates that I provided previously are much less than the results will be with the new methodology, even taking into account the good investment returns over the past 2 years." This information was provided by the Committee to the City Council on September 13, 2011 in the interim report shown in Appendix C.

In response to the August 2011 change in the actuarial procedures for determining termination unfunded liabilities; the Committee prepared a set of estimates of the possible values for the City's two funds. After taking into account additional information from Barbara Ware, the Committee prepared the estimates of termination unfunded liabilities shown in Appendix E. These are at best very rough approximations and were reviewed by Barbara Ware who commented that they were likely usable as talking points.

With these caveats, based on the estimate of $34.4 million in Appendix E, and adding in the Side Fund Debts of $ 6.2 million, the Committee's best estimate is that the total liabilities associated with underfunded pension obligations could be between $35 million and $45 million.

These are at the very best, crude estimates. Only if the City passes a resolution to terminate the CalPERS plans can better values be obtained in the relatively near future. When and if such official estimates are available, the Committee believes they should be included in the City's reports.

Recommendation 3: Include Side Fund Debts and Estimated Termination Unfunded Liabilities in the City's Financial Reports

The Side Fund Debts and the Termination Unfunded Liabilities represent costs that will have to be paid either sooner (via termination and/or payment of the Side Fund Debt) or later, with pension contributions that would be greater than if those liabilities did not exist. In order that the City's taxpayers and employees are fully informed about these obligations, the Committee recommends that the latest estimates of their magnitudes be included on the City's Financial Reports, either in footnotes or comments.

Estimates of the Side Fund Debts can be found in the CalPERS annual actuarial reports. Estimates of the Termination Unfunded Liabilities will be obtained if the Council passes a resolution to terminate the CalPERS plans. In future years such estimates may also be provided in the annual actuarial reports provided to the City by CalPERS, although at the earliest, this practice will start in October 2012 with values based on assets and liabilities at the end of June 2011.

The Financial Risks of the CalPERS Pension Plans

The CalPERS pension plans currently used by Carmel-by-the-Sea create large financial risks for the City. Several aspects of the plans contribute to such risks:

- Pension benefits are pre-determined and are adjusted in whole or in part for inflation
- Carmel's assets are invested in a single multi-asset portfolio with substantial risk and year-to-year volatility. This volatility makes it difficult for the City to assess its obligations.
- Pre-retirement, employees pay up to a fixed percentage of salary. Post-retirement, employees bear no risk. CalPERS' actuarial procedures may lead to situations in which employees nearing retirement are not assessed the increasing costs of their pensions. In such cases the obligations remain with the City.
- The City's share of the current contribution is substantially larger than the employees' share.

- Increased contributions will likely be required by CalPERS when the City is least equipped to pay them since the contribution rate is affected by capital market conditions in a lagged manner. Hence, CalPERS can be expected to increase contribution rates after periods of poor capital market conditions, which typically coincide with decreases in revenue from all the City's sources of income.

Additional risks borne by City include:

- Inflation risk
- The risk that CalPERS will earn a lower-than-expected return on its investments
- The risk of greater-than-predicted life expectancies
- The risk that the contributions required by CalPERS will fail to fully fund the actual accumulating pension obligations
- The risk that the City's lack of current visibility on its increasing obligations will lead to decisions that would not have been made if such there had been full disclosure.

These risks can be mitigated or eliminated by either:

- Terminating the CalPERS plans and adopting lower-risk retirement benefits, such as a combination of social security, a defined contribution plan similar to a corporate 401(k) plan, and possibly higher salaries, or by
- remaining in the CalPERS system, but decreasing the levels of CalPERS benefits to the extent possible.

Consideration of possible replacements for the CalPERS pension plans is beyond the scope of this Committee's work. The next section thus focuses on possible actions that the Council could take to reduce the risks associated with benefits obtained within the CalPERS system.

Adoption of Alternative CalPERS Benefit Tiers

CalPERS makes a number of alternative pension plans available for adoption by participating cities and agencies. For each category of employees there are typically two or more possible "tiers". For example, as indicated earlier, Carmel-by-the-Sea has adopted the "3% at 50" tier for its safety employees and the "2% at 55" tier for its miscellaneous employees. Within each tier there are additional options, some of which require higher employer contributions. In each plan, Carmel-by-the-Sea has chosen to base an employee's retirement income on his or her highest one-year salary – an option that requires higher employer contributions than the standard approach which bases such income on an employee's highest average salary over three years.

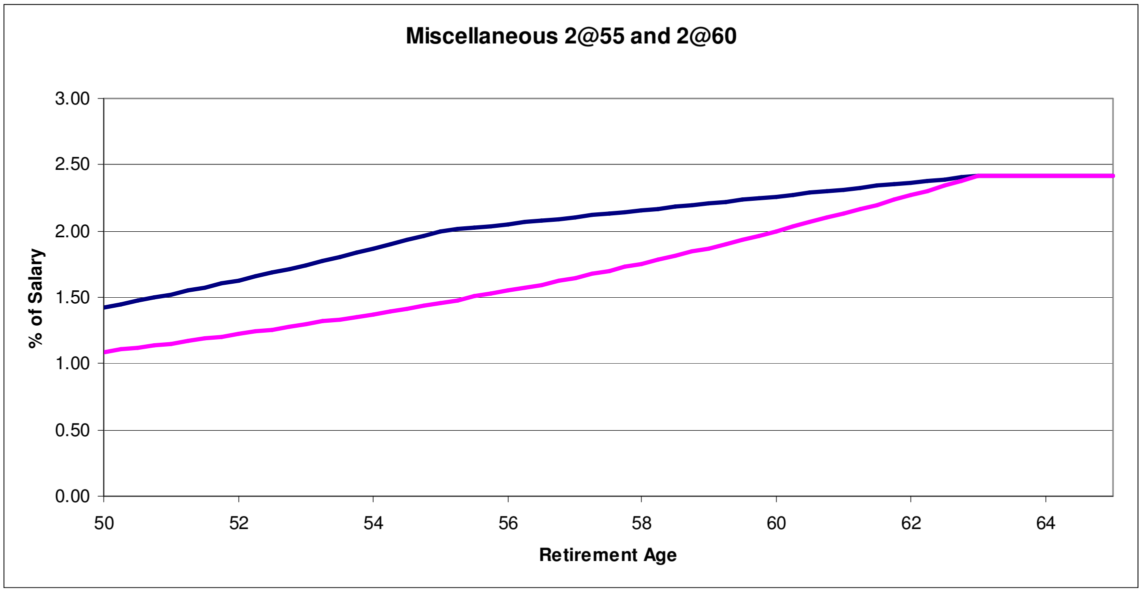
With regard to both the tiers utilized and the salary bases elected, the City has chosen to provide very generous pension benefits to its employees. This increases the risk to the City associated with the provision of each employee's total compensation – his or her lifetime salary plus benefits received after retirement. In effect, an employee's total compensation is "back-end loaded" and the back-end retirement benefits create significant financial risks for the City. These risks could be reduced, although not eliminated, if less generous retirement benefits were provided. CalPERS rules and current agreements with the City's unions may restrict changes that can be made for current employees. However, such benefits could be offered to new employees.

The Committee offers no opinion on the appropriate level of overall compensation for City employees but believes that the City should reduce the risks inherent in the current retirement system. If less generous CalPERS tiers are offered to new employees, it may be necessary and appropriate to provide additional retirement benefits and/or higher salaries in order to attract qualified applicants. One alternative would be to offer a less generous defined benefit retirement plan (such as one of the alternative tiers) with lower but still substantial financial risk to the city, supplemented with City contributions to a defined contribution plan (similar to a corporate 401(k)) for which the employee bears all the future financial risk. CalPERS offers such a defined contribution plan and allows employers and employees to make contributions on a before-tax basis up to Federal limits. The Committee has learned that the organization representing the City's miscellaneous employees has agreed to the use of a lower CalPERS tier for newly-hired employees.

When considering alternative CalPERS tiers, it is important to understand that the simple descriptions indicate only the percentage factor to be used if an employee chooses to retire at a specified age. Plan provisions also specify factors that will apply if an employee retires at other ages.

Figure 1 shows the percentage factors that apply for two alternative tiers available to be used for miscellaneous employees. The higher (blue) curve shows the terms for the City's current plan. As indicated, an employee who retires at age 55 will receive an income at retirement equal to 2% of his or her highest annual salary times the number of years of service. However, an employee can retire at an earlier age, but the retirement benefit will be calculated using a smaller percentage of salary – for example, less than 1.50% if the employee retires at age 50. On the other hand, if an employee retires at an age greater than 55, the percentage will be larger, up to age 63 after which it remains the same.

Figure 1

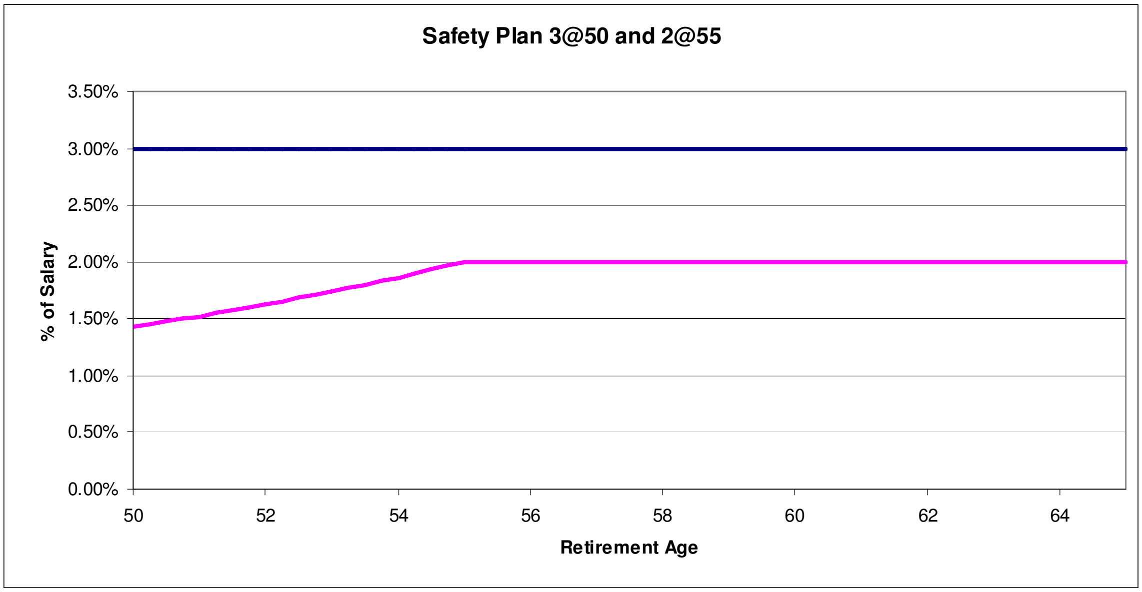


The lower (red) curve in Figure 1 shows the terms of an alternative tier, typically described as “2% at 60”. It provides a lower percentage of salary than the “2% at 55” tier for any employee retiring before age 63, but the same amount for those who retire at older ages.

The Grand Jury report shown in Appendix B recommended that the cities in Monterey County adopt the 2% at 60 tier for new miscellaneous employees. The Committee agreed that a less generous tier should be utilized but recognized that at some point it might be possible to utilize one with even lower percentages of salary. The Committee also agreed with the Grand Jury that, to the extent permitted by CalPERS regulations and labor agreements, the City should either require employees to pay the additional costs of the optional benefit of basing benefits on the highest annual salary or utilize the standard three-year average salary in its plans.

Figure 2 shows the percentages of salary for the City’s current “3% at 50” plan for Safety employees and the “2% at 55” plan recommended by the Grand Jury. The current plan does not provide for lower percentages for those who retire before age 50 nor for higher percentages for those who retire at ages greater than 50. The lower tier provides lower percentages for every retirement age, with those retiring between ages 50 and 55 receiving less than 2% of salary and all those retiring after age 55 receiving 2% of salary.

Figure 2



The Grand Jury also recommended utilizing the "2% at 55" tier for new safety employees. Here, too, the Committee agreed that a less generous tier should be utilized but recognized that at some point it might be possible to utilize one with even lower percentages of salary. In this case the Committee also agreed with the Grand Jury that, to the extent permitted by CalPERS regulations and labor agreements, the City should either require employees to pay the additional costs of the optional benefits of basing benefits on the highest annual salary or utilize the standard three-year average salary in its plans.

Recommendation 4: Provide Substantially Lower Defined Benefits for New Employees

The Committee recommends while the City chooses to remain within the CalPERS pension system it negotiate with its unions and prospective employees to provide substantially lower defined benefits. This should be accomplished by adopting tiers with less generous terms and basing benefits on highest three-year average salaries.

Governmental retirement systems in California are in a state of flux at this time. It is not impossible that CalPERS will offer even lower tiers than the two analyzed here ("2% at 60" for miscellaneous employees and "2% at 55" for safety employees). In fact, there is in principle an option for a City to adopt a "1.5% at 65" option for miscellaneous employees. However, this would require the use of Social Security and a number of other requirements; apparently no City has yet chosen this option and no pool exists for small cities such as Carmel-by-the-Sea. That said, in the future it may be possible for the City to remain within the CalPERS system and significantly reduce its financial risk by selecting benefit choices not currently offered by CalPERS. We expect that such choices would include moving toward a hybrid system with a combination of a considerably less generous defined-benefit plan (with other characteristics similar to those of the current CalPERS tiers) and a defined contribution plan (such as the current CalPERS optional plan). This would allow the City to greatly reduce its financial risk and allow employees to bear amounts of such risk that they deem appropriate.

Summary of Recommendations

In sum, the Committee recommends that the City Council:

1. Pay the side fund debt,

2. Pass a non-binding resolution to terminate the CalPERS pension plans,

3. Include Side Fund Debts and the City's termination unfunded liabilities in the City's financial reports, and

4. Provide substantially lower defined benefits for new employees.

Respectfully submitted:

Richard Borda

Joseph A. Mark

Joseph Mark

Barbara Santry

William Sharpe

Laura Zehm

Laura Zehm

Appendix A
Committee Member Biographies

William Sharpe:

- Professor of Finance Emeritus at Stanford University Graduate School of Business
- Author of seven books
- Nobel Prize winner in Economic Sciences
- Co-founder and current board member of Financial Engines, a firm that provides investment management and advice for individuals in employer-sponsored retirement plans.

Joseph Mark:

- Principal of Mark Investment Company
- Founding Partner, RCM Capital (retired)
- Formerly with Wells Fargo and Greenshields Ltd. (Canada)
- Past member of Board of Security Analysts Society of San Francisco, Community Foundation for Monterey County, Monterey Institute of International Studies, and Flagg Memorial Youth Fund

Richard Borda:

- Former Vice Chairman and Chief Financial Officer of National Life Insurance Company
- Former Executive Vice President of Wells Fargo Bank
- Former member of the Grace Commission
- Former Assistant Secretary of the Air Force
- Past chair of the Monterey Institute of International Studies Board

Barbara Santry:

- Former venture capitalist
- Health care reimbursement consultant
- Past Chair of Health Plan Board
- Director, Santa Lucia Community Services District

Laura Zehm:

- MBA
- Vice President/Chief Financial Officer, Community Hospital of the Monterey Peninsula since 1996
- Fellow and former board member/chair of the Healthcare Financial Management Association (HFMA) Board of Directors
- Board Member, California Hospital Association (Northern California HFMA designee) and former Board member of Natividad Hospital (as part of the grant agreement between CHOMP and the County of Monterey)
- Board member of the Monterey County AIDS Project, Monterey Federal Credit Union and Monterey Institute for Research on Astronomy

Appendix B

Carmel CalPERS Pension Committee Response to Grand Jury Findings and Recommendations

March 18, 2011

Introduction

The Carmel CalPERS Pension Committee was appointed by the Mayor in October, 2010 to investigate conditions concerning the city's retirement systems and its participation in the CalPERS retirement system.

On January 10, 2011 the Monterey County Civil Grand Jury released a report that included findings and recommendations concerning retirement systems and participation in CalPERS for the cities in the county. Each of the cities is required to provide a written response by April 11, 2011.

This Committee has not yet completed its work and is not ready to issue a full report on its findings and recommendations. However, in order to provide assistance to the city administration and council, we have studied the Grand Jury findings and recommendations. This document provides our suggestions concerning the city's response. For convenience we have grouped each of the Grand Jury's findings (F1.1 through F1.12) with its associated recommendation (R1.1 through R1.12). We follow each finding and recommendation with our comments and/or suggested response (in italics).

Comments and Suggested Responses

F1.1. *The CalPERS retirement system is worth retaining.*

R1.1. *Continue to participate in the CalPERS retirement system.*

By virtue of its participation in the CalPERS retirement system, Carmel by the Sea (hence, Carmel) is exposed to the uncertainty associated with a series of risks, including reliance on a risky asset portfolio to support payments that are specified and not subject to asset risks.

The Committee believes that more information is needed to assess whether Carmel should continue to participate in the CalPERS retirement system. CalPERS regulations make it possible for the Council to request that CalPERS estimate the cost of exiting the retirement system. Our understanding is that the request for this estimate is non-binding and does not commit Carmel to any further action.

The Committee recommends that Carmel request this "exit estimate" as a necessary first step in considering the costs and benefits of a possible withdrawal from the system and adoption of an alternative retirement plan better suited to the needs of the City and its employees.

F1.2. *Those local agencies that have binding arbitration have ceded their collective bargaining authority and responsibility to an individual arbitrator.*

R1.2. *Abolish binding arbitration in labor matters.*

The Committee agrees with the finding. Carmel's current labor contracts do not provide for binding arbitration and we recommend that this practice continue.

F1.3. *A vote of the electorate before granting increased retirement benefits has not been implemented as a check on overspending.*

R1.3. *Require a vote of the electorate as a prerequisite to increase retirement benefits and thereby limit spending.*

The Committee believes that the Council should retain a full range of choices concerning its employees' salaries, benefits and other contract terms. Thus we do not concur with this recommendation. However, the Committee recommends that public notice be made of any intention to enter into negotiations to significantly change retirement benefits in order to allow sufficient time for comments by interested parties.

F1.4 *Some agencies may allow retired employees to come back to work part time at the same agency and receive retirement and a salary, provided they don't work more than 960 hours per year, the maximum allowed by CalPERS.*

R1.4. *Do not allow those who have retired from the agency to be re-employed by the same agency on a part-time basis.*

Findings and Recommendations 4 through 9 relate to particular practices allowed within the CalPERS retirement system. The Grand Jury recommended that each of these be restricted. Carmel has avoided broad use of these practices and avoided use of some them entirely.

The Committee believes that the City Council and administration should continue to have the full range of available choices in managing its employees, and recommends against imposing the restrictions in recommendations 4 through 9 categorically. However, the Committee does believe it prudent to avoid frequent use of these practices.

With regard to recommendation 1.4 the Committee recommends continuation of the restriction that retired employees can only be hired on a part-time temporary basis with no benefits

***F1.5**. Some agencies may have practices that allow employees to increase or "spike" their base year salaries by converting unused sick leave or vacation leave to salary during their last year of employment.*

***R1.5**. Prevent "spiking" the base salary.*

The committee thoroughly concurs that practices related to unused sick leave or vacation leave in the last year of employment have the potential to unduly increase pension costs. There are currently caps on accumulated sick and vacation leave in the City's Municipal Code and we recommend that they be continued. We also recommend that the City analyze the costs and benefits associated with changing such caps.

***F1.6.** The practice of offering an employee up to two years unearned credit for retirement in exchange for taking an early retirement ("a Golden Handshake"), as authorized by Section 20903 of the Government Code, may be subject to abuse.*

***R1.6.** Do not offer a "Golden Handshake."*

The Committee believes that the Council and administration should continue to have the full range of choices in managing its employees and thus recommends against restricting the Council's ability to make such an offer. However, we recognize that any use of early retirement should be carefully considered, supported by a sound financial analysis indicating that the benefits of such an offer will outweigh the costs, and endorsed by the City Council.

***F1.7.** Some employees do not pay an appropriate CalPERS retirement share.*

***R1.7.** Require employees to pay the CalPERS employee contribution rate.*

At present, Carmel employees pay the full share for the standard plans specified by CalPERS and the Committee recommends that this practice be continued.

F1.8. *Some employees may pay for all optional CalPERS benefits. Some employees may pay for some or a portion of some of these benefits and some may pay nothing for optional benefits received.*

R1.8. *Require employees to pay for all optional CalPERS benefits.*

At present, Carmel uses plans that include an optional provision that bases retirement benefits on a single year's compensation rather than the average of amounts over three years. The additional required contribution is currently paid by the City.

The Committee concurs with the Grand Jury and recommends that Carmel require employees to pay for optional CalPERS benefits, to the extent permitted by CalPERS regulations and labor agreements.

F1.9. *Some agencies have no caps on the maximum amount of time one can accumulate in sick leave or vacation leave.*

R1.9. *Place a cap on the maximum amount of sick leave and vacation leave an employee can accumulate.*

The Committee recommends continuation of caps such as those currently specified in the City's Municipal Code. We also recommend that the City analyze the costs and benefits associated with changing such caps.

F1.10. *The California Legislature could enact changes that would limit new employees to 2% @ 55 for Safety with a 90% of salary retirement cap and 2% @ 60 for Miscellaneous in the CalPERS system with a 36-month salary base for each.*

R1.10. *Urge passage of legislation that new hires are limited to 2% @ 60 for Miscellaneous employees, 2% @ 55 for Safety employees with a 90% of salary retirement cap, and a 36-month salary base for each.*

The Committee believes that it is important for CalPERS to offer employers multiple tiers, including the two included in this recommendation. This can allow employers maximum flexibility in providing overall compensation plans, balancing salary payments, health and retirement benefits. We understand that the two specific plans specified in the recommendation are now available for use by employers when hiring new employees. The Committee recommends that CalPERS continue to make these plans available in the future, preferably with additional alternatives. However, we do not recommend that City urge the California Legislature to mandate that all CalPERS member agencies be required to utilize these particular plans for all new employees.

F1.11. *CalPERS could be made more affordable to the agencies if new employees were provided, in lieu of benefits accorded to existing employees, a second-tier of benefits of 2% @ 55 for Safety employees with a 90% of salary retirement cap and 2% @ 60 for Miscellaneous employees, each with a 36-month salary base*

R1.11. *Contract for a CalPERS retirement benefit for newly hired employees of 2% @ 55 for Safety employees with a 90% of salary cap and 2% @ 60 for Miscellaneous employees with a 36-month salary base for each.*

As indicated in the previous response, the Committee understands that these tiers are currently available for use by Carmel for new employees. We recommend that the Council undertake negotiations with the employee organizations to allow the adoption of some set of benefits for new employees that will decrease the risk to the City associated with retirement payments. The tiers proposed by the Grand Jury meet this criterion but the Committee recommends that the City also consider any other plans allowed by CalPERS that could accomplish this goal.

F1.12 *Some MOUs may not allow the reopening of negotiations to make prospective changes to salary and benefits in the event of unforeseen dire economic circumstances.*

R1.12. *In all future MOUs, reserve the right to reopen negotiations in the event of unforeseen dire economic circumstances to make changes to salary and benefits with no reduction to salary and/or benefits already earned.*

The Committee understands that Carmel's current agreements with labor organizations (MOUs) do not preclude the reopening of negotiations to make prospective changes to salary and benefits. In general, we recommend that no future MOUs restrict in any way the City's right to reopen negotiations to make prospective changes in salary and benefits.

Conclusions

The Committee recognizes that decisions concerning retirement benefits are extremely important to the employees and to the citizens of the City of Carmel. The City's current CalPERS retirement plans are highly complex and increasingly costly. The Grand Jury has made a major contribution by indentifying a number of crucial issues and recommending the adoption of specific policies by the cities in Monterey County. We ask the Carmel city administration and Council to consider our suggestions and recommendations when responding to the Grand Jury report. This Committee will continue to analyze Carmel's current pension plans, explore possible alternatives, and issue a final report with findings and recommendations for possible action by the City at a later date.

Respectfully Submitted:

Richard Borda

Joseph Mark

Barbara Santry

William Sharpe

Laura Zehm

Appendix C
Interim Report[1]

Carmel CalPERS Committee

Interim Report

1

Charge

- Appointed by Mayor Sue McCloud in October, 2010
- Goal: to review the City's pension retirement plans provided by the California Public Employees' Retirement System (CalPERS) and to make recommendations to the City concerning those and alternative plans.
- At the Mayor's request, the committee has operated independently since its inception.

2

Members

- Richard Borda
- Joseph Mark
- Barbara Santry
- William Sharpe
- Laura Zehm

3

Investigation

- The committee worked with City Administration
- At different times its meetings were attended by:
  - Richard Gillen, City Administrator
  - Heidi Burch, Assistant City Administrator
  - John Goss, Interim City Administrator
- Information was obtained from
  - City Administration
  - CalPERS actuary
  - Public sources
- There were numerous meetings in person, by phone and email

4

The Grand Jury Report

- In January 2011, the 2010 Monterey County Civil Grand Jury issued a Report on the CalPERS retirement system for public employees of the County of Monterey and the twelve cities within the county
- In March, 2011, at the request of the City, the Carmel Committee provided suggestions to the City administration concerning the City's required responses to the Grand Jury Report
- With minor changes those recommendations were adopted by the administration for its response to the Grand Jury

5

The City's Pension Plans

- Formula for retitrement benefit
  - **% factor** times **years of service** times **salary base**
  - Post-retirement, payments adjusted each year for inflation
- Miscellaneous employees
  - 2% at age 55
  - Salary base: Highest year
- Safety employees
  - 3% at age 50
  - Salary base: Highest year

6

Current Contributions

- Employee contributions
  - Miscellaneous: 7% of salary
  - Safety: 9% of salary
- Employer contributions
  - Miscellaneous: 19.494 % of payroll
  - Safety: 34.868 % of payroll

7

The "Side Fund" Debt

- Established by CalPERS in 2003
  - Based on estimates of past underfinding at the time
  - Loans to the City
  - Interest charged at 7.75 % per year
  - CalPERS designates a portion of the employer contributions to be applied each year towards interest and principal
  - The City has made all required payments
  - May be paid in whole or in part at any time
- Amount owed, 6/30/2011

  $ 6.2 million

8

Interest Rates

- Side Fund: current interest rate
  7.75 %
- Reserve Funds (many required by law)
  $ 8.9 Million
- Current interest rate on reserves
  0.51 %
- Estimated interest rate on a new bond issue
  6.0 %

9

The Side Fund Debt: Recommendation

- Pay the Side Fund Debt as soon as possible, using
  - Proceeds from a new bond issue
  - And possibly some reserves
- This is equivalent to refinancing a mortgage at a lower interest rate
- This does not modify the benefits.

10

Termination

- Terminating the CalPERS pension plans does not require terminating the CalPERS health plans
- A Council resolution to terminate is not binding
  - After approximately 6 months, CalPERS provides an estimate of the amount required to be paid to CalPERS to terminate the plans
  - A resolution is the only way to obtain a CalPERS estimate of the cost
- If the plans are terminated, all benefits earned to date will be paid by CalPERS

11

The Termination Unfunded Liability

- Termination Unfunded liability

  = termination assets – termination liabilities

- Current actuarial reports are not transparent
  - They do not include any of these values
- Such values may be included in future actuarial reports
  - At the earliest, values as of June, 2011 will be provided in the actuarial reports in October, 2012

12

Possible Termination Asset and Liability Values

- In April, 2011, the City's CalPERS actuary provided the committee a "very rough" estimate of the termination unfunded liability (in addition to the side fund debt) as of 6/30/2009: Total for Miscellaneous and Safety:
  - $ 14.4 million
- On August 18, 2011, CalPERS changed the method used to calculate termination unfunded liabilities
- On August 17, 2011 the City's Actuary advised the committee that
  - "the estimates that I provided previously are much less than what the results will be with the new methodology, even taking into account the good investment returns over the past 2 years."
- At present the committee has no further CalPERS estimate of these liabilities

13

Termination: Recommendation

- The committee recommends that the Council pass a resolution to terminate the CalPERS pension plans
  - the only way to obtain an official estimate of the termination assets, liabilities and unfunded liability
  - makes it possible, but not necessary, to terminate the plans at a later date if desired

14

Financial Risk

- The CalPERS pension plans create large financial risks for the City
  - Risks that asset values will decrease substantially, most likely when City revenues also decrease
  - Risks of demographic changes
  - Risks associated with changes in CalPERS actuarial procedures

- These risks can be reduced by
  - Decreasing the levels of CalPERS benefits, or
  - Replacing the CalPERS plans
    - For example, with a combination of social security, a defined contribution pension plan and possibly higher salaries

15

Current CalPERS Tiers and Salary Bases

- Tiers
  - Percentage Factors related to age at retirement

- Salary bases
  - Highest single year
  - Highest 3-year average

16

Tiers and Salary Bases: Recommendation

- For new employees
  - Adopt substantially lower tiers
  - Base benefits on highest 3-year average salary

17

Major Recommendations

- Pay the side fund debt as soon as possible
  - to lower interest costs
- Pass a non-binding resolution to terminate the CalPERS plans
  - To obtain an estimate of the termination unfunded liabilities
  - To make it possible to subsequently terminate the plans if desired
- Include estimates of the termination unfunded liabilities in footnotes or comments in the City’s budget reports
- Adopt substantially lower retirement benefit tiers for new employees

18

Appendix D
Revised Actuarial Method for Determining Termination Unfunded Liabilities

CalPERS

California Public Employees' Retirement System
P.O. Box 942709
Sacramento, CA 94229-2709
(888) CalPERS (or 888-225-7377)
TTY: (877) 249-7442
www.calpers.ca.gov

Reference No.:
Circular Letter No.: 200-058-11
Distribution: I, VI
Special:

Circular Letter

August 19, 2011

TO: **ALL PUBLIC AGENCIES**

SUBJECT: **CHANGES TO THE TERMINATED AGENCY POOL**

ATTENTION: **FINANCE DIRECTORS, HUMAN RESOURCE DIRECTORS, PUBLIC AGENCY DECISION MAKERS**

CalPERS is sending this Circular Letter as a result of the CalPERS Board of Administration's decision at its August meeting to take steps to protect member benefits and to mitigate funding risk to the Terminated Agency Pool (Pool).

Background

When a contracting agency terminates its CalPERS contract, the assets and liabilities of the agency are merged into the Pool. Similarly, when a contracting agency terminates a portion of its CalPERS contract, the assets and liabilities associated with the terminated portion of the contract are merged into the Pool. The Pool is part of the Public Employees' Retirement Fund (PERF) and pools those PERF assets used to pay benefits to members who are credited with service rendered as employees of terminated agencies.

As of June 30, 2009, the market value of assets attributable to the Pool was $144 million, and the funding value of actuarial liabilities attributable to the Pool was $60 million. At that time the Pool was 240% funded. Benefit payments attributable to the Pool exceed $5.4 million annually.

Due to the current economic environment and budget issues faced by public agencies, there is increasing pressure on public agencies to amend or terminate pension plan contracts. Although currently the Pool is well funded, the termination of a large employer (or several small employers) would cause the funded status of the Pool to be significantly diluted. For example, if a plan (or collection of plans) with $535 million in assets and $500 million in liabilities is merged into the Pool, the funded status of the Pool would likely drop from 240% to 121%.

Should the Pool become underfunded, CalPERS has limited funding sources available to increase the funded status of the Pool. This is because terminated agencies generally do not make ongoing contributions (other than a fixed schedule of payments established at the time of contract termination). Therefore, the Pool could be at risk should it become underfunded. Since the Pool is currently well funded, an opportunity exists to mitigate this risk before it is realized.

How Can CalPERS Minimize This Risk?

In light of the risk discussed above, the Board has adopted, in concept, an investment policy and asset allocation strategy that reflects the characteristics of future expected benefit payments that will be paid out of the Pool. By implementing a specific investment policy and asset allocation strategy, CalPERS is taking steps to increase benefit security and mitigate the Pool's funding status risk.

Change to Investment Policy, Income Allocation and Other Actuarial Assumptions

The assets of the Pool will be invested in a way that reflects the characteristics of future expected benefit payments. The Pool will continue to be part of the PERF and will be allocated income in accordance with this investment policy and asset allocation strategy. Over the next few months, CalPERS will establish the investment policy and asset allocation strategy to better match the liabilities and assets of the Pool.

To ensure that the most appropriate actuarial assumptions are used at the time a public agency terminates its contract with CalPERS, the Board has adopted an interim method to determine the discount rate, inflation assumption and other related economic assumptions to be used when calculating the liabilities of terminating agencies and to be used in the annual actuarial valuation of the Pool entitled "Method to Determine the Discount Rate, Inflation Assumption and Wage Growth Assumption for Termination Calculations," a copy of which is attached.

The interim method will be used to set the discount rate, inflation assumption and other related economic assumptions for contract terminations (and partial contract terminations) with a termination date on or after August 18, 2011. In addition, this method will be used to set the discount rate and other actuarial assumptions for the June 30, 2010, actuarial valuation of the Pool that will be performed later this fall. It is expected that there will be changes to the interim method when an investment policy and asset allocation strategy are adopted, and thereafter from time to time to reflect changes to the investment policy and asset allocation strategy.

Impact on Liabilities in the Pool and Agencies Contemplating Termination of a Contract with CalPERS

In light of the current benefits attributable to the Pool, and using the US Treasury rates in effect as of June 30, 2011, and the new termination calculation method described above, the discount rate for valuation of the Pool as of June 30, 2011, would be 3.8%. Using this rate, actuarial liabilities attributable to the Pool increases from $60 million to close to $92 million, resulting in a decrease in surplus assets of the Pool from $84 million to $52 million.

Going forward, if an agency terminates its contract, or a portion of its contract, a similar increase in the value of actuarial liabilities at the time of termination (compared to the value of actuarial liabilities as an active agency with ongoing contributions) can be expected assuming rates remain at 3.8%. Note that as rates fluctuate in the market, the value of actuarial liabilities at the time of termination will also fluctuate. Employers should be aware that under the current interest rate environment this new termination calculation method will increase the amount of assets that employers will need to leave behind when they terminate; if there is insufficient assets in the employer's account at CalPERS, the employer will be required to make up the shortfall.

In order to ensure transparency and provide relevant information, the CalPERS Actuarial Office expects to be able to provide employers with hypothetical information regarding their termination liabilities as part of the regular annual actuarial valuation report. At this time we expect this information to be available, at the earliest, in the June 30, 2011, actuarial valuation report that will be mailed in October of 2012.

If you wish to discuss these issues further, please contact your CalPERS actuary at **888 CalPERS** or (888-225-7377).

ALAN MILLIGAN, Chief Actuary
Actuarial Office

Enclosure
Method to Determine the Discount Rate

Circular Letter No. 200-058-11 Enclosure

METHOD TO DETERMINE THE DISCOUNT RATE, INFLATION ASSUMPTION AND WAGE GROWTH ASSUMPTION FOR TERMINATION CALCULATIONS

The discount rate assumption to be used for actuarial valuations for employers terminating a contract (or portion of a contract) with CalPERS, and for the annual actuarial valuation of the Terminated Agency Pool, will be a weighted average of the 10 and 30 year US Treasury yields in effect on the valuation date. The weighted average percentages will be the weights that when applied to the duration of the 10 and 30 year US Treasury, determined at current spot rates, equal the duration of the expected benefit payment cash flows of the contract (or portion of a contract in the case of a partial termination) being terminated or the terminated Agency Pool.

In addition, the inflation assumption used to project the expected benefit payment cash flows of the contract (or portion of a contract in the case of a partial termination) being terminated or the terminated Agency Pool will be the inflation imbedded in the US Treasury Inflation Protected Securities (TIPS) on the valuation date. The wage growth assumption used for the same calculation will be 0.25% higher than the inflation assumption. This wage growth assumption will be used in combination with the merit, seniority and promotion component of individual salary increases previously adopted by the Board to project individual salaries into the future.

Appendix E
Estimates of Approximate Values of Termination Unfunded Liabilities

	Safety	Miscellaneous	Sum
(a) Carmel projected payroll 2011/2012	2,164,868	3,267,799	5,432,667
(b) Pool Projected Payroll 2011/2012	1,071,880,252	817,802,011	1,889,682,263
(c) Carmel/Pool Payroll [(b)/(c)]	0.00202	0.00400	
(d) Market Value of Pool Assets 6/30/2009	5,841,020,995	2,014,366,226	7,855,387,221
(e) Estimated Market Value of Carmel Assets 6/30/2009 [(c)*(d)]	11,797,064	8,049,068	19,846,131
(f) Estimated Unfunded Liabilities, previous actuarial method	8,300,000	6,000,000	14,300,000
(g) Estimated Total Liabilities, previous actuarial method [(e)+(f)]	20,097,064	14,049,068	34,146,131
(h) Estimated Total Liabilities, current actuarial method [1.45*(g)]	29,140,742	20,371,148	49,511,891
(i) Estimated Unfunded Liabilities, current actuarial method [(h)-(e)]	17,343,679	12,322,081	29,665,759
Values as of 6/30/2011			
(j) Estimated Market Value of Assets [(e)*1.133*1.207]	16,132,850	11,007,350	27,140,200
(k) Estimated Value of Liabilities [(h)*1.0775*1.0775]	33,832,584	23,651,031	57,483,614
(l) Funded Ratio ([(j)/(k)]	47.7%	46.5%	47.2%
(m) Estimated Value of Liabilities with mortality load [1.07*(k)]	36,200,865	25,306,603	61,507,467
(n) Estimated unfunded liabilities [(k)-(j)]	17,699,734	12,643,681	30,343,414
(o) Estimated required payment on termination [(m)-(j)]	20,068,015	14,299,253	34,367,267

Notes:
(a) from actuarial reports
(b) from actuarial reports
(c) ratio of carmel payroll to pool payroll
(d) from actuarial reports
(e) assumes that the ratio of carmel payroll to pool payroll equal the ratio of assets
(f) based on emails from Barbara Ware, 4/27/2011, 5/6/2011 and 8/2/2011
4/27/2011: "very, very rough estimates: Misc. 11.3, Safety 9.3
5/6/2011: " side fund liabilities are included"
8/2/2011: as of 6/30/2009.. Side find liabilities are 3.0 for Misc and 3.3 for Safety
Estimated Unfunded liabilities are 11.3-3.0 and 9.3-3.3, respectively
(g) based on estimated unfunded liabilities and estimated assets
(h) assumes that liabilies under current method = 1.45*value under previous method
(ratio is based on emial from Babara Ware, 8/17/2011 that value "... would
be much higher than the accrued liability for an ongoing plan (probably
in the range of 40 or 50% higher".)
(i) difference between estimated total liabilities and estimated value of assets
(j) based on total returns of CalPERS assets 2009/10 and 2010/11
2009/2010: From CalPERS annual investment report
2010/2011: From CalPERS press release (7/18/2011)
Calculation assumes that from 2009 to 2011, contributions are used to pay
benefits
(k) based on assumed actuarial rate of 7.75%
Calculation assumes that from 2009 to 2011, the present value of new accrued
liabilties equals the present value of benefits paid
(l) Ratio of market value of assets to estimated value of liabilities
(m) Value of liabilities plus 7% load for mortality improvements
per email from Barbara Ware 9/19/2011
(n) Estimated value of liabilities minus estimated market value of assets
(o) Estimtaedl value of Liabilities with mortality load minus estimated
market value of assets