

OAKLAND COUNTY RETIREES' HEALTH CARE TRUST THIRTIETH ANNUAL ACTUARIAL VALUATION REPORT SEPTEMBER 30, 2014

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April 24, 2015

The Oakland County VEBA Board Waterford, Michigan

Dear Board Members:

Submitted in this report are the results of the thirtieth annual actuarial valuation of the liabilities, funded position and contribution requirements associated with the Oakland County Retiree Health Trust Plan with benefits provided through a VEBA. The purpose of the valuation was to measure the VEBA's funding progress, determine the employer contribution for the 2015-2016 fiscal year and provide information in connection with applicable Governmental Accounting Standards Board Statements. This report should not be relied upon for any other purpose. This report may be provided to parties other than the VEBA Board only in its entirety and only with the permission of the VEBA Board.

The date of the valuation was September 30, 2014. An Executive Summary is included as Section A. Valuation results are contained in Section B.

The valuation was based upon information, furnished by your secretary, concerning VEBA benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. Data was checked for internal and year-to-year consistency, but was not otherwise audited by us. As a result, we are unable to assume responsibility for the accuracy or completeness of the data provided.

Future actuarial measurements may differ significantly from those presented in this report due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements.

To the best of our knowledge, this report is complete and accurate and the valuation was conducted in accordance with standards of practice prescribed by the Actuarial Standards Board in compliance with the applicable state statutes. Louise Gates and Mark Buis are independent of the plan sponsor and are Members of the American Academy of Actuaries (MAAA) who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the actuarial assumptions used for the valuation produce results which are reasonable.

Respectfully submitted,

Louise M. Gates, ASA, MAAA

Mark Buis, FSA, EA, FCA, MAAA

LMG/MB:sac

SECTION A EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

1. Required County Contributions - Fiscal Year Beginning October 1, 2015

The computed employer contributions are shown in the chart below.

| Division | Computed Employer Contributions | | |
|----------------------|---------------------------------|-----|--|
| General | \$ | 0 | |
| Command Officers | 800, | 184 | |
| Road Deputies | | 0 | |
| Corrections Deputies | | 0 | |
| Total | \$ 800, | 184 | |

As of the valuation date, the Plan has a funding surplus which was used as a credit against County normal cost contributions, resulting in zero dollar County contributions for 3 of the 4 employment groups. It is important to note, that once the funding surplus is depleted, County contributions will increase to normal cost contributions plus any UAL payments.

2. Contribution Rate Comparison

The total required contribution in the September 30, 2013 valuation was \$818,930 and is \$800,184 as of September 30, 2014.

3. Reasons for Change

Although there were no changes in benefits reported to the actuary in connection with this valuation of the VEBA, we understand that during the year ended September 30, 2014 eligible employee members of the VEBA were given a one-time opportunity to join the Retirement Health Savings Plan (RHS plan which is another County sponsored retiree health plan). Individuals who migrated from the VEBA to the RHS plan, made an irrevocable election to forfeit VEBA benefits and elect to receive an account balance from the RHS plan upon retirement from County employment. The impact on VEBA liabilities was favorable.

EXECUTIVE SUMMARY

4. Plan Experience

During the year ended September 30, 2014, the experience of the VEBA was overall, favorable. VEBA claims costs increased by less than projected by actuarial assumptions. In addition, Medicare Part B premiums increased by less than assumed and the investment experience of the VEBA was also favorable. The favorable experience was partially offset by a change in the medical inflation assumption. Additional information regarding Plan investments is shown in Section E of this report.

5. Funding Position

Funding for retiree health benefits began more than 25 years ago. This year, valuation assets represent over 121% of accrued liabilities, while last year the funded percent was 117%. The increase is due to primarily to the favorable Plan experience.

6. Actuarial Standards

The Actuarial Standards of Practice (ASOP) with regard to the mortality assumption have recently been revised. ASOP No. 35 Disclosure Section 4.1.1 now states "The disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement. If the actuary assumes zero mortality improvement after the measurement date, the actuary should state that no provision was made for future mortality improvement." Currently, there appears to be no margin for future mortality improvement in the mortality assumption used for the annual valuation of the Plan.

We recommend a limited scope assumption study to review the appropriate margin (if any) to be added to the current mortality assumption and the contribution method used in future valuations of the Plan

7. Other

The County contributions shown in this report were based on a 10 year open amortization of the unfunded actuarial accrued liability (UAL) for the over funded divisions and a 20 year closed amortization of the UAL for the underfunded division. A closed amortization period is recommended for any employment group that is underfunded.

SECTION B VALUATION RESULTS

FINANCIAL OBJECTIVE

The financial objective of the Retirees' Health Care Plan is to establish and receive contributions, which will permit the accumulation of assets to pay for the retirement benefit promises.

Your annual retiree health benefit valuations determine how well the objective is being met.

CONTRIBUTIONS

The retiree health benefits are supported by contributions from the County and by the investment income earned on accumulated fund assets. The County provides an actuarially determined contribution needed to meet the financial objective.

The County's contributions cover both (i) normal cost, and (ii) the financing of the unfunded accrued liability over a period of future years. The normal cost is the portion of health benefit costs allocated to the current year by the valuation method described in Section F. The unfunded accrued liability is the portion of costs not covered by present fund assets and future normal costs. The contribution requirements for retiree health benefits are presented on page B-2.

CONTRIBUTIONS TO PROVIDE BENEFITS FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2015

| Contributions for | General Members | Command Officers | Road Deputies | Corrections Deputies |
|----------------------------------|-----------------|-------------------------|---------------|-----------------------------|
| Normal cost of benefits | \$ 7,498,462 | \$ 685,254 | \$2,703,715 | \$1,661,506 |
| Unfunded accrued liability (UAL) | (19,457,113) | 114,930 | (4,801,171) | (3,790,563) |
| Employer contribution \$ | 0 | 800,184 | 0 | 0 |

The unfunded accrued liabilities for the employment divisions shown above were amortized as a level dollar amount over a period of 10 years (20 years for Command Officers). The chart above shows the resulting UAL amortization payments (credits) and normal cost contributions. The following page shows the UAL by employment division as of September 30, 2014.

The contribution dollars in this report anticipate contribution payments in the middle of the fiscal year. If the employer contribution pattern is significantly different, an adjustment to the contributions may be appropriate. For example, payment of the entire contribution at the beginning of the year is available for investment throughout the year and, therefore, ought to be somewhat smaller than 12 monthly payments. Similarly, payment of the entire contribution at the end of the year will not generate any investment income that year and so ought to be greater than 12 monthly payments.

DETERMINATION OF THE PLAN'S UNFUNDED ACCRUED LIABILITY AS OF SEPTEMBER 30, 2014

| | General Members | Command Officers | Road Deputies | Corrections Deputies | Total |
|--|--------------------|---------------------|------------------|-------------------------|----------------|
| | Wiemoers | Officers | Deputies | Deputies | 1000 |
| A. Accrued Liability | | | | | |
| 1. For retirees and beneficiaries | \$ 364,561,133 | \$26,588,352 | \$ 37,975,794 | \$ 34,643,575 | \$ 463,768,854 |
| 2. For vested terminated members | 51,597,862 | 870,686 | 2,891,467 | 3,526,915 | 58,886,930 |
| 3. For present active members | | | | | |
| a. Value of expected future benefit payments | 301,503,751 | 29,931,016 | 82,677,384 | 53,437,603 | 467,549,754 |
| b. Value of future normal costs | 61,513,907 | 4,092,764 | 24,166,799 | 14,927,639 | 104,701,109 |
| c. Active member liability: (a) - (b) | 239,989,844 | 25,838,252 | 58,510,585 | 38,509,964 | 362,848,645 |
| 4. Total | 656,148,839 | 53,297,290 | 99,377,846 | 76,680,454 | 885,504,429 |
| B. Valuation Assets | 789,733,149 | 52,125,386 | 132,340,657 | 102,704,855 | 1,076,904,047 |
| C. Unfunded Accrued Liability: (A.4) – (B) | (133,584,310) | 1,171,904 | (32,962,811) | (26,024,401) | (191,399,618) |

RETIREE PREMIUM RATE DEVELOPMENT

Background

The initial per capita health care premiums are an important part of a retiree health valuation. We understand that currently, eligible County retirees (and eligible spouses) receive benefits from a number of health care plans, including the self-insured BCBS and ASR plans for Non-Medicare retirees, a self-insured medical plan through NGS for retirees on Medicare, a self-insured drug plan through Navitus and the fully-insured Health Alliance Plan (HAP). Dental benefits provided by Delta Dental are also self-insured.

Rate Development

For the self-insured medical plans, initial per capita costs were developed separately for pre-65 and post-65 retirees using medical claims experience from October 2011 to September 2014 from BCBS, ASR, and NGS in conjunction with exposure data for the retired members of the health care program. These medical claims were projected on an incurred claim basis, adjusted for plan design changes, large claims and loaded for administrative expenses.

For the self-insured drug plans, initial per capita costs were developed using drug claims experience from October 2011 to September 2014 from Navitus in conjunction with exposure data for the retired members of the health care program. These drug claims were projected on an incurred claim basis, adjusted for plan design changes and administrative expenses.

The initial medical and drug premium rates used in the valuation are a weighted average cost of the three-year experience period to smooth out any large year to year fluctuations. A margin to add a bit of conservatism was included in the development of the initial post-65 self-insured premiums due to erratic claim experience.

The initial medical premium rates for current retirees used for this valuation show a less than 2% increase for both the pre-65 and post-65 participants from the initial premium rates used in the October 1, 2013 VEBA valuation. The initial drug premium rates for current retirees used for this valuation show slightly more than a 5% increase from the initial premium rates used in the 2013 VEBA valuation.

RETIREE PREMIUM RATE DEVELOPMENT

Since participation in the fully-insured HAP plan is minimal in relation to the other coverage (approximately 1% of participation), the HAP plan was not used in the development of the rates.

For employees hired after 1/1/1997, BCBS PPO2, ASR PPO1, and ASR PPO2 are the only medical plan available to non-Medicare retirees. The prescription drug plan is the same as the plan offered to current retirees. We have developed separate premium rates for these future retirees in order to reflect the non-Medicare medical benefit differences.

For the current valuation, we have incorporated the new ASR, Community Blue, and NGS plans.

Age graded and sex distinct premiums are utilized by this valuation. The initial costs developed are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. This process more accurately reflects health care costs in the retired population over the projection period.

Based on the guidance provided by GASB on issues related to Medicare Part D payments to State and Local Governments effective as of June 30, 2006, an employer should apply the measurement requirements of GASB Statement No. 45 to determine the actuarial accrued liabilities, the annual required contribution of the employer, and the annual OPEB cost without reduction for Retiree Drug Subsidy (RDS) payments. Therefore the impact of the RDS that is part of the Medicare Prescription Drug Improvement and Modernization Act of 2003 is not reflected in the liabilities shown in this report.

RETIREE PREMIUM RATE DEVELOPMENT

The tables below show the resulting combined medical and prescription drug one-person monthly premiums at select ages. The premium (or per capita costs) rates shown below were used in this valuation of the plan and reflect the use of age grading.

Current Retirees

| Premiums For Retirees Not Yet Eligible For Medicare | | | | |
|---|----------|----------|--|--|
| Age | Males | Females | | |
| 50 | \$573.40 | \$649.69 | | |
| 55 | 749.42 | 770.33 | | |
| 60 | 941.48 | 904.97 | | |

| Premiums For Retirees Receiving Medicare | | | | | |
|--|----------|----------|--|--|--|
| Age | Males | Females | | | |
| 70 | \$528.64 | \$475.35 | | | |
| 75 | 586.88 | 520.84 | | | |
| 80 | 629.25 | 554.67 | | | |

Future Retirees

| Premiums For Retirees Not Yet Eligible For Medicare | | | | | |
|---|----------|----------|--|--|--|
| Age | Males | Females | | | |
| 50 | \$542.50 | \$614.69 | | | |
| 55 | 709.04 | 728.83 | | | |
| 60 | 890.76 | 856.22 | | | |

| Premiums For Retirees Receiving Medicare | | | | | |
|--|----------|----------|--|--|--|
| Age | Males | Females | | | |
| 70 | \$528.64 | \$475.35 | | | |
| 75 | 586.88 | 520.84 | | | |
| 80 | 629.25 | 554.67 | | | |

The dental and vision premium rates used in this valuation of the Plan were not "age graded" since these claims do not vary significantly by age. The monthly one and two-person dental premiums used in this valuation are \$41.21 and \$75.73, respectively. The monthly one and two-person vision premiums used in this valuation are \$3.04 and \$7.28.

James E. Pranschke is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown above.

James E. Pranschke, FSA, MAAA Health Actuary

DEVELOPMENT OF 2013/2014 EXPERIENCE GAIN (LOSS)

Actual experience will never (except by coincidence) exactly match assumed experience. It is hoped that gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) is shown below.

| | | 2014 |
|------|--|-----------------|
| | | |
| (1) | UAAL* at start of year | \$(153,615,428) |
| (2) | Normal cost for year | 13,072,329 |
| (3) | Actual contributions | 2,524,655 |
| (4) | Net interest accrual on (1), (2) and (3) | (11,130,387) |
| (5) | Expected UAAL before changes: $(1) + (2) - (3) + (4)$ | (154,198,141) |
| (6) | Change from benefit changes | 0 |
| (7) | Change from revised asset method | 0 |
| (8) | Other changes | 0 |
| (9) | Expected UAAL after changes: (5) + (6) + (7) + (8) | (154,198,141) |
| (10) | Actual UAAL at end of year | (191,399,618) |
| (11) | Gain (Loss): (9) - (10) | 37,201,477 |
| (12) | Gain (Loss) as percent of actuarial accrued liabilities at start of year | 4.3% |

^{*} Unfunded actuarial accrued liabilities

SECTION C CASH FLOW PROJECTIONS

CASH FLOW PROJECTIONS

Background

Until a retirement program reaches a mature state, the number of members receiving benefits will continue to increase, with commensurate increases in the amount of benefit disbursements. When the retirement benefits being paid are health benefits, health costs can be expected to increase as the result of health care cost increases, changes in utilization and Medicare cost shifting. When these reasons for increased disbursements apply, as they do for Oakland County Retirees' Health Care Trust, it is reasonable to expect that the amount of the fund's annual disbursements will increase for many years to come.

We have projected the fund's disbursements over the next 10 years. The projections are based upon the valuation assumptions shown in Section F. The following schedule projects the anticipated benefit payments of the Trust. These benefit payments include vision, dental, medical and prescription drug benefits as well as Medicare Part B premium payments.

10-YEAR CLOSED GROUP PROJECTION OF BENEFIT DISBURSEMENTS PLAN TOTAL (ALL DIVISIONS COMBINED)

(Dollar Amounts Shown in Millions)

| Year Ending | Retiree Health Payments on Behalf of Present | | | | | |
|----------------|--|-----------|-----------|--------|--|--|
| Sept. 30 | Retirees | Employees | Inactives | Total | | |
| | | | | | | |
| 2015 | \$31.8 | \$ 1.2 | \$0.3 | \$33.3 | | |
| 2016 | 33.3 | 3.7 | 0.8 | 37.8 | | |
| 2017 | 34.6 | 6.1 | 1.4 | 42.1 | | |
| 2018 | 35.7 | 8.6 | 1.8 | 46.1 | | |
| 2019 | 36.6 | 11.1 | 2.2 | 49.9 | | |
| | | | | | | |
| 2020 | 37.4 | 13.7 | 2.7 | 53.8 | | |
| 2021 | 38.2 | 16.4 | 3.1 | 57.7 | | |
| 2022 | 38.8 | 19.3 | 3.6 | 61.7 | | |
| 2023 | 39.2 | 22.4 | 4.0 | 65.6 | | |
| 2024 | 39.3 | 25.6 | 4.3 | 69.2 | | |
| | | | | | | |

SECTION D ACCOUNTING DISCLOSURES

REQUIRED SUPPLEMENTARY INFORMATION

(amounts in millions)

SCHEDULE OF FUNDING PROGRESS

| Valuation Date September 30 | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | % of Covered Payroll ((b-a)/c) |
|-----------------------------------|--|--|------------------------------------|--------------------------|---------------------------|---|
| 2010 | \$516.7 | \$794.1 | \$277.4 | 65.1% | \$175.3 | 158.2% |
| 2011 | 563.5 | 814.6 | 251.1 | 69.2 | 173.9 | 144.4 |
| 2012 | 636.6 | 867.6 | 231.0 | 73.4 | 162.8 | 141.9 |
| 2013 | 1,023.1 | 869.5 | (153.6) | 117.7 | 154.1 | 0.0 |
| 2014 | 1,076.9 | 885.5 | (191.4) | 121.6 | 146.5 | 0.0 |

SCHEDULE OF EMPLOYER CONTRIBUTIONS

| Valuation Year Ended September 30 | Fiscal Year Ended September 30 | Required Contribution (ARC) | Actual Contributions | Percentage Contributed |
|---|--------------------------------------|-----------------------------------|-------------------------|---------------------------|
| 2009 | 2011 | \$47,592,273 | \$47,592,273 | 100.0% |
| 2010 | 2012 | 37,268,761 | 37,268,761 | 100.0 |
| 2011 | 2013 | 36,969,985 | 36,970,025 | 100.0 |
| 2012 | 2014 | 35,236,330 | 35,236,330 | # 100.0 |
| 2013 | 2015 | 818,930 | | |
| 2014 | 2016 | 800,184 | | |

[#] Contribution paid approximately 2 weeks before the start of the 2013-2014 fiscal year.

Annual required contributions are based on contribution rates and projected valuation payroll. Actual contributions were based on the financial statements provided by the County. This information is presented in draft form for review by the County's auditor. Please let us know if there are any items that the auditor changes so that we can maintain consistency with the County's financial statements.

REQUIRED SUPPLEMENTARY INFORMATION

The following assumptions and methods were used in the September 30, 2014 actuarial valuation of the Retiree Health Care Plan:

Valuation Date September 30, 2014

Actuarial Cost Method Entry-Age

Amortization Method Level dollar *

Remaining Amortization Period 20 years (Command Officers)

10 years (All Others)

Asset Valuation Method 5-year smoothed market

Premium Rate Development Method Please refer to pages B-4 – B-6

Actuarial Assumptions

Annual rate of return (discount rate) 7.50% per year

Rates of inflation for medical and other benefits

Please refer to page F-6

^{*} A closed, level dollar amortization method was used in the development of Command Officer Division contributions and an open, level dollar amortization method was used in the development of contributions for the other employment divisions.

SECTION E SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

BRIEF SUMMARY OF HEALTH BENEFIT PROVISIONS (SEPTEMBER 30, 2014)

Eligibility Amount

EMPLOYED UNTIL RETIREMENT

of service, or hired between 9/20/85 and 1/1/95 and had 15 or more years of service - retired employee or survivor under the Retirement System or the defined contribution plan.

Hired before 9/21/85 and having 8 or more years Until age 65 - the same health benefits as are in effect for County employees. Beginning at age 65 - Medicare supplementary coverage. If hired before 1/1/89 there is reimbursement for Medicare Part B premiums. Family coverage provided if needed.

Retired employee or survivor of deceased employee, hired between 9/20/85 and 1/1/95 and had 8 to 14 years of service.

Same as above, for retired member only.

For members hired during 1995 and later, refer to "Accumulation of Health Care Points" below.

EMPLOYMENT ENDED BEFORE RETIREMENT

Hired between 9/20/85 and 1/1/95 and 15 to 19 Same as above, for retired employee only. years of service.

Hired before 9/21/85 and 8 or more years of Same as above, with family coverage if needed. service or hired between 9/20/85 and 1/1/95 with 20 or more years of service.

ACCUMULATION OF HEALTH CARE POINTS

For General members hired on and after 1/1/95 (5/27/95 for Command Officers and Sheriff's Deputies), the portion of the health care costs paid by the Trust will be based on years of service at retirement. If a member has less than 15 years of service, there is no County paid retiree health coverage. If a member has 15 years of service at retirement, 60% of the health care premium will be paid by the Health Care Trust. The percent increases 4% per year of service over 15 with a 100% maximum coverage after 25 years of service. Note, new employees are required to join the County's retiree health savings plan effective 1/1/06 for General Non-Union employees, 3/5/09 for Sheriff Command Officers, 1/1/10 for Sheriff Corrections Deputies, and 2/9/12 for Sheriff Road Patrol Deputies. Closure effective dates vary for General Union members.

DEATH AFTER RETIREMENT

Benefits may be payable to the spouse at time of retirement under the conditions described above.

DENTAL AND VISION COVERAGE

Retirees and eligible family members based upon their eligibility for health benefits.

General Division members hired after 2006, Command Officers hired after 3/5/2009, Corrections Deputies hired after 2009 and Road Patrol Deputies hired after 2/9/2012 must join the defined contribution health plan.

RETIREES AND BENEFICIARY LIABILITIES AS OF SEPTEMBER 30, 2014 TABULATED BY ATTAINED AGE

| Attained | Number of | |
|----------|-------------------|------------|
| Age* | Medical Contracts | Liability^ |
| | | - |
| Under 25 | 3 | \$ 594 |
| 25 - 29 | 0 | 0 |
| 30 - 34 | 0 | 0 |
| 35 - 39 | 0 | 0 |
| 40 - 44 | 1 | 428 |
| 45 - 49 | 19 | 7,827 |
| | | |
| 50 - 54 | 42 | 15,699 |
| 55 - 59 | 190 | 65,718 |
| 60 - 64 | 457 | 123,061 |
| 65 - 69 | 484 | 104,505 |
| 70 74 | 296 | 67.241 |
| 70 - 74 | 386 | 67,341 |
| 75 - 79 | 322 | 43,122 |
| 80 - 84 | 213 | 22,579 |
| 85 - 89 | 136 | 9,559 |
| | | |
| 90 & Up | 71 | 3,336 |
| | | |
| Total | 2,324 | \$463,769 |

[^] Amounts shown have been rounded to the nearest thousand and include liabilities associated with all Plan benefits.

^{*} Age of contract holder.

INACTIVE MEMBERS AS OF SEPTEMBER 30, 2014 TABULATED BY ATTAINED AGE

Inactive members reported in connection with the September 30, 2014 valuation totaled 234. An inactive member is a person who has left County employment with entitlement to retiree health coverage at a future date. The schedule shows the inactive members by age.

| Attained Age | Number* |
|-----------------|---------|
| ngc . | rumber |
| 25 - 29 | 0 |
| 30 - 34 | 0 |
| 35 - 39 | 4 |
| 40 - 44 | 19 |
| 45 - 49 | 50 |
| 50 - 54 | 78 |
| 55 - 59 | 80 |
| 60 - 64 | 3 |
| 65 - 69 | 0 |
| 70 - 74 | 0 |
| Total | 234 |

^{*} Includes 33 individuals reported in connection with this valuation without entitlement to retiree health benefits.

ACTIVE MEMBERS REPORTED FOR VALUATION COMPARATIVE SCHEDULE

| | Active Members | | | | | | | | |
|------------|----------------|----------|-------------|----------|-------|----------------|---------|---------|----------|
| | | Road | Corrections | Command | | Valuation | Average | | |
| Date | General | Deputies | Deputies | Officers | Total | Payroll | Age | Service | Pay |
| | | | | | | | | | |
| 12/31/1990 | 2,860 | 575 | @ | @ | 3,435 | \$ 103,261,438 | 40.6 | 9.9 | \$30,062 |
| 12/31/1991 | 2,922 | 582 | @ | @ | 3,504 | 111,486,994 | 41.0 | 10.1 | 31,817 |
| 12/31/1992 | 2,965 | 590 | @ | @ | 3,555 | 119,536,060 | 41.5 | 10.8 | 33,625 |
| 12/31/1993 | 2,670 | 577 | @ | @ | 3,247 | 114,443,309 | 41.1 | 10.4 | 35,246 |
| 12/31/1994 | 2,701 | 567 | @ | @ | 3,268 | 118,366,427 | 41.7 | 10.9 | 36,220 |
| 12/31/1995 | 2,935 | 594 | @ | @ | 3,529 | 133,105,986 | 41.6 | 10.6 | 37,718 |
| 12/31/1996 | 2,753 | 584 | @ | @ | 3,337 | 133,923,317 | 42.7 | 11.8 | 40,133 |
| 9/30/1997 | 3,024 | 556 | @ | 85 | 3,665 | 147,575,221 | 42.1 | 11.0 | 40,266 |
| 9/30/1998 | 3,137 | 528 | @ | 86 | 3,751 | 156,867,328 | 42.5 | 11.2 | 41,820 |
| 9/30/1999 | 2,935 | 629 | @ | 89 | 3,554 | 153,188,662 | 42.4 | 11.6 | 43,103 |
| 9/30/2000 | 2,836 | 685 | @ | 90 | 3,611 | 166,503,751 | 42.5 | 11.7 | 46,110 |
| 9/30/2001 | 2,935 | 691 | @ | 92 | 3,718 | 172,693,445 | 42.6 | 11.7 | 46,448 |
| 9/30/2002 | 2,981 | 705 | @ | 101 | 3,787 | 183,705,032 | 42.9 | 12.0 | 48,509 |
| 9/30/2003 | 2,837 | 715 | @ | 94 | 3,646 | 181,772,063 | 42.7 | 11.6 | 49,855 |
| 9/30/2004 | 2,903 | 724 | @ | 101 | 3,728 | 192,689,384 | 43.1 | 11.9 | 51,687 |
| 9/30/2005 | 2,918 | 736 | @ | 102 | 3,756 | 201,187,290 | 43.4 | 12.2 | 53,564 |
| 9/30/2006 | 2,819 | 732 | @ | 103 | 3,654 | 201,019,205 | 44.2 | 13.0 | 55,013 |
| 9/30/2007 | 2,654 | 743 | @ | 104 | 3,501 | 200,409,433 | 44.8 | 13.8 | 57,243 |
| 9/30/2008 | 2,401 | 731 | @ | 102 | 3,234 | 186,274,882 | 45.0 | 14.1 | 57,599 |
| 9/30/2009 | 2,292 | 708 | @ | 101 | 3,101 | 180,539,069 | 45.9 | 15.1 | 58,220 |
| 9/30/2010 | 2,185 | 681 | @ | 95 | 2,961 | 175,316,170 | 46.7 | 16.0 | 59,208 |
| 9/30/2011 | 2,027 | 375 | 329 | 97 | 2,828 | 173,903,452 | 47.1 | 16.2 | 61,493 |
| 9/30/2012 | 1,898 | 376 | 292 | 98 | 2,664 | 162,819,440 | 47.9 | 17.0 | 61,118 |
| 9/30/2013 | 1,806 | 372 | 263 | 98 | 2,539 | 154,128,944 | 48.4 | 17.6 | 60,705 |
| 9/30/2014 | 1,651 | 355 | 219 | 97 | 2,322 | 146,473,723 | 48.9 | 18.4 | 63,081 |

[@] Included in the Road Deputies column.

SUMMARY OF REPORTED FINANCIAL INFORMATION YEAR ENDED SEPTEMBER 30, 2014 (MARKET VALUE)

Revenues and Disbursements

Revenues:

| a. | Employer Contributions | \$ | 0 |
|----|------------------------|---------|------|
| b. | Asset Transfer | | 0 |
| c. | Investment Income | 103,071 | ,756 |
| d. | Payments by Retirees | 102 | ,795 |
| e. | Other | 2,421 | ,860 |
| c | Total | | |

f. Total \$105,596,411

Disbursements:

| a. Benefits Paid | 29,217,862 | |
|------------------|------------|------------|
| b. Expenses | 3,514,549 | |
| c. Total | | 32,732,411 |

Reserve Increase:

Total Revenues Minus Total Disbursements \$ 72,864,000

Summary of Investments

Assets:

| a. Cash & Equivalents* | \$ 31,332,408 |
|------------------------|------------------|
| b. Other | 451,585,588 |
| c. Common Stock | 337,987,411 |
| d. Fixed Income | 275,059,167 |
| | |

Total \$ 1,095,964,574

^{*} Adjusted for accruals, and payables.

DEVELOPMENT OF VALUATION ASSETS AS OF SEPTEMBER 30, 2014

| | | 2014 |
|----|---|-----------------|
| A. | Funding Value Beginning of Year | \$1,023,100,574 |
| B. | Market Value End of Year | 1,095,964,574 |
| C. | Market Value Beginning of Year | 1,023,100,574 |
| D. | Non-Investment Net Cash Flow | (26,693,207) |
| | Member and employer contributions less benefit payments | |
| E. | Investment Income | |
| | E1. Market Total: B - C - D | 99,557,207 |
| | E2. Assumed Rate (I) | 7.50% |
| | E3. Amount for Immediate Recognition | |
| | I * (A + D / 2) | 75,731,548 |
| | E4. Amount for Phased-In Recognition: E1-E3 | 23,825,659 |
| F. | Phased-In Recognition of Investment Income | |
| | F1. Current Year | 4,765,132 |
| | F2. First Prior Year | 0 |
| | F3. Second Prior Year | 0 |
| | F4. Third Prior Year | 0 |
| | F5. Fourth Prior Year | 0 |
| | F6. Total Recognized Investment Gain | 4,765,132 |
| G. | Funding Value End of Year: A + D + E3 + F6 | \$1,076,904,047 |
| H. | Difference between Market & Funding Value | 19,060,527 |
| I. | Recognized Rate of Return | 8.0% |
| J. | Market Value Rate of Return | 9.9% |
| K. | Ratio of Funding Value to Market Value | 0.98 |



VALUATION METHODS

The normal cost was computed as follows:

The series of contributions necessary to accumulate the present value at time of retirement of an employee's retired member health benefits was computed so that each contribution in the series, from entry age to retirement, was a constant percentage of the employee's year-by-year projected covered compensation. This is referred to as the individual entry age actuarial cost method.

The accrued liability was computed as follows:

Retirees and Beneficiaries: The discounted value of health benefits likely to be paid to retirees and beneficiaries was computed using the investment return, health cost increase and mortality assumptions.

Active and Inactive Employees: The discounted value of health benefits likely to be paid for active and inactive employees after their retirement was computed using the assumptions outlined on the following pages and was reduced by the value of normal costs to be paid for service after the valuation date.

Valuation Assets: Valuation assets are equal to the reported market value of assets at the valuation date with investment gains and losses spread over a period of 5 years (with 20% recognition in each year). Valuation assets were reset to the market value of assets as of September 30, 2013.

Financing of Unfunded Actuarial Accrued Liabilities: The unfunded accrued liabilities (UAL) for all groups were amortized by the level (principal & interest combined) dollar payment method.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Investment Return (net of expenses): 7.5% per year compounded annually. This rate consists of a real rate of return of 3.00% a year plus a long-term rate of inflation of 4.50% a year. This assumption is used to equate the value of payments due at different points in time.

Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below. The increases in health rates (excluding dental and vision) are also shown for comparative purposes.

| | | Year Eı | nded Septe | mber 30 | |
|---------------------------|------|---------|------------|---------|------|
| | 2014 | 2013 | 2012 | 2011 | 2010 |
| Rate of Investment Return | 8.0% | 21.8% | 10.5% | 4.4% | 6.6% |

The nominal rate of return was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is actual investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems.

Pay Projections: These assumptions are used to project current pays to those upon which future contributions will be based. The assumptions were first used for the September 30, 2010 valuation.

| | Annual Rate of Pay Increase for Sample Ages | | | | | | |
|--------|---|------------|-------|------------|------------|---------------|--------|
| | Ge | neral Memb | ers | | Sher | iff's Departi | nent |
| Sample | Base* | Merit & | | Years of | Base* | Merit & | |
| Ages | (Economic) | Longevity | Total | Service | (Economic) | Longevity | Total |
| 20 | 4.50% | 4.00% | 8.50% | 1 to 7 | 4.50% | 6.00% | 10.50% |
| 25 | 4.50 | 3.00 | 7.50 | 8 to 15 | 4.50 | 3.00 | 7.50 |
| 30 | 4.50 | 2.00 | 6.50 | thereafter | 4.50 | 0.00 | 4.50 |
| 35 | 4.50 | 2.00 | 6.50 | | | | |
| 40 | 4.50 | 1.00 | 5.50 | | | | |
| | | | | | | | |
| 45 | 4.50 | 1.00 | 5.50 | | | | |
| 50 | 4.50 | 0.50 | 5.00 | | | | |
| 55 | 4.50 | 0.50 | 5.00 | | | | |
| 60 | 4.50 | 0.25 | 4.75 | | | | |

^{*} First used for the September 30, 2010 valuation of the Plan.

Mortality: The 1994 Group Annuity Mortality Table with ages unadjusted for men and set back one year for women was used in this valuation. This table was first used for the September 30, 2010 valuation. Sample values follow:

| | Future Life | | | |
|--------|-------------|------------|--|--|
| Sample | Expectane | cy (Years) | | |
| Ages | Men | Women | | |
| | | | | |
| 50 | 30.69 | 35.84 | | |
| 55 | 26.15 | 31.11 | | |
| 60 | 21.83 | 26.49 | | |
| 65 | 17.84 | 22.11 | | |
| | | | | |
| 70 | 14.29 | 18.08 | | |
| 75 | 11.12 | 14.31 | | |
| 80 | 8.37 | 10.93 | | |
| | | | | |

This assumption is used to measure the probabilities of employees dying before retirement and the probabilities of health coverage being provided year by year after retirement. The membership size in this group is not sufficiently large to determine if there is a margin for mortality improvement. However, based upon our experience with a broad cross section of public sector plans similar in nature to this plan, it is our opinion that there is no provision for future mortality improvement in the current mortality assumption.

Medical Coverage was assumed to be available for all employees on attainment of age 65, or immediately if retired for disability.

Other: Terminated vested members of the Plan with incomplete data were assumed to elect two person health coverage upon retirement. Liabilities were loaded by four percent for the expected future impact of the "Cadillac Plan" status as defined by the Patient Protection and Affordable Care Act.

Medicare Part B Premium used in this valuation was \$104.90 per month for future retirees and existing retirees.

Rates of separation from active membership: The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

| Sample | Years of | % of Active Members Separating within Next Year | | | | | |
|--------|----------|---|------------|-------------|------------|------------|-------------|
| Ages | Service | General-DB | Command-DB | Sheriffs-DB | General-DC | Command-DC | Sheriffs-DC |
| ALL | 0 | | | | | 9.00 % | 8.00 % |
| | 1 | | | | | 6.00 | 5.50 |
| | 2 | | | | | 5.00 | 4.50 |
| | 3 | | | | | 5.00 | 4.50 |
| | 4 | | | | | 5.00 | 4.50 |
| | 5 & Over | | | | | | |
| 20 | | 5.00 % | 4.00 % | 4.00 % | 7.00 % | 5.00 % | 4.00 % |
| 25 | | 5.00 | 4.00 | 4.00 | 7.00 | 5.00 | 4.00 |
| 30 | | 4.00 | 3.40 | 3.40 | 6.00 | 3.70 | 3.40 |
| 35 | | 4.00 | 2.50 | 2.50 | 4.40 | 2.40 | 2.50 |
| 40 | | 3.00 | 1.80 | 1.80 | 3.40 | 1.70 | 1.80 |
| 45 | | 3.00 | 1.30 | 1.30 | 3.00 | 1.30 | 1.30 |
| 50 | | 2.00 | 0.80 | 0.80 | 3.00 | 1.20 | 0.80 |
| 55 | | | | | | | |
| | | 1.00 | 0.40 | 0.40 | 3.00 | 1.20 | 0.40 |
| 60 | | 0.50 | 0.10 | 0.10 | 3.00 | 1.20 | 0.10 |
| 65 | | 0.50 | - | - | 3.00 | 1.20 | - |

The rates were first used for the September 30, 2010 valuation.

Rates of Disability: These rates represent the probabilities of active members becoming disabled.

| Sample | Percent Becoming Disabled within Next Year | | | |
|--------|--|----------|--|--|
| Ages | General | Sheriffs | | |
| 25 | 0.02% | 0.15% | | |
| 30 | 0.04 | 0.18 | | |
| 35 | 0.06 | 0.23 | | |
| 40 | 0.16 | 0.30 | | |
| | | | | |
| 45 | 0.19 | 0.51 | | |
| 50 | 0.31 | 1.00 | | |
| 55 | 0.71 | 1.55 | | |

These rates were first used for the December 31, 1992 valuation.

Rates of Retirement: These rates are used to measure the probabilities of an eligible member retiring during the next year.

| Percent of Active Members Retiring within One Year | | | | | | | | |
|--|------------|------------|---------------------------|-----|---------|-----|---------------------------|-----|
| | General-DB | General-DC | Sheriff's Department - DB | | | | Sheriff's Department - DC | |
| Ages | % | % | Ages | % | Service | % | Ages | % |
| 55 | 20% | 25% | | | 25 | 40% | 45 | 40% |
| 56 | 15 | 20 | | | 26 | 35 | 46 | 40 |
| 57 | 15 | 15 | | | 27 | 35 | 47 | 40 |
| 58 | 15 | 20 | | | 28 | 35 | 48 | 40 |
| 59 | 15 | 20 | | | 29 | 35 | 49 | 40 |
| 60 | 20 | 20 | 60 | 20% | 30 | 40 | 50 | 30 |
| 61 | 15 | 15 | 61 | 40 | 31 | 40 | 51 | 20 |
| 62 | 25 | 30 | 62 | 70 | 32 | 50 | 52 | 20 |
| 63 | 15 | 20 | 63 | 50 | 33 | 70 | 53 | 20 |
| 64 | 15 | 20 | 64 | 50 | 34 | 70 | 54 | 20 |
| 65 | 35 | 40 | 65 | 100 | 35 | 100 | 55 | 20 |
| 66 | 40 | 45 | | | | | 56 | 20 |
| 67 | 50 | 35 | | | | | 57 | 20 |
| 68 | 70 | 40 | | | | | 58 | 20 |
| 69 | 80 | 45 | | | | | 59 | 20 |
| 70 | 100 | 100 | | | | | 60 | 20 |
| | | | | | | | 61 | 40 |
| | | | | | | | 62 | 70 |
| | | | | | | | 63 | 50 |
| | | | | | | | 64 | 50 |
| | | | | | | | 65 | 100 |

A member was understood to be eligible for retirement after attaining age 55 with 25 or more years of service (after 25 years of service regardless of age for Sheriff's Department) or age 60 with 8 or more years of service. These rates were first used for the September 30, 2010 valuation.

Marital status at retirement: 85% of men and 70% of women were assumed to be married at retirement. This assumption is used for current active participants to predict the extent of premiums for single persons and for couples.

In general, trend factors are established by reviewing historical trends and evaluating their relationship with national and/or regional trends. The regional trend used for this purpose is the BCBS trend developed for their group business with over 100 employees per group, due to the prevalence of BCBS coverage in this region. Historical trends for the entire self-insured medical program – active and retiree combined – for the past seven years were also reviewed and factored in.

Health Cost Increase Assumptions - are shown below:

| Year Beginning Sept. 30 | Future Health Cost Increases Medical and Prescription Drugs Valuation Assumption |
|-------------------------------|---|
| 2015 | 9.00% |
| 2016 | 8.50% |
| 2017 | 8.00% |
| 2018 | 7.50% |
| 2019 | 7.00% |
| 2020 | 6.50% |
| 2021 | 6.00% |
| 2022 | 5.50% |
| 2023 | 5.00% |
| 2024 & After | 4.50% |

Rates of Inflation for Medicare Part B and Dental/Vision Benefits

| Year Beginning Dec. 31 | Future Health Cost Increases Medicare Part B |
|------------------------------|---|
| 2015 | 9.00% |
| 2016 | 8.50 |
| 2017 | 8.00 |
| 2018 | 7.50 |
| 2019 | 7.00 |
| 2020 | 6.50 |
| 2021 | 6.00 |
| 2022 | 5.50 |
| 2023 | 5.00 |
| 2024 & after | 4.50 |

| Year Beginning Sept. 30 | Future Health Cost Increases Dental & Vision |
|-------------------------------|---|
| 2015 | 4.50% |
| 2016 | 4.50 |
| 2017 | 4.50 |
| 2018 | 4.50 |
| 2019 | 4.50 |
| 2020 | 4.50 |
| 2021 | 4.50 |
| 2022 | 4.50 |
| 2023 | 4.50 |
| 2024 & after | 4.50 |

GLOSSARY

Actuarial Accrued Liability - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability." Under the actuarial cost method used the "AAL" differs somewhat from the value of future payments based on benefits earned as of the valuation date.

Accrued Service - The service credited under the plan, which was rendered before the date of the actuarial valuation.

Actuarial Assumptions - Estimates of future plan experience with respect to rates of mortality, disability, retirement, investment income and salary increases. Decrement assumptions (rates of mortality, separation and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate appropriate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the normal costs to be paid in the future and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Present Value - The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization - Paying off an interest-bearing liability by means of periodic contributions of interest and principal, as opposed to a lump sum payment.

Experience Gain (Loss) - A measure of the difference between actual experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Normal Cost - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." An amortization payment toward the unfunded actuarial accrued liability is in addition to the normal cost.

GLOSSARY

Reserve Account - An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability - The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets - The value of current plan assets recognized for valuation purposes.



April 24, 2015

Ms. Judy Fandale Oakland County VEBA Board 2100 Pontiac Lake Rd. Waterford, MI 48328-0440

Dear Judy:

I am enclosing 25 copies of the September 30, 2014 Actuarial Valuation of the Oakland County Retirees' Health Care Trust. We look forward to meeting with you and the Board to review the report. If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

Louise M. Gates

LMG:sac Enclosures