September 21, 2015

Ms. Alyssa Schiffman
Finance Director
Southern Marin Fire Protection District
308 Reed Blvd.
Mill Valley, CA 94941

Re: Southern Marin Fire Protection District ("SMFPD")
GASB 45 Actuarial Valuation as of July 1, 2015

Dear Ms. Schiffman:

This report sets forth the results of our GASB 45 actuarial valuation of SMFPD's retiree health insurance program as of July 1, 2015.

In June, 2004 the Governmental Accounting Standards Board (GASB) issued accrual accounting standard for retiree healthcare benefits, GASB 45. GASB 45 requires public employers such as SMFPD to perform periodic actuarial valuations to measure and disclose their retiree healthcare liabilities for the financial statements of both the employer and the trust, if any, set aside to pre-fund these liabilities. SMFPD must obtain actuarial valuations of its retiree health insurance program under GASB 45 not less frequently than once every three years.

To accomplish these objectives SMFPD selected Demsey, Filliger and Associates (DF&A) to perform an actuarial valuation of the retiree health insurance program as of July 1, 2015. This report may be compared with the valuation performed by DF&A as of July 1, 2012, to see how the liabilities have changed since the last valuation. We are available to answer any questions SMFPD may have concerning the report.

## Financial Results

We have determined that the amount of actuarial liability for current and future retirees, as of July 1, 2015, is $11,819,316. This represents the present value of all benefits expected to be paid by SMFPD for its current and future retirees. If SMFPD were to place this amount in a fund earning interest at the rate of 6.5% per year, and all other actuarial assumptions were exactly met, the fund would have exactly enough to pay all expected benefits.

This includes benefits for 30 current retirees as well as 39 active employees who may become eligible to retire and receive benefits in the future. It does not include employees hired on or after January 1, 2014.

If we apportion the $11,819,316 into past service and future service components under the Projected Unit Credit Cost Method, the past service liability (or Accrued Liability) component is $9,018,221 as of July 1, 2015. This represents the present value of all benefits earned to date assuming that an employee earns retiree medical benefits ratably over his or her career. The $9,018,221 is comprised of liabilities of $4,495,544 for active employees and $4,522,677 for retirees. SMFPD has adopted an irrevocable trust (the "Public Agency Retirement Services (PARS) GASB 45 Program") for the pre-funding of retiree healthcare benefits. Trust assets have an actuarial value of $1,928,681 as of July 1, 2015, so the Unfunded Accrued Liability (called the UAL, equal to the AL less assets) is $7,089,540.

We have determined that SMFPD's "Annual Required Contributions", or "ARC", for the fiscal year 2015-16, is $916,153. The $916,153 is comprised of the present value of benefits accruing in the current year, called the "Service Cost", and a 30-year amortization of the UAL. We estimate that SMFPD's pay-as-you-go cost for retiree healthcare for the 2015-16 fiscal year will be approximately $304,131, so the difference between the accrual accounting expense (ARC) and pay-as-you-go is an increase of $612,022.

There are two adjustments to the ARC that are required in order to determine SMFPD's Annual OPEB Cost (AOC) for the 2015-16 fiscal year. We have calculated these adjustments based on an estimated Net OPEB (Asset) of ($60,286) as of June 30, 2015, resulting in an AOC for 2015-16 of $916,851.

On June 24, 2012, SMFPD annexed the City of Sausalito's fire department and acquired 15 new employees. The City of Sausalito has agreed to pay retiree health benefits for 6 of the 15 employees directly, and those employees have been excluded from this report. The remaining 9 employees are the obligation of SMFPD and have been included in this report to the extent they were in active service as of the valuation date. The City of Sausalito has agreed to pay SMFPD $58,000 per year for each of the next 30 years in consideration of the projected cost of retiree health benefits for those 9 employees. The liabilities shown in this report do not take into account the expected payments from the City of Sausalito to SMFPD, as those payments are considered an asset of SMFPD separate from the retiree health plan, and are thus accounted for separately.

We summarize the valuation results in the table on the next page and in Exhibit II at the end of the report. All amounts are net of expected future retiree contributions.

**Southern Marin Fire Protection District**

**Actuarial Liabilities and Annual Expense under**

**GASB 45 Accrual Accounting Standard**

| **Item** | **Amounts for Fiscal 2015-16** |
|---|---|
| Present Value of Future Benefits (PVFB) | |
| Active | $7,296,639 |
| Retired | 4,522,677 |
| **Total: PVFB** | **$11,819,316** |
| Accrued Liability (AL) | |
| Actives | $4,495,544 |
| Retired | 4,522,677 |
| **Total: AL** | **$9,018,221** |
| Assets | (1,928,681) |
| **Total: Unfunded AL** | **$7,089,540** |
| Annual Required Contributions (ARC) | |
| Service Cost At Year-End | $373,254 |
| 30-year Amortization of Unfunded AL | 542,899 |
| **Total: ARC** | **$916,153** |
| Adjustments to ARC | |
| Interest on Net OPEB (Asset)* | (3,919) |
| Adjustment to ARC* | 4,617 |
| **Total: Annual OPEB Cost for 2015-16** | **$916,851** |

*Amounts based on estimated June 30, 2015 Net OPEB (Asset) of ($60,286).

The ARC of $916,153, shown above, should be used for the 2015-16 and 2016-17 fiscal years, but the Annual OPEB Costs for both years must include adjustments based on the Net OPEB Obligation/(Asset) as reported in the prior year's financial statement, which is not known in advance.

When SMFPD begins preparation of the June 30, 2015 government-wide financial statements, DF&A will provide SMFPD and its auditors with complimentary assistance in preparation of footnotes and required supplemental information for compliance with GASB 45.

We determined the July 1, 2015 asset value of $1,928,681 by using the June 30, 2015 value of the District's PARS GASB 45 Program account, without adjustment.

## Differences from Prior Valuation

The most recent prior valuation was completed by DF&A as of July 1, 2012. The Accrued Liability as of that date was $5,670,516, compared to $9,018,221 on July 1, 2015. In this section, we provide a reconciliation between the 2012 AL and the 2015 AL, so that it is possible to track the numbers from one actuarial report to the next.

Several factors have caused the AL to change since 2012. The passage of time increases the AL as the employees accrue more service and get closer to receiving benefits. There are actuarial gains/losses from one valuation to the next, and changes in actuarial assumptions and methodology for the current valuation. The most important of these factors were as follows:

1. There was a gain (a decrease in the AL) of $481,444 due to increases in healthcare premiums less than expected.
2. We changed to more up-to-date mortality tables. This change increased the AL by $266,898.
3. We included the "implicit subsidy" as required by Actuarial Standard of Practice Number 6 (ASOP 6). Please see page 8 for further details. This change increased the AL by $1,498,231.
4. We changed the initial healthcare trend assumption from 5% to 8% to better reflect our expectation of premium increases over the next several years. This change increased the AL by $378,568.
5. There was a net census loss (an increase in the AL) of $721,175. Sources of census loss include lower-than-expected turnover and mortality, and more retirements than expected.

The changes to the AL since the July 1, 2012 valuation may be summarized as follows:

| **Changes to AL** | **AL** |
|---|---|
| AL as of 7/1/12 | **$5,670,516** |
| Passage of time | 964,277 |
| Gain from premium increases < expected | (481,444) |
| Change in mortality tables | 266,898 |
| Valuation of implicit subsidy | 1,498,231 |
| Change in healthcare trend rates | 378,568 |
| Census loss | 721,175 |
| AL as of 7/1/15 | **$9,018,221** |

## Sample Funding Schedules

There are many ways to approach the pre-funding of retiree healthcare benefits. In the *Financial Results* section, we determined the annual expense for all SMFPD-paid benefits. The expense is an orderly methodology, developed by the GASB, to account for retiree healthcare benefits. This amount will fluctuate from year to year based on the asset performance and as the population matures. However, the GASB 45 expense has no direct relation to amounts SMFPD may set aside to pre-fund healthcare benefits.

The table on the next page provides SMFPD with three alternative schedules for funding (as contrasted with expensing) retiree healthcare benefits. The schedules all assume SMFPD earns 6.5% on its trust assets and that contributions and benefits are paid mid-year. A starting asset value of $1,928,681 as of July 1, 2015 is used for the projection.

The schedules are:

1. A level contribution amount for the next 20 years.
2. A level percentage of the Unfunded Accrued Liability (UAL).
3. A contribution that increases by 3% per year for the next 20 years.

We provide these funding schedules to give SMFPD a sense of the various alternatives available to it to pre-fund its retiree healthcare obligation. The three funding schedules are simply three different examples of how SMFPD may choose to spread its costs.

By comparing the schedules, you can see the effect that pre-funding has on the total amount SMFPD will eventually have to pay. Because of investment earnings on fund assets, the earlier contributions are made, the less SMFPD will have to pay in the long run. Of course, the advantages of pre-funding will have to be weighed against other uses of the money.

The table on the following page shows the required annual outlay under the pay-as-you-go method and each of the above schedules. **The three funding schedules include the "pay-as-you-go" costs; therefore, the amount of pre-funding is the excess over the "pay-as-you-go" amount.**

These numbers are computed on a closed group basis, assuming no new entrants, and using unadjusted premiums. We use unadjusted premiums for these funding schedules because we do not recommend that SMFPD pre-fund for the full age-adjusted costs reflected in the GASB 45 liabilities shown in the first section of this report. If the premium structure changes in the future to explicitly charge under-age 65 retirees for the full actuarial cost of their benefits, this change will be offset by a lowering of the active employee rates (all else remaining equal), resulting in a direct reduction in SMFPD operating expenses on behalf of active employees from that point forward. For this reason among others, we believe that pre-funding of the full GASB liability would be redundant.

## Southern Marin Fire Protection District

## Sample Funding Schedules (Closed Group)

## Starting Actuarial Asset Value of $1,928,681 as of July 1, 2015

| Fiscal Year Beginning | Pay-as-you-go | Level Contribution For 20 years | Level % of Unfunded Liability | Constant Percentage Increase |
|---|---|---|---|---|
| 2015 | $304,131 | $690,900 | $1,034,392 | $546,625 |
| 2016 | 348,502 | 690,900 | 931,532 | 563,024 |
| 2017 | 366,511 | 690,900 | 843,511 | 579,915 |
| 2018 | 396,719 | 690,900 | 767,242 | 597,312 |
| 2019 | 428,761 | 690,900 | 701,664 | 615,231 |
| 2020 | 456,180 | 690,900 | 645,394 | 633,688 |
| 2021 | 477,113 | 690,900 | 596,979 | 652,699 |
| 2022 | 495,036 | 690,900 | 555,116 | 672,280 |
| 2023 | 537,967 | 690,900 | 518,811 | 692,448 |
| 2024 | 586,137 | 690,900 | 488,096 | 713,222 |
| 2025 | 631,330 | 690,900 | 462,260 | 734,619 |
| 2026 | 685,521 | 690,900 | 440,412 | 756,657 |
| 2027 | 716,524 | 690,900 | 422,114 | 779,357 |
| 2028 | 757,926 | 690,900 | 406,102 | 802,738 |
| 2029 | 791,535 | 690,900 | 392,213 | 826,820 |
| 2030 | 821,682 | 690,900 | 379,829 | 851,624 |
| 2031 | 864,428 | 690,900 | 368,544 | 877,173 |
| 2032 | 898,965 | 690,900 | 358,341 | 903,488 |
| 2033 | 934,657 | 690,900 | 348,742 | 930,593 |
| 2034 | 950,732 | 690,900 | 339,533 | 958,511 |
| 2035 | 962,895 | 0 | 330,194 | 0 |
| 2036 | 977,133 | 0 | 320,602 | 0 |
| 2037 | 982,015 | 0 | 310,744 | 0 |
| 2038 | 951,279 | 0 | 300,470 | 0 |
| 2039 | 958,635 | 0 | 289,436 | 0 |
| 2040 | 973,279 | 0 | 278,173 | 0 |
| 2041 | 966,650 | 0 | 266,708 | 0 |
| 2042 | 977,525 | 0 | 254,861 | 0 |
| 2043 | 953,758 | 0 | 242,756 | 0 |
| 2044 | 946,699 | 0 | 230,256 | 0 |
| 2045 | 940,266 | 0 | 217,508 | 0 |
| 2046 | 897,037 | 0 | 202,587 | 0 |
| 2047 | 893,735 | 0 | 177,143 | 0 |
| 2048 | 889,164 | 0 | 154,905 | 0 |
| 2049 | 863,801 | 0 | 135,470 | 0 |
| 2050 | 846,250 | 0 | 118,480 | 0 |
| 2055 | 767,983 | 0 | 60,718 | 0 |
| 2060 | 651,964 | 0 | 31,229 | 0 |
| 2065 | 476,201 | 0 | 16,137 | 0 |
| 2070 | 288,971 | 0 | 8,372 | 0 |

Note to auditor: when calculating the employer OPEB contribution for the year ending on the statement date, we recommend multiplying the actual SMFPD-paid premiums on behalf of retirees by a factor of 1.3245 to adjust for the implicit subsidy.

## Actuarial Assumptions

In order to perform the valuation, it is necessary for the actuary to make certain assumptions regarding such items as rates of employee turnover, retirement, and mortality, as well as economic assumptions regarding healthcare inflation and interest rates. Our assumptions are based on a standard set of assumptions we have used for similar studies, modified as appropriate for SMFPD. For example, turnover rates are taken from a standard actuarial table, T-5, reduced by 40% at all ages. This matches well with recent SMFPD experience. Retirement rates were also based on SMFPD experience. Both assumptions should be reviewed periodically to see if they are tracking well with actual turnover and retirement patterns.

The discount rate of 6.5% is based on our best estimate of expected long-term plan experience and is in accordance with our understanding of the guidelines for selection of these rates under GASB 45. The healthcare trend rates are based on our knowledge of the general healthcare environment and the specific coverages offered by SMFPD.

A complete description of the actuarial assumptions used in the valuation is set forth in the "Actuarial Assumptions" section later in the report.

## Projected Pay-as-you-go Costs

As part of the valuation, we prepared a projection of the expected annual cash outlay of SMFPD to pay benefits on behalf of its retirees on a pay-as-you-go basis. These numbers are computed on a closed group basis, assuming no new entrants. Projected pay-as-you-go amounts for selected years are as follows:

| FYB | Pay-as-you-go |
|---|---|
| 2015 | $304,131 |
| 2016 | 348,502 |
| 2017 | 366,511 |
| 2018 | 396,719 |
| 2019 | 428,761 |
| 2020 | 456,180 |
| 2025 | 631,330 |
| 2030 | 821,682 |
| 2035 | 962,895 |
| 2040 | 973,279 |
| 2045 | 940,266 |
| 2050 | 846,250 |
| 2055 | 767,983 |
| 2060 | 651,964 |
| 2065 | 476,201 |
| 2070 | 288,971 |

**Valuation of Implicit Subsidy**

Since SMFPD's implementation of GASB 45, we have made use of the "community rating" exception with respect to the premiums charged by MCERA and the County of Marin. This exception has permitted an actuary to ignore the effects of the use of blended premiums for active employees and retirees under age 65 as we understand to be the case for the County of Marin. This treatment has resulted in actuarial liabilities that were significantly lower than those of agencies with insurance providers that charged separate, stand-alone rates for retirees under age 65, and has been the prevailing practice among California-based actuarial firms. The Actuarial Standards Board has amended Actuarial Standard of Practice Number 6 (ASOP 6) to virtually eliminate this practice for valuations beginning with the July 1, 2015 fiscal year. As shown on page 4 of this report, the implicit subsidy for SMFPD is approximately $1.5 million. The new GASB OPEB standards, expected to take effect in 2017, contain guidance that will require actuaries to continue to include this subsidy, where applicable, for all future OPEB valuations. Please feel free to call us at (818) 718-1266 if you would like further explanation of this change.

**Breakdown by Employee/Retiree Group**

Exhibit I, attached at the end of the report, shows a breakdown of the GASB 45 components (ARC, AL, Service Cost, and PVFB) by bargaining unit (or non-represented group) and separately by active employees (future retirees) and current retirees.

**Net OPEB Obligation/(Asset) and Annual OPEB Cost (AOC)**

Exhibit II shows a development of SMFPD's Net OPEB Obligation/(Asset) as of June 30, 2010 through June 30, 2015, and the Annual OPEB Cost for the fiscal years 2009-10 through 2015-16. The Net OPEB (Asset) as of June 30, 2015 and the Annual OPEB Cost for 2015-16 are <u>estimates</u> as of the date this report is being prepared.

**Certification**

The actuarial certification, including a caveat regarding limitations of scope, if any, is contained in the "Actuarial Certification" section at the end of the report. We have enjoyed working with SMFPD on this report, and are available to answer any questions you may have concerning any information contained herein.

Sincerely,
DEMSEY, FILLIGER AND ASSOCIATES

T. Louis Filliger

T. Louis Filliger, FSA, EA, MAAA
Partner & Actuary

# Benefit Plan Provisions

SMFPD provides health care for employees, and dependents (and also for retirees and their dependents) through the Marin County Employees' Retirement Association (MCERA). Employees may choose one of two medical options: Kaiser Plan L and Anthem Blue Cross PPO. SMFPD also offers dental and vision insurance through BRMS.

## Retiree Coverage

### Firefighters

Effective beginning with the 2011-12 fiscal year, Firefighters receive retiree health benefits pursuant to the terms of Section 11.1 of their Memorandum of Understanding (MOU), which states in relevant part that retired unit members with at least 20 years of service will receive a District contribution equal to 100% of the Kaiser Plan L retiree-only premium. Members with at least 10 but fewer than 20 years of service at retirement will receive a District contribution equal to the Kaiser L rate multiplied by 50% plus 5% per year of service in excess of 10 years. Members other than former Sausalito employees hired prior to July 1, 2010 with at least 30 years of service at retirement will also receive District-paid spousal coverage (up to 100% of the Kaiser "Plus 1" rate). Benefits for members hired on or after January 1, 2014 are under negotiation at the time of the report and we have assumed that such members are ineligible for retiree health benefits for purposes of this report.

### Administrative Employees

Retired administrative employees hired prior to January 1, 2014 are eligible to receive an employer contribution equal to the retiree-only premium for the Kaiser Plan L rate (similar to Firefighters). Administrative employees hired on or after January 1, 2014 are not eligible for retiree health benefits.

### Fire Chief Officers' Association (SMFCOA)

Retired Deputy Chief and Battalion Chiefs covered by IAFF Local 1775 are eligible to receive an employer contribution towards medical and dental insurance after the completion of 5 years of service and retirement from SMFPD through the Marin County Retirement System. Full-time employees of SMFCOA with 15 years of service qualify for continuation of District-paid spousal coverage. These provisions apply only to existing members of SMFCOA and Fire Chiefs who were employed and promoted prior to July 1, 2001. SMFCOA members hired or promoted after that date are subject to the same provisions as Firefighters, with the exception that SMFCOA retirees with at least 15 years of service are also eligible to receive District-paid dental insurance. Benefits for members hired on or after January 1, 2014 are under negotiation at the time of this report and we have assumed that such members are ineligible for retiree health benefits for purposes of this report.

## Benefit Plan Provisions (Continued)

**Medical and Dental Premiums**

The following table shows January 1, 2015 premiums for retirees in MCERA:

| | Kaiser HMO Plan L | Anthem Blue Cross PPO | Delta Dental |
|---|---|---|---|
| Basic Plan | | | |
| Retiree | $709.10 | $1,046.71 | $65.19 |
| Retiree + 1 | 1,418.22 | 2,120.20 | 123.37 |
| Medicare Coordinated | | | |
| Retiree | $395.32 | N/A | $65.19 |
| Retiree + 1ME | 790.64 | N/A | 123.37 |

## Valuation Data

**Active and Retiree Census**

Age distribution of eligible retirees and surviving spouses

| Age | Count |
|---|---|
| Under 50 | 0 |
| 50-54 | 0 |
| 55-59 | 7 |
| 60-64 | 8 |
| 65-69 | 6 |
| 70-74 | 7 |
| 75-79 | 2 |
| 80-84 | 0 |
| 85-89 | 0 |
| 90+ | 0 |
| Total | 30 |
| Average Age | 64.70 |

Age/Years of service distribution of active employees included in the valuation*

| Years→ | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35+ | Total |
|---|---|---|---|---|---|---|---|---|---|
| Age | | | | | | | | | |
| <25 | 0 | | | | | | | | 0 |
| 25-29 | 1 | 0 | | | | | | | 1 |
| 30-34 | 1 | 4 | 0 | | | | | | 5 |
| 35-39 | 1 | 3 | 2 | 0 | | | | | 6 |
| 40-44 | 0 | 1 | 7 | 1 | 1 | | | | 10 |
| 45-49 | 0 | 2 | 2 | 4 | 0 | 0 | | | 8 |
| 50-54 | 0 | 1 | 3 | 1 | 1 | 2 | 0 | | 8 |
| 55-59 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65+ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| All Ages | 3 | 11 | 14 | 6 | 2 | 2 | 1 | 0 | 39 |

*includes prior service credits with the City of Sausalito where applicable.

Average Age: 42.92
Average Service: 12.36

## Actuarial Assumptions

The liabilities set forth in this report are based on the actuarial assumptions described in this section.

Valuation Date: July 1, 2015

Actuarial Cost Method: Projected Unit Credit

Discount Rate: 6.5% per annum

Return on Assets: 6.5% per annum

Amortization Method: 30 year, level dollar, open period

Pre-retirement Turnover: According to the Crocker-Sarason Table T-5 less mortality, reduced by 40% at all ages. Sample rates are as follows:

| Age | Turnover (%) |
|---|---|
| 25 | 4.6% |
| 30 | 4.3 |
| 35 | 3.8 |
| 40 | 3.1 |
| 45 | 2.4 |
| 50 | 1.5 |
| 55 | 0.6 |

Pre-retirement Mortality: RP-2014 Employee Mortality, without projection. Sample deaths per 1,000 employees are as follows:

| Age | Males | Females |
|---|---|---|
| 25 | 0.48 | 0.17 |
| 30 | 0.45 | 0.22 |
| 35 | 0.52 | 0.29 |
| 40 | 0.63 | 0.40 |
| 45 | 0.97 | 0.66 |
| 50 | 1.69 | 1.10 |
| 55 | 2.79 | 1.67 |
| 60 | 4.69 | 2.44 |

Post-retirement Mortality: RP-2014 Healthy Annuitant Mortality, without projection. Sample deaths per 1,000 retirees are as follows:

| Age | Males | Females |
|---|---|---|
| 55 | 5.74 | 3.62 |
| 60 | 7.78 | 5.19 |
| 65 | 11.01 | 8.05 |
| 70 | 16.77 | 12.87 |
| 75 | 26.83 | 20.94 |
| 80 | 44.72 | 34.84 |
| 85 | 77.50 | 60.50 |
| 90 | 135.91 | 107.13 |

## Actuarial Assumptions (Continued)

Claim Cost per Retiree or Spouse:

| Age | Medical/Rx | Dental |
|---|---|---|
| 50 | $10,093 | $782 |
| 55 | 11,700 | 782 |
| 60 | 13,564 | 782 |
| 64 | 15,266 | 782 |
| 65+ | 4,930 | 782 |

Retirement Rates:

| Age | Percent Retiring* |
|---|---|
| 45-49 | 3.0% |
| 50 | 15.0 |
| 51 | 20.0 |
| 52 | 25.0 |
| 53 | 30.0 |
| 54 | 40.0 |
| 55 | 50.0 |
| 56 | 60.0 |
| 57 | 70.0 |
| 58 | 80.0 |
| 59 | 90.0 |
| 60 | 100.0 |

* Of those having met eligibility to receive retirement benefits. The percentage refers to the probability that an active employee who has reached the stated age will retire within the following year.

Trend Rates:

| Year | Medical/Rx | Dental |
|---|---|---|
| 2015 | 8.0% | 4.0% |
| 2016 | 7.0 | 4.0 |
| 2017 | 6.0 | 4.0 |
| 2018+ | 5.0 | 4.0 |

Percent of Retirees with Spouses:

Future Retirees: 25% of future retirees were assumed to have spouses. Female spouses assumed three years younger than male spouses.

Current Retirees: Based on actual spousal data.

## Actuarial Certification

The liabilities set forth in this report are based on our actuarial valuation of SMFPD's retiree health insurance program as of July 1, 2015.

The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by SMFPD in August, 2015. We made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by SMFPD. We have also relied on monthly asset statements for amounts held in trust provided to SMFPD by PARS.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 43 and GASB 45, and the existing and proposed Actuarial Standards of Practice for measuring post-retirement healthcare benefits. We have assumed no post-valuation mortality improvements, consistent with our belief that there will be no further significant, sustained increases in life expectancy in the United States over the projection period covered by the valuation.

Throughout the report, we have used unrounded numbers, because rounding and the reconciliation of the rounded results would add an additional, and in our opinion unnecessary, layer of complexity to the valuation process. By our publishing of unrounded results, no implication is made as to the degree of precision inherent in those results. Clients and their auditors should use their own judgment as to the desirability of rounding when transferring the results of this valuation report to the clients' financial statements.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

T. Louis Filliger

T. Louis Filliger, FSA, EA, MAAA Date: 9/21/15
Partner & Actuary

**Exhibit I**

# Southern Marin Fire Protection District

## GASB 45 Valuation Results By Employee Group

| | 7/1/2015 Valuation Results Firefighters | 7/1/2015 Valuation Results Chiefs | 7/1/2015 Valuation Results Administrators | 7/1/2015 Valuation Results Total All Groups |
|---|---|---|---|---|
| District-paid Present Value of Benefits: | | | | |
| Actives | $ 6,712,497 | $ 420,560 | $ 163,582 | $ 7,296,639 |
| Retirees | 2,098,561 | 2,370,875 | 53,241 | 4,522,677 |
| Total District-Paid PVFB: | $ 8,811,058 | $ 2,791,435 | $ 216,823 | $ 11,819,316 |
| District-paid Accrued Liability: | | | | |
| Actives | $ 4,116,983 | $ 228,611 | $ 149,950 | $ 4,495,544 |
| Retirees | 2,098,561 | 2,370,875 | 53,241 | 4,522,677 |
| Total District-Paid AL: | $ 6,215,544 | $ 2,599,486 | $ 203,191 | $ 9,018,221 |
| Assets* | (1,329,287) | (555,939) | (43,455) | (1,928,681) |
| District-paid Unfunded Accrued Liability ("UAL") | **$ 4,886,257** | **$ 2,043,547** | **$ 159,736** | **$ 7,089,540** |
| GASB 45 ARC ("Annual Required Contributions") | | | | |
| Service Cost at Year-end | $ 339,213 | $ 19,523 | $ 14,518 | $ 373,254 |
| 30-year amortization of District-paid UAL | 374,177 | 156,490 | 12,232 | 542,899 |
| Total ARC (District's Annual Expense) | **$ 713,390** | **$ 176,013** | **$ 26,750** | **$ 916,153** |

*Assets, if any, allocated in proportion to AL for illustration purposes only; GASB 45 does not provide authority for this calculation.

| | | | Amount |
|---|---|---|---|
| ARC for 2009-10 | | | 575,707 |
| Interest on Net OPEB Obligation | | | - |
| Amortization adjustment to ARC | | | - |
| **Annual OPEB Cost 2009-10** | | | **575,707** |
| Employer Contribution | | | (296,844) |
| Change in Net OPEB Obligation 2009-10 | | | 278,863 |
| Net OPEB Obligation | 6/30/2009 | | - |
| **Net OPEB Obligation** | **6/30/2010** | | 278,863 |
| ARC for 2010-11 | | | 575,707 |
| Interest on Net OPEB Obligation | | | 13,943 |
| Amortization adjustment to ARC | | | (18,140) |
| **Annual OPEB Cost 2010-11** | | | **571,510** |
| Employer Contribution | | | (532,337) |
| Change in Net OPEB Obligation 2010-11 | | | 39,173 |
| Net OPEB Obligation | 6/30/2010 | | 278,863 |
| **Net OPEB Obligation** | **6/30/2011** | | **318,036** |
| ARC for 2011-12 | | | 577,830 |
| Interest on Net OPEB Obligation | | | 20,672 |
| Amortization adjustment to ARC | | | (24,354) |
| **Annual OPEB Cost 2011-12** | | | **574,148** |
| Employer Contribution | | | (643,543) |
| Change in Net OPEB Obligation 2011-12 | | | (69,395) |
| Net OPEB Obligation | 6/30/2011 | | 318,036 |
| **Net OPEB Obligation** | **6/30/2012** | | **248,641** |
| ARC for 2012-13 | | | 626,917 |
| Interest on Net OPEB Obligation | | | 16,162 |
| Amortization adjustment to ARC | | | (19,040) |
| **Annual OPEB Cost 2012-13** | | | **624,039** |
| Employer Contribution | | | (640,701) |
| Change in Net OPEB Obligation 2012-13 | | | (16,662) |
| Net OPEB Obligation | 6/30/2012 | | 248,641 |
| **Net OPEB Obligation** | **6/30/2013** | | **231,979** |
| ARC for 2013-14 | | | 626,917 |
| Interest on Net OPEB Obligation | | | 15,079 |
| Amortization adjustment to ARC | | | (17,764) |
| **Annual OPEB Cost 2013-14** | | | **624,232** |
| Employer Contribution | | | (676,324) |
| Change in Net OPEB Obligation 2013-14 | | | (52,092) |
| Net OPEB Obligation | 6/30/2013 | | 231,979 |
| **Net OPEB Obligation** | **6/30/2014** | | **179,887** |
| ARC for 2014-15 | | | 626,917 |
| Interest on Net OPEB Obligation | | | 11,693 |
| Amortization adjustment to ARC | | | (13,775) |
| **Annual OPEB Cost 2014-15** | | | **624,835** |
| Employer Contribution | | | (865,008) |
| Change in Net OPEB Obligation 2014-15 | | | (240,173) |
| Net OPEB Obligation | 6/30/2014 | | 179,887 |
| **Net OPEB (Asset)** | **6/30/2015** | **estimate** | **(60,286)** |
| ARC for 2015-16 | | | 916,153 |
| Interest on Net OPEB Obligation | | | (3,919) |
| Amortization adjustment to ARC | | | 4,617 |
| **Annual OPEB Cost 2015-16** | | **estimate** | **916,851** |