# Oakland County Retirees' Health Care Trust

## Actuarial Valuation Report

## September 30, 2020

# Contents

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

May 24, 2021

The Oakland County VEBA Board
Waterford, Michigan

Dear Board Members:

Submitted in this report are the results of the annual actuarial valuation of the liabilities, funded position and contribution requirements associated with the Oakland County Retiree's Health Care Trust with benefits provided through a VEBA. The purpose of the valuation was to measure the VEBA's funding progress and determine the employer contribution for the 2021-2022 fiscal year. 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. GRS is not responsible for unauthorized use of this report.

The date of the valuation was September 30, 2020. The valuation was based upon the actuarial assumptions and methods adopted by the Board, information, furnished by the Plan, concerning VEBA benefits, financial transactions, individual members, terminated members, retirees and beneficiaries. Data was checked for internal and year-to-year consistency, but was not 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.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report was prepared by actuaries with substantial experience in valuing public employee retirement systems. 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 M. Gates and James D. Anderson 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, FCA, MAAA

James D. Anderson, FSA, EA, FCA, MAAA

3164

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

# SECTION A

## EXECUTIVE SUMMARY

# Executive Summary

**1. Computed Employer Contributions - Fiscal Year Beginning October 1, 2021**

The computed employer contributions for each employment division are shown in the chart below.

| Division | Computed Employer Contributions |
|---|---|
| General | $ 0 |
| Command Officers | 0 |
| Road Deputies | 0 |
| Corrections Deputies | 0 |
| Total | $ 0 |

As of the valuation date, the Retiree Health Care Plan (the Plan) has a funding surplus which was used as a credit against County normal cost contributions, resulting in zero dollar employer contributions for all of the employment groups.

**2. Contribution Comparison**

The total recommended contribution in the September 30, 2019 valuation was $0 and is $0 again this year. The 2020 actuarial valuation is used to determine employer contributions for the County's 2021-2022 fiscal year.

**3. Reasons for Change**

There are three general reasons why contributions change from one valuation to the next. The first is a change in the benefits or eligibility conditions of the plan. The second is a change in the valuation assumptions used to predict future occurrences. The third is the difference during the year between the plan's actual experience and what the assumptions predicted.

No benefit changes were reported to the actuary in connection with this valuation of the VEBA. A change was made to the medical/prescription drug inflation assumption used in the valuation of the plan to better reflect the anticipated future experience of the VEBA. These inflation assumptions are shown in Section B of this report.

**4. Plan Experience**

For the year ended September 30, 2020, the experience of the VEBA was, overall, favorable. During the year, the claims experience for Medicare eligible plan members was better than anticipated by valuation assumptions. In addition, fiscal year 2020 benefit payments were lower than projected and there were more retiree deaths than anticipated by actuarial assumptions. This favorable experience was offset in part by investment experience which was lower than long term expectations. Additional information regarding Plan investments is shown in Section E of this report.

**5. Funding Position**

The Plan's funding percent based on the funding value of Plan assets was 150% as of September 30, 2020. If the market value of plan assets were used to determine the plan's funding percent, the result would be a funding percent of 146% as of the same date.

Unless otherwise indicated, a funding status measurement presented in this report is based upon the actuarial accrued liability and the funding value of assets. It is important to note that the funding status measurement presented in this report is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation and the need for or amount of future employer contributions.

**6. Asset Transfers**

Asset transfers totaling approximately $1.5 million were made between valuation groups in connection with reported transfers between employment divisions. These asset transfers were made to equitably distribute both assets and plan liabilities in connection with participant movement between groups.

**7. Other**

As of September 30, 2020, there is a funding surplus that is sufficient to eliminate the employer normal cost contribution resulting in a $0 employer contribution for fiscal year 2022. Given the practice of using any funding surplus to make recommended County contributions, and the volatility of medical and prescription drug benefit costs the funding surplus may eventually be depleted. Once the surplus is depleted, County contributions to the Plan will once again be needed. These contributions will be at least equal to the employer's normal cost payment which is currently about $8.8 million.

**8. Looking Ahead**

This valuation of the VEBA does not reflect any activity related to the recent Voluntary Employee Separation Incentive Program (ending May 1, 2021, the last day for employee separation). The impact of this program on the VEBA will be reflected in the 2021 valuation.

# 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 any unfunded accrued liabilities 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.

# Employer Contributions to Provide Benefits for the Fiscal Year Beginning October 1, 2021

| Contributions for | General Members | Command Officers | Road Deputies | Corrections Deputies | Total |
|---|---|---|---|---|---|
| Normal cost of benefits | $ 4,828,065 | $ 828,805 | $ 1,946,865 | $ 1,191,080 | $ 8,794,815 |
| Unfunded accrued liability (UAL) | (51,168,101) | (2,344,526) | (8,618,569) | (6,784,346) | (68,915,542) |
| Employer contribution $ | 0 | 0 | 0 | 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. 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, 2020.

# Determination of the Plan's Unfunded Accrued Liability as of September 30, 2020

| | General Members | Command Officers | Road Deputies | Corrections Deputies | Total |
|---|---|---|---|---|---|
| A. Accrued Liability | | | | | |
| 1. For retirees and beneficiaries | $ 389,585,385 | $33,423,348 | $ 53,014,338 | $ 47,157,668 | $ 523,180,739 |
| 2. For vested terminated members | 45,503,152 | 1,745,427 | 5,283,591 | 1,622,279 | 54,154,449 |
| 3. For present active members | | | | | |
| a. Value of expected future benefit payments | 248,821,614 | 35,916,893 | 71,293,605 | 43,957,578 | 399,989,690 |
| b. Value of future normal costs | 32,192,037 | 5,167,627 | 13,150,170 | 7,739,713 | 58,249,547 |
| c. Active member liability: (a) - (b) | 216,629,577 | 30,749,266 | 58,143,435 | 36,217,865 | 341,740,143 |
| 4. Total | 651,718,114 | 65,918,041 | 116,441,364 | 84,997,812 | 919,075,331 |
| B. Valuation Assets | 994,836,897 | 81,639,768 | 174,235,042 | 130,491,715 | 1,381,203,422 |
| C. Unfunded Accrued Liability: (A.4) – (B) | (343,118,783) | (15,721,727) | (57,793,678) | (45,493,903) | (462,128,091) |

# 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 2017 to September 2020 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 2017 to September 2020 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 cost of the three-year experience period to smooth out any large year to year fluctuations.

Since participation in the fully-insured HAP plan is minimal in relation to the other coverage (less than 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 PPO3 are the only medical plans 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.

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 | $ 782.17 | $ 963.56 |
| 55 | 1,029.25 | 1,123.79 |
| 60 | 1,329.33 | 1,308.94 |

| Premiums For Retirees Receiving Medicare | | |
|---|---|---|
| **Age** | **Males** | **Females** |
| 70 | $ 589.97 | $ 570.88 |
| 75 | 633.64 | 618.29 |
| 80 | 665.19 | 653.56 |

**Future Retirees**

| Premiums For Retirees Not Yet Eligible For Medicare | | |
|---|---|---|
| **Age** | **Males** | **Females** |
| 50 | $ 806.11 | $ 993.04 |
| 55 | 1,060.75 | 1,158.18 |
| 60 | 1,370.01 | 1,348.99 |

| Premiums For Retirees Receiving Medicare | | |
|---|---|---|
| **Age** | **Males** | **Females** |
| 70 | $ 589.97 | $ 570.88 |
| 75 | 633.64 | 618.29 |
| 80 | 665.19 | 653.56 |

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 $40.49 and $74.09, respectively. The monthly one and two-person vision premiums used in this valuation are $1.90 and $3.16.

## Healthcare Cost Trend Assumption

The health care cost trend rate is the rate of change in per capita health care claims over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological improvements. It is a crucial economic assumption that is required for measuring retiree health care benefit obligations.

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over a time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premiums will moderate over the long term, otherwise the healthcare sector would eventually consume the entire GDP. It is on this basis that we project premium rate increases will continue to exceed wage inflation for the next 12 years, but by less each year until leveling off at an ultimate rate, assumed to be 3.50% in this valuation.

# Retiree Premium Rate Development

While experience is often the best starting point for future costs, GRS does not rely on a group's experience in setting the near-term trend assumptions since trends vary significantly from year to year and are not credible for most groups. Therefore, professional judgment, trends from GRS' book of business and industry benchmarks (e.g., trend reports from various Pharmacy Benefit Management (PBM) organizations and national healthcare benefit consulting firms) are used in conjunction with a group's historical experience to establish the trend assumptions.

The combined medical and prescription drug per capita costs are projected to increase as shown in the table below:

| Year Beginning Sept. 30 | Future Health Cost Increases Medical and Prescription Drugs | |
|---|---|---|
| | Pre-65 | Age 65+ |
| 2021 | 7.50% | 6.25% |
| 2022 | 7.25 | 6.00 |
| 2023 | 6.75 | 5.75 |
| 2024 | 6.50 | 5.50 |
| 2025 | 6.00 | 5.25 |
| 2026 | 5.75 | 5.00 |
| 2027 | 5.25 | 4.75 |
| 2028 | 5.00 | 4.50 |
| 2029 | 4.50 | 4.25 |
| 2030 | 4.25 | 4.00 |
| 2031 | 3.75 | 3.75 |
| 2032 & After | 3.50 | 3.50 |

The Medicare Part B and Dental/Vision benefits are projected to increase as shown in the table below:

| Year Beginning January 1 | Future Health Cost Increases Medicare Part B Premium* |
|---|---|
| 2021 | 2.70% |
| 2022 | 6.25 |
| 2023 | 6.00 |
| 2024 | 5.75 |
| 2025 | 5.50 |
| 2026 | 5.25 |
| 2027 | 5.00 |
| 2028 | 4.75 |
| 2029 | 4.50 |
| 2030 | 4.25 |
| 2031 | 4.00 |
| 2032 | 3.75 |
| 2033 & after | 3.50 |

| Year Beginning Sept. 30 | Future Health Cost Increases Dental & Vision |
|---|---|
| 2021 | 3.50% |
| 2022 | 3.50 |
| 2023 | 3.50 |
| 2024 | 3.50 |
| 2025 | 3.50 |
| 2026 | 3.50 |
| 2027 | 3.50 |
| 2028 | 3.50 |
| 2029 | 3.50 |
| 2030 | 3.50 |
| 2031 | 3.50 |
| 2032 | 3.50 |
| 2033 & after | 3.50 |

* *partial year increase from 9/30/2020 to calendar year 2021*

# Retiree Premium Rate Development

## Actuarial Disclosures

The premium rates used in this valuation were developed using the proprietary Excel models which in James E. Pranschke's professional judgment provide the initial projected costs which are consistent with the purposes of the valuation. We perform tests to ensure that the models, in their entirety, reasonably represent that which is intended to be modeled.

Aging factors used in the premium development models were developed based on the information and data from a 2013 study commissioned by the Society of Actuaries entitled "Health Care Costs – From Birth to Death."

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 on page B-5 and the healthcare cost trend rates shown on page B-6.

James E. Pranschke

James E. Pranschke, FSA, FCA, MAAA

# Development of the 2019/2020 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.

| | | 2020 |
|---|---|---|
| (1) | UAAL* at start of year | $(402,276,752) |
| (2) | Normal cost for year | 8,645,109 |
| (3) | Actual contributions # | 4,767,201 |
| (4) | Net interest accrual on (1), (2) and (3) | (29,024,490) |
| (5) | Expected UAAL before changes: (1) + (2) - (3) + (4) | (427,423,334) |
| (6) | Change from benefit revisions | |
| (7) | Change from revised assumptions | (7,995,436) |
| (8) | Other changes | 0 |
| (9) | Expected UAAL after changes: (5) + (6) + (7) + (8) | (435,418,770) |
| (10) | Actual UAAL at end of year | (462,128,091) |
| (11) | Gain (Loss): (9) - (10) | 26,709,321 |
| (12) | Gain (Loss) as percent of actuarial accrued liabilities at start of year | 2.9% |

* *Unfunded actuarial accrued liabilities*
\# *governmental contributions*

# 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, 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 Sept. 30 | Retiree Health Payments on Behalf of Present | | | |
|---|---|---|---|---|
| | Retirees | Employees | Inactives | Total |
| 2021 | $41.8 | $ 1.7 | $0.8 | $44.3 |
| 2022 | 42.4 | 4.9 | 1.5 | 48.8 |
| 2023 | 43.3 | 8.1 | 1.9 | 53.3 |
| 2024 | 44.0 | 11.2 | 2.4 | 57.6 |
| 2025 | 44.5 | 14.5 | 2.9 | 61.9 |
| 2026 | 45.1 | 18.0 | 3.3 | 66.4 |
| 2027 | 45.4 | 21.5 | 3.6 | 70.5 |
| 2028 | 45.4 | 25.0 | 3.9 | 74.3 |
| 2029 | 45.5 | 28.5 | 4.2 | 78.2 |
| 2030 | 45.3 | 32.3 | 4.7 | 82.3 |

# SECTION D

## SUPPLEMENTARY INFORMATION

# Schedule of Funding Progress

**(Amounts in Millions)**

| Valuation Date September 30 | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Valuation Payroll (c) | UAAL as a % of Payroll ((b-a)/c) |
|---|---|---|---|---|---|---|
| 2014 | $1,076.9 | $885.5 | $(191.4) | 121.6% | $146.5 | 0.0% |
| 2015 | 1,118.3 | 898.3 | (220.0) | 124.5 | 144.7 | 0.0 |
| 2016 | 1,164.6 | 944.1 | (220.5) | 123.4 | 141.5 | 0.0 |
| 2017 | 1,222.1 | 861.9 | (360.2) | 141.8 | 135.6 | 0.0 |
| 2018 | 1,277.3 | 891.8 | (385.5) | 143.2 | 131.9 | 0.0 |
| 2019 | 1,322.3 | 920.0 | (402.3) | 143.7 | 127.2 | 0.0 |
| 2020 | 1,381.2 | 919.1 | (462.1) | 150.3 | 115.4 | 0.0 |

# Schedule of Employer Contributions

| Valuation Year Ended September 30 | Fiscal Year Ended September 30 | Required Employer Contributions | Computed Employer Contributions | Percentage Contributed |
|---|---|---|---|---|
| 2014 | 2016 | $800,184 | $800,184 | 100.0% |
| 2015 | 2017 | 0 | 0 | 100.0 |
| 2016 | 2018 | 0 | 0 | 100.0 |
| 2017 | 2019 | 0 | 0 | 100.0 |
| 2018 | 2020 | 0 | 0 | 100.0 |
| 2019 | 2021 | 0 | | |
| 2020 | 2022 | 0 | | |

# Summary of Assumptions and Methods

The following assumptions and methods were used in the September 30, 2020 actuarial valuation of the Retiree Health Care Plan:

| | |
|---|---|
| Valuation Date | September 30, 2020 |
| Actuarial Cost Method | Entry-Age |
| Amortization Method | Level dollar, open |
| Remaining Amortization Period | 10 years |
| Asset Valuation Method | 5-year smoothed market |
| Premium Rate Development Method | Please refer to pages B-4 – B-7 |
| Actuarial Assumptions | |
| Annual rate of return (discount rate) | 7.25% per year |
| Rates of inflation for medical and other benefits | Please refer to page B-6 |

# SECTION E

## SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

# Brief Summary of Health Benefit Provisions (September 30, 2020)

| Eligibility | Amount |
|---|---|
| **Employed Until Retirement** | |
| Hired before 9/21/85 and having 8 or more years 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. | 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.**

| Eligibility | Amount |
|---|---|
| **Employment Ended Before Retirement** | |
| Hired between 9/20/85 and 1/1/95 and 15 to 19 years of service. | Same as above, for retired employee only. |
| Hired before 9/21/85 and 8 or more years of service or hired between 9/20/85 and 1/1/95 with 20 or more years of service. | Same as above, with family coverage if needed. |

### 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 Benefit Recipients
# As of September 30, 2020
# Tabulated by Attained Age

| Attained Age* | Number of Contracts # | Liability^ |
|---|---|---|
| Under 40 | 7 | $ 1,542 |
| 40 - 44 | 1 | 253 |
| 45 - 49 | 10 | 3,992 |
| 50 - 54 | 44 | 18,967 |
| 55 - 59 | 160 | 57,325 |
| 60 - 64 | 354 | 99,555 |
| 65 - 69 | 576 | 131,905 |
| 70 - 74 | 543 | 101,659 |
| 75 - 79 | 411 | 61,145 |
| 80 - 84 | 263 | 28,942 |
| 85 - 89 | 170 | 13,040 |
| 90 & Up | 110 | 4,856 |
| **Total** | **2,649** | **$523,181** |

^ *Amounts shown have been rounded to the nearest thousand and include liabilities associated with all Plan benefits (including members with dental/vision only)*

* *Age of contract holder*

\# *Contract counts associated with all contract types (including retiree with Dental and/or Vision only) are shown*

# Inactive Members as of September 30, 2020
# Tabulated by Attained Age

Inactive members reported in connection with the September 30, 2020 valuation totaled 213. 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* |
|---|---|
| 35 - 39 | 3 |
| 40 - 44 | 13 |
| 45 - 49 | 37 |
| 50 - 54 | 64 |
| 55 - 59 | 75 |
| 60 - 64 | 14 |
| 65 - 69 | 6 |
| 70 - 74 | 1 |
| **Total** | **213** |

** Includes 24 individuals reported in connection with this valuation without entitlement to retiree health benefits.*

# Active Members Reported for Valuation
# Comparative Schedule

| Date | Active Members General | Road Deputies | Corrections Deputies | Command Officers | Total | Valuation Payroll | Average Age | Average Service | Average Pay |
|---|---|---|---|---|---|---|---|---|---|
| 12/31/1996 | 2,753 | 584 | @ | @ | 3,337 | $ 133,923,317 | 42.7 yrs. | 11.8 yrs. | $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 |
| 9/30/2015 | 1,548 | 335 | 195 | 99 | 2,177 | 144,715,626 | 49.5 | 19.0 | 66,475 |
| 9/30/2016 | 1,450 | 314 | 179 | 107 | 2,050 | 141,464,508 | 50.1 | 19.6 | 69,007 |
| 9/30/2017 | 1,345 | 291 | 158 | 105 | 1,899 | 135,578,345 | 50.6 | 20.2 | 71,395 |
| 9/30/2018 | 1,247 | 276 | 148 | 104 | 1,775 | 131,945,254 | 51.0 | 20.8 | 74,335 |
| 9/30/2019 | 1,174 | 251 | 145 | 103 | 1,673 | 127,156,148 | 51.6 | 21.4 | 76,005 |
| 9/30/2020 | 1,096 | 234 | 139 | 109 | 1,578 | 115,445,020 | 52.2 | 22.1 | 73,159 |

@ *Included in the Road Deputies column.*

# Summary of Reported Financial Information
# Year Ended September 30, 2020
# (Market Value)

## Revenues and Disbursements

| | | |
|---|---|---|
| **Revenues:** | | |
| a. Employer Contributions | $ 0 | |
| b. Asset Transfer | 0 | |
| c. Investment Income | 66,273,869 | |
| d. Payments by Retirees | 279,397 | |
| e. Other # | 4,767,201 | |
| f. Total | | $71,320,467 |
| **Disbursements:** | | |
| a. Benefits Paid | 37,789,321 | |
| b. Administrative expenses | 399,973 | |
| c. Investment expenses | 3,203,396 | |
| d. Total | | 41,392,690 |
| **Reserve Increase:** | | |
| Total Revenues Minus Total Disbursements | | $29,927,777 |

*# Includes drug rebates*

## Summary of Investments

| | |
|---|---|
| **Assets:** | |
| a. Cash & Equivalents* | $ 27,410,120 |
| b. Fixed Income | 360,005,786 |
| c. Equities | 691,386,595 |
| d. Real Estate | 117,161,101 |
| e. Other | 141,542,709 |
| Total | $ 1,337,506,311 |

* *Includes receivables and payables*

# Development of Valuation Assets
## as of September 30, 2020

| | | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|
| A. | Funding Value Beginning of Year | $1,277,312,668 | $1,322,265,934 | | | | |
| B. | Market Value End of Year | 1,307,578,534 | 1,337,506,311 | | | | |
| C. | Market Value Beginning of Year | 1,295,523,352 | 1,307,578,534 | | | | |
| D. | Non-Investment Net Cash Flow | (34,515,515) | (32,742,723) | | | | |
| | Member and employer contributions less benefit payments | | | | | | |
| E. | Investment Income | | | | | | |
| | E1. Market Total: B - C - D | 46,570,697 | 62,670,500 | | | | |
| | E2. Assumed Rate (I) | 7.25% | 7.25% | | | | |
| | E3. Amount for Immediate Recognition | | | | | | |
| | I * (A + D / 2) | 91,353,981 | 94,677,357 | | | | |
| | E4. Amount for Phased-In Recognition: E1-E3 | (44,783,284) | (32,006,857) | | | | |
| F. | Phased-In Recognition of Investment Income | | | | | | |
| | F1. Current Year | (8,956,657) | (6,401,371) | | | | |
| | F2. First Prior Year | (688,354) | (8,956,657) | $(6,401,371) | | | |
| | F3. Second Prior Year | 10,155,053 | (688,354) | (8,956,657) | $(6,401,371) | | |
| | F4. Third Prior Year | 2,894,183 | 10,155,053 | (688,354) | (8,956,657) | $(6,401,371) | |
| | F5. Fourth Prior Year | (15,289,425) | 2,894,183 | 10,155,053 | (688,354) | (8,956,657) | $(6,401,371) |
| | F6. Total Recognized Investment Gain | (11,885,200) | (2,997,146) | (5,891,329) | (16,046,382) | (15,358,028) | (6,401,371) |
| **G.** | **Funding Value End of Year: A + D + E3 + F6** | **$1,322,265,934** | **$1,381,203,422** | | | | |
| H. | Difference between Market & Funding Value | (14,687,400) | (43,697,111) | | | | |
| I. | Recognized Rate of Return | 6.3% | 7.0% | | | | |
| J. | Market Value Rate of Return | 3.6% | 4.9% | | | | |
| K. | Ratio of Funding Value to Market Value | 1.01 | 1.03 | | | | |

# SECTION F

## VALUATION METHODS AND ASSUMPTIONS

# 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).

***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): 7.25% per year compounded annually. This assumption is used to equate the value of payments due at different points in time. The investment return assumption was first used for the September 30, 2016 valuation.

***Net Market Value Rates of Investment Return*** during the last 5 plan years are shown below:

| | For the Year Ending September 30th | | | | |
|---|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** | **2016** |
| Rate of Investment Return | 4.93% | 3.63% | 6.83% | 11.92% | 9.20% |

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

| | Annual Rate of Pay Increase for Sample Ages | | | | | | |
|---|---|---|---|---|---|---|---|
| | General Members | | | | Sheriff's Department | | |
| Sample Ages | Base* (Economic) | Merit & Longevity | Total | Years of Service | Base* (Economic) | Merit & Longevity | Total |
| 20 | 3.25% | 4.00% | 7.25% | 1 to 7 | 3.25% | 6.00% | 9.25% |
| 25 | 3.25 | 3.00 | 6.25 | 8 to 15 | 3.25 | 3.00 | 6.25 |
| 30 | 3.25 | 2.00 | 5.25 | thereafter | 3.25 | 0.00 | 3.25 |
| 35 | 3.25 | 2.00 | 5.25 | | | | |
| 40 | 3.25 | 1.00 | 4.25 | | | | |
| 45 | 3.25 | 1.00 | 4.25 | | | | |
| 50 | 3.25 | 0.50 | 3.75 | | | | |
| 55 | 3.25 | 0.50 | 3.75 | | | | |
| 60 | 3.25 | 0.25 | 3.50 | | | | |

* *First used for the September 30, 2016 valuation of the Plan.*

***Mortality:*** The RP-2014 Healthy Annuitant Mortality Tables (unadjusted) projected to 2021 using the 2-dimensional MP-2014 improvement scales. These tables were first used for the September 30, 2016 valuation. Sample values follow:

| Sample Ages | Future Life Expectancy (Years) | |
|---|---|---|
| | Men | Women |
| 50 | 33.50 | 36.20 |
| 55 | 29.15 | 31.69 |
| 60 | 24.96 | 27.26 |
| 65 | 20.91 | 22.97 |
| 70 | 17.05 | 18.88 |
| 75 | 13.44 | 15.06 |
| 80 | 10.17 | 11.58 |

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 a 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.

For retiree members of the plan who were reported as receiving two-person coverage but without beneficiary information we assumed that male retirees had a spouse beneficiary 3 years younger. Female retirees were assumed to have a spouse 3 years older.

***Medicare Part B Premiums*** used in this valuation were provided by the Retiree Health Plan for current benefit recipients. For future benefit recipients, the premium used in this valuation was $144.60 per month during calendar year 2020 and $148.50 per month during calendar 2021.

***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 Ages | Years of Service | % of Active Members Separating within Next Year | | | | | |
|---|---|---|---|---|---|---|---|
| | | 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 Ages | Percent Becoming Disabled within Next Year | |
|---|---|---|
| | 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 |

Eligibility for retirement is shown in Section E of this report. 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.

# 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.

**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.

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

May 24, 2021

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

Dear Board Members:

I am enclosing one copy of the September 30, 2020 actuarial valuation of the Oakland County Retirees' Health Care Trust. We look forward to meeting with you to review the report. If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

Louise Gates

Louise M. Gates

Enclosure

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723