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GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending December 31, 2024

CHARTER TOWNSHIP OF HIGHLAND

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March 20, 2025

Tami Flowers
Charter Township of Highland
205 N John Street
Highland, MI 48357

This report summarizes the GASB actuarial valuation for the Charter Township of Highland 2024 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 74 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). This report may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. Asset information has been provided to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, expected return on assets, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice. Note that the evaulation of the reasonability of the expected asset return assumption was considered outside the scope of our assignment.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.

Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

Should you have any questions please do not hesitate to contact us.

John Mallows, FSA, MAAA
Actuary

Cody Kocher, FSA, MAAA
Actuary

Executive Summary

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending December 31, 2024 compared to the prior fiscal year as shown in the Township's Notes to Financial Statement.

	As of December 31, 2021	As of December 31, 2024
Total OPEB Liability	$ 498,677	$ 415,620
Actuarial Value of Assets	$ (937,259)	$ (815,207)
Net OPEB Liability	$ (438,582)	$ (399,587)
Funded Ratio	187.9%	196.1%

	FY 2021	FY 2024
OPEB Expense	$ 12,907	$ (40,918)
Annual Employer Contributions	$ 0	$ 0
Actuarially Determined Contribution	$ 48,096	$ 0

	As of December 31, 2021	As of December 31, 2024
Discount Rate	5.50%	5.50%
Expected Return on Assets	5.50%	5.50%

	As of December 31, 2024
Total Active Participants	3
Total Retiree Participants	13

The active participants' number above may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

* The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

Executive Summary

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

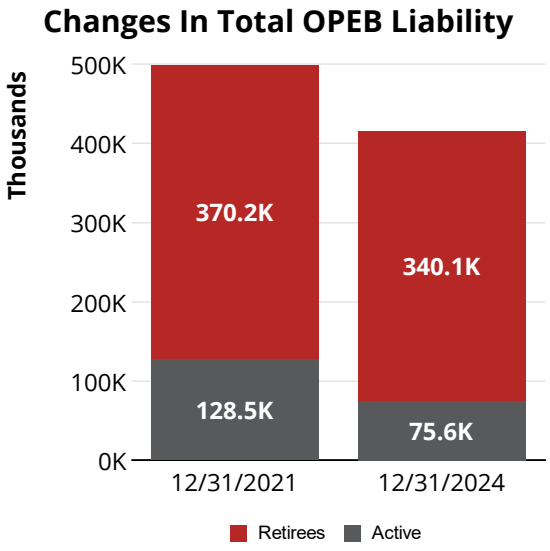
Summary of Results

Below is a breakdown of total GASB 75 liabilities allocated to past and current service compared to the prior year. The table below also provides a breakdown of the Total OPEB Liability allocated to pre- and post- Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

Present Value of Future Benefits	As of December 31, 2021	As of December 31, 2024
Active Employees	$ 142,719	$ 85,293
Retired Employees	370,207	340,064
Total Present Value of Future Benefits	**$ 512,926**	**$ 425,357**

Total OPEB Liability	As of December 31, 2021	As of December 31, 2024
Active Pre-Medicare	$ 22,096	$ 12,078
Active Post-Medicare	106,374	63,478
Active Liability	$ 128,470	$ 75,556
Retiree Pre-Medicare	$ 0	$ 0
Retiree Post-Medicare	370,207	340,064
Retiree Liability	$ 370,207	$ 340,064
Total OPEB Liability	**$ 498,677**	**$ 415,620**

	As of December 31, 2021	As of December 31, 2024
Discount Rate	5.50%	5.50%



Present Value of Future Benefits (PVFB) is the amount needed as of December 31, 2024 and December 31, 2021, to fully fund the Township's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

Total OPEB Liability is the portion of PVFB considered to be accrued or earned as of December 31, 2024 and December 31, 2021. This amount is a required disclosure in the Required Supplementary Information

* The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

GASB Disclosures

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2024	FY 2021	FY 2018	FY 2017
Total OPEB Liability				
Total OPEB Liability - beginning of year	$ 462,602	$ 502,001	$ 564,088	$ 832,564
Service cost	3,185	2,733	2,854	4,449
Interest	24,477	26,455	29,882	43,805
Change of benefit terms	0	0	0	0
Changes in assumptions	(4,216)	12,999	(7,395)	(106,407)
Differences between expected and actual experience	(28,365)	2,585	(3,532)	(128,114)
Benefit payments	(42,063)	(48,096)	(47,922)	(82,209)
Net change in total OPEB liability	$ (46,982)	$ (3,324)	$ (26,113)	$ (268,476)
Total OPEB Liability - end of year	$ 415,620	$ 498,677	$ 537,975	$ 564,088
Plan Fiduciary Net Position				
Plan fiduciary net position - beginning of year	$ 793,008	$ 969,719	$ 1,043,064	$ 964,040
Contributions - employer	0	0	0	82,209
Contributions - active employees	0	0	0	0
Net investment income	74,115	37,399	(16,406)	87,691
Benefit payments	(42,063)	(48,096)	(47,922)	(82,209)
Trust administrative expenses	(9,853)	(9,017)	(9,017)	(8,667)
Net change in plan fiduciary net position	$ 22,199	$ (19,714)	$ (73,345)	$ 79,024
Plan fiduciary net position - end of year	$ 815,207	$ 937,259	$ 969,719	$ 1,043,064
Net OPEB Liability - end of year	**$ (399,587)**	**$ (438,582)**	**$ (431,744)**	**$ (478,976)**
Plan fiduciary net position as % of total OPEB liability	196.1%	187.9%	180.3%	184.9%
Covered employee payroll	$ 238,371	$ 272,387	$ 195,006	$ 187,958
Net OPEB liability as % of covered payroll	-167.6%	-161.0%	-221.4%	-254.8%

* The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

GASB Disclosures

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the Township's financial statements.

	FY 2024	FY 2021	FY 2018	FY 2017	FY 2016
Actuarially Determined Contribution (ADC)	$ 0	$ 48,096	$ 0	$ 0	$ 18,522
Contributions in relation to the ADC	0	0	0	82,209	44,365
Contribution deficiency/(excess)	$ 0	$ 48,096	$ 0	$ (82,209)	$ (25,843)
Covered employee payroll	$ 238,371	$ 272,387	$ 195,006	$ 187,958	$ 333,881
Contribution as a % of covered payroll	0.0%	0.0%	0.0%	43.7%	13.3%

	FY 2015	FY 2014	FY 2013	FY 2012	FY 2011
Actuarially Determined Contribution (ADC)	$ 22,795	$ 46,596	$ 160,339	$ 160,339	$ 160,339
Contributions in relation to the ADC	69,923	401,723	149,688	77,760	77,760
Contribution deficiency/(excess)	$ (47,128)	$ (355,127)	$ 10,651	$ 82,579	$ 82,579
Covered employee payroll	$ 333,881	$ 415,651	$ 415,651	$ 883,822	$ 883,822
Contribution as a % of covered payroll	20.9%	96.6%	36.0%	8.8%	8.8%

*The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

GASB Disclosures

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

OPEB Expense

OPEB Expense		FY 2024		FY 2021
Discount Rate				
Beginning of year		5.50%		5.50%
End of year		5.50%		5.50%
Service cost	$	3,185	$	2,733
Interest		24,477		26,455
Change of benefit terms		0		0
Projected earnings on OPEB plan investments		(42,207)		(51,084)
Reduction for contributions from active employees		0		0
OPEB plan administrative expenses		9,853		9,017
Current period recognition of deferred outflows / (inflows) of resources				
Differences between expected and actual experience	$	(28,365)	$	2,585
Changes in assumptions		(4,216)		12,999
Net difference between projected and actual earnings on OPEB plan investments		(3,645)		10,202
Total current period recognition	$	(36,226)	$	25,786
Total OPEB expense	$	(40,918)	$	12,907

* The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

Deferred Outflows / (Inflows) of Resources

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

1. Differences between expected and actual experience of the OPEB plan
2. Changes of assumptions
3. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

The initial amortization period for the first two items noted above is based on expected future service lives while the difference between the projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the items above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of December 31, 2024
December 31, 2017	$ (128,114)	1	$ 0	$ 0
December 31, 2018	$ (3,532)	1	$ 0	$ 0
December 31, 2021	$ 2,585	1	$ 0	$ 0
December 31, 2024	$ (28,365)	1	$ (28,365)	$ 0

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of December 31, 2024
December 31, 2017	$ (106,407)	1	$ 0	$ 0
December 31, 2018	$ (7,395)	1	$ 0	$ 0
December 31, 2021	$ 12,999	1	$ 0	$ 0
December 31, 2024	$ (4,216)	1	$ (4,216)	$ 0

* The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

Deferred Outflows / (Inflows) of Resources (Continued)

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of December 31, 2024
December 31, 2017	$ (34,904)	5	$ 0	$ 0
December 31, 2018	$ 72,230	5	$ 0	$ 0
December 31, 2021	$ 13,685	5	$ 2,737	$ 2,737
December 31, 2024	$ (31,908)	5	$ (6,382)	$ (25,526)

As of fiscal year ending December 31, 2024	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	$ 0	$ 0
Changes in assumptions	0	0
Net difference between projected and actual earnings in OPEB plan investments	0	(22,789)
Total	**$ 0**	**$ (22,789)**

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of December 31, 2024 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2025	$ (3,645)
2026	$ (6,382)
2027	$ (6,382)
2028	$ (6,380)
2029	$ 0
Thereafter	$ 0

* The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

Sensitivity Results

The following presents the Net OPEB Liability as of December 31, 2024, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 5.50%.
- The 1% decrease in discount rate would be 4.50%.
- The 1% increase in discount rate would be 6.50%.

As of December 31, 2024	Net OPEB Liability	
1% Decrease	$	(366,434)
Current Discount Rate	$	(399,587)
1% Increase	$	(428,819)

The following presents the Net OPEB Liability as of December 31, 2024, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 7.50%, decreasing to an ultimate rate of 4.50%.
- The 1% decrease in health care trend rates would assume an initial rate of 6.50%, decreasing to an ultimate rate of 3.50%.
- The 1% increase in health care trend rates would assume an initial rate of 8.50%, decreasing to an ultimate rate of 5.50%.

As of December 31, 2024	Net OPEB Liability	
1% Decrease	$	(416,376)
Current Trend Rates	$	(399,587)
1% Increase	$	(380,450)

GASB Disclosures

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Asset Information

Asset Breakdown		FY 2021		FY 2024
Assets				
Cash and deposits	$	15,986	$	14,384
Securities lending cash collateral		0		0
Total cash	$	15,986	$	14,384
Receivables				
Contributions	$	0	$	0
Accrued interest		0		0
Total receivables	$	0	$	0
Investments				
Fixed income	$	0	$	0
Equities		0		0
Mutual Funds		921,273		800,823
Total investments	$	921,273	$	800,823
Total Assets	$	937,259	$	815,207
Liabilities				
Payables				
Investment management fees	$	0	$	0
Securities lending expense		0		0
Total liabilities	$	0	$	0
Net Position Restricted to OPEB	**$**	**937,259**	**$**	**815,207**

Asset Information (Continued)

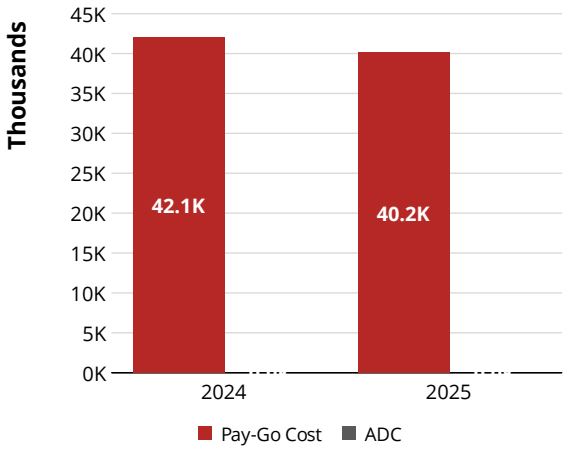
Asset Reconciliation		FY 2021		FY 2024
Additions				
Contributions Received				
Employer	$	0	$	0
Active employees		0		0
Total contributions	$	0	$	0
Investment Income				
Net increase in fair value of investments	$	(13,685)	$	31,908
Interest and dividends		154,309		42,207
Investment expense, other than from securities lending		0		0
Securities lending income		0		0
Securities lending expense		0		0
Net investment income	$	140,624	$	74,115
Total additions	$	140,624	$	74,115
Deductions				
Benefit payments	$	146,033	$	42,063
Administrative expenses		9,017		9,853
Other		0		0
Total deductions	$	173,084	$	51,916
Net increase in net position	$	(32,460)	$	22,199
Net position restricted to OPEB				
Beginning of year	$	969,719	$	793,008
End of year	$	937,259	$	815,207

Actuarially Determined Contributions

Charter Township of Highland GASB 74/75 Valuation For Fiscal Year Ending December 31, 2024

		FY 2024		FY 2025
Discount rate (Funding)		5.50%		5.50%
Payroll growth factor used for amortization		N/A		N/A
Actuarial cost method		Entry Age Normal Level % of Salary		Entry Age Normal Level % of Salary
Amortization type		Level Dollar		Level Dollar
Amortization period (years)		13		12
Actuarial Accrued Liability (AAL) - beginning of year	$	462,602	$	415,620
Actuarial Value of Assets (AVA) - beginning of year		(793,008)		(815,207)
Unfunded AAL - beginning of year	$	(330,406)	$	(399,587)
Normal Cost	$	3,185	$	3,281
Amortization of Unfunded AAL		(34,351)		(43,947)
Total normal cost plus amortization	$	(31,166)	$	(40,666)
Interest to end of year		(1,714)		(2,237)
Actuarially Determined Contribution - Preliminary	$	(32,880)	$	(42,903)
Expected Benefit Payments		42,063		40,178
Actuarially Determined Contribution - Final	$	**0**	$	**0**

Cash Vs Accrual Accounting



Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

* The Actuarially Determined Contribution is set to be no less than $0. Due to the funded status of the plan, no contribution to the Trust is required.

Cash Flow Projections

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

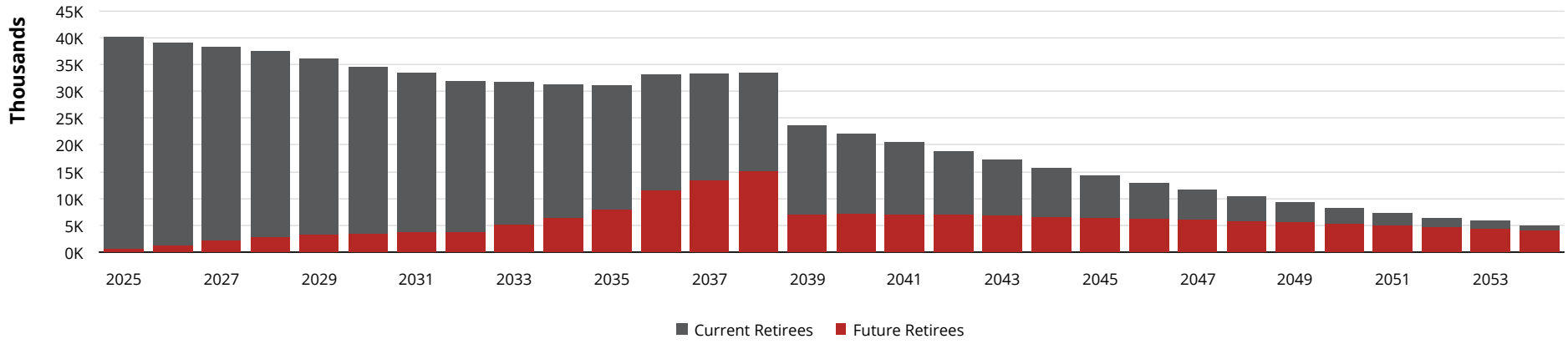
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current/future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees*	Total
2025	$ 39,540	$ 638	$ 40,178
2026	$ 37,757	$ 1,192	$ 38,949
2027	$ 36,043	$ 2,312	$ 38,355
2028	$ 34,384	$ 2,970	$ 37,354
2029	$ 32,764	$ 3,232	$ 35,996
2030	$ 31,170	$ 3,460	$ 34,630
2031	$ 29,585	$ 3,657	$ 33,242
2032	$ 27,999	$ 3,825	$ 31,824
2033	$ 26,403	$ 5,239	$ 31,642
2034	$ 24,793	$ 6,502	$ 31,295

FYE	Current Retirees	Future Retirees*	Total
2035	$ 23,170	$ 7,816	$ 30,986
2036	$ 21,537	$ 11,542	$ 33,079
2037	$ 19,896	$ 13,507	$ 33,403
2038	$ 18,255	$ 15,084	$ 33,339
2039	$ 16,623	$ 7,069	$ 23,692
2040	$ 15,010	$ 7,198	$ 22,208
2041	$ 13,430	$ 7,092	$ 20,522
2042	$ 11,899	$ 6,967	$ 18,866
2043	$ 10,430	$ 6,823	$ 17,253
2044	$ 9,040	$ 6,658	$ 15,698

FYE	Current Retirees	Future Retirees*	Total
2045	$ 7,741	$ 6,472	$ 14,213
2046	$ 6,543	$ 6,263	$ 12,806
2047	$ 5,455	$ 6,033	$ 11,488
2048	$ 4,482	$ 5,783	$ 10,265
2049	$ 3,625	$ 5,662	$ 9,287
2050	$ 2,885	$ 5,360	$ 8,245
2051	$ 2,256	$ 5,049	$ 7,305
2052	$ 1,732	$ 4,731	$ 6,463
2053	$ 1,304	$ 4,413	$ 5,717
2054	$ 962	$ 4,099	$ 5,061

Projected Employer Pay-go Cost



* Projections for future retirees do not take into account future new hires.

Discussion of Discount Rates

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA /Aa or higher (or equivalent quality on another rating scale) must be used.

For the current valuation:

1. The long-term expected rate of return on OPEB plan investment is assumed to be 5.50%. The prior valuation assumed 5.50%. This was determined using a building block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are then combined to produce the long-term expected rate of return by weighting them based on the target asset allocation percentage and adding in expected inflation (2.50%). The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of December 31, 2024 are summarized in the following table.

Asset Class	Target Allocation	L/T Expected Real ROR
Cash / Money Market	5.00%	1.50%
CD-Structured Products	15.00%	4.50%
Alternative Investments	10.00%	5.50%
Mutual Fund ETF	70.00%	6.00%
Total	**100.00%**	**5.50%**

2. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.

Yield as of	December 31, 2023	December 31, 2024
Bond Buyer Go 20-Bond Municipal Bond Index	3.26%	4.08%
S&P Municipal Bond 20-Year High Grade Rate Index	4.00%	4.28%
Fidelity 20-Year Go Municipal Bond Index	3.77%	4.20%
Bond Index Range	**3.26% - 4.00%**	**4.08% - 4.28%**

3. The final equivalent single discount rate used for this year's valuation is 5.50%. The Charter Township of Highland's funding policy is to contribute the Actuarial Determined Contribution annually and the OPEB Trust is expected to be sufficient to pay for all future benefit payments.

Summary of Plan Participants

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Active Employees

Actives with coverage	Single[1]	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Total actives with coverage[2]	**3**	**0**	**3**	**60.3**	**30.6**	**$ 238,371**

Spouses are not allowed to enroll in the plan upon retirement.

In addition to the employees above, there are 30 employees who were hired or rehired as full time on/after January 1, 2008 and are not eligible for retiree health benefits. They have been excluded from the valuation.

Active Age-Service Distribution

Including those eligible for retiree health benefits only.

	Years of Service										
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25											**0**
25 to 29											**0**
30 to 34											**0**
35 to 39											**0**
40 to 44											**0**
45 to 49											**0**
50 to 54						1					**1**
55 to 59											**0**
60 to 64						1					**1**
65 to 69										1	**1**
70 & up											**0**
Total	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**3**

[1] Includes participants electing employee only and employee/child(ren) coverage levels.
[2] Includes active employees who have requested OPEB eligibility and appear to meet eligibility criteria.

Summary of Plan Participants

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Retirees

Retirees with coverage	Single[3]	Non-Single	Total	Avg. Age
Total retirees with coverage	**8**	**0**	**8**	**80.7**

In addition to the retirees above, there are 5 retirees who are currently receiving the buyout benefit. They have been included in the valuation.

Retiree Age Distribution[4]

Age	Retirees
< 45	
45 to 49	
50 to 54	
55 to 59	
60 to 64	
65 to 69	1
70 to 74	5
75 to 79	3
80 to 84	3
85 to 89	
90 & up	1
Total	**13**

[3] Includes participants electing employee only and employee/child(ren) coverage levels.
[4] Includes retirees who are currently receiving buyout benefit.

Substantive Plan Provisions

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Eligibility

Employees hired before January 1, 2008 are eligible for retiree health benefits once when they attain age 60 and have at least 10 years of service. Employees who did not maintain full time status since this date lost the eligibility for retiree health coverage.

Employees hired on/after January 1, 2008 are not eligible for retiree health benefits.

Spouse Benefit

Spouses of retirees are not eligible to enroll in the health plans.

Medical and Vision Benefits

Same pre-Medicare benefits are available to retirees as active employees. The plan is fully-insured and premiums vary by age. Premiums effective January 1, 2025 from age 60 to age 64 are as follows. Refer to the appendix for a summary of the pre-Medicare medical/rx plan. Medical/Rx and vision coverage is bundled; there is no option to enroll in one and not the other.

	Single Coverage		
Age	**Medical/Rx**	**Vision**	**Total**
60	$ 842.08	$ 6.14	$ 848.22
61	$ 871.61	$ 6.10	$ 877.71
62	$ 890.97	$ 6.06	$ 897.03
63	$ 915.25	$ 6.00	$ 921.25
64	$ 929.95	$ 5.92	$ 935.87

For retirees age 65 and older, there is no health care coverage provided by the Township, instead the Township will provide a reimbursement of up to $450 per month for the cost of any Medicare supplement coverage obtained elsewhere. For vision expenses, the Township will reimburse up to $300 per year after documentation is provided. These amounts will be pro-rated based on the month the retiree reaches 65.

Dental

No subsidized dental benefit is provided to retirees under the age of 65. Retirees age 65 and older (including those who are receiving buyout benefits) will be reimbursed up to $1,000 for dental expenses per year after documentation is provided. These amounts will be pro-rated based on the month they reach age 65.

Buy-out

In lieu of health benefits, other than dental, any qualified retiree electing not to take the Township's health care coverage or reimbursement for a period of one year starting in January is eligible to receive a buy-out of $2,000 for single coverage. The buy-out payment will be made in December. Re-enrollment in Township's health plans is allowed, which would result in the buyout being prorated.

Explicit Subsidy

For retirees between the ages of 60 and 65, the Township agrees to pay a percentage of the cost of single coverage towards available retiree health benefits for each retiree that qualifies based on the following scale, to be reviewed annually.

YOS at Retirement	% Paid by Township
10	70%
11	73%
12	76%
13	79%
14	82%
15	85%
16	88%
17	91%
18	94%
19	97%
20	100%

For all other benefits, the Township may reimburse costs up to the specified limit as specified in the sections above.

Retiree Cost Sharing

Retirees contribute the portion not covered by the explicit subsidy above for health care coverage prior to age 65. No contribution is required once retirees turn 65.

Actuarial Methods and Assumptions

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and Township experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Township with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Township. All calculations have been made in accordance with generally accepted actuarial principles and practice.

There are changes to the actuarial methods and assumptions since the last full GASB valuation, which was for the fiscal year ending December 31, 2021. Refer to the Actuary's Notes section for complete information on these changes. For the current year full GASB valuation, we have also updated the per capita costs. We expect to update the discount rate, health care trend rates, mortality tables, and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending December 31, 2026.

Measurement Date

For the fiscal year ending December 31, 2024, a December 31, 2024 measurement date was used.

Actuarial Valuation Date

January 1, 2025
Liabilities as of December 31, 2024 are based on an actuarial valuation date of January 1, 2025 with no adjustments to get to the December 31, 2024 measurement date**.**
Liabilities as of December 31, 2023 are based on an actuarial valuation date of January 1, 2022 projected to December 31, 2023, on a rolled forward basis with adjustments for actual premium and discount rate changes.

Discount Rate

5.50% as of December 31, 2023 and 5.50% as of December 31, 2024 for accounting disclosure purposes.
5.50% as of December 31, 2023 and 5.50% as of December 31, 2024 for funding disclosure purposes (in calculating the Actuarially Determined Contribution).
Refer to the Discussion of Discount Rates section for more information on selection of the discount rate, which is determined by the Plan Sponsor in concurrence with Nyhart.

Cost Method

Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using the Entry Age Normal Level % of Salary method where:

- Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant's benefit at retirement; and
- Annual Service Cost is a constant percentage of the participant's salary that is assumed to increase according to the Payroll Growth.

Employer Funding Policy

The funding policy is to contribute the Actuarial Determined Contribution annually.

Actuarial Methods and Assumptions

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Payroll Growth

3.00% general payroll growth assumption, plus merit increase rates as shown below. Payroll growth is based on the Michigan Employees Retirement System (MERS) actuarial valuation as of December 31, 2023. The assumptions from these state-wide valuations provide reasonable estimates of experience for municipal employers such as the Charter Township of Highland. Sample rates are shown below:

YOS	Merit
0	6.70%
5	1.90%
10	1.10%
15	0.70%
20	0.60%
25	0.40%
30	0.20%
35	0.10%
40+	0.00%

Census Data

Census information as of December 31, 2024 was provided by the Township in January 2025. We have reviewed it for reasonableness, and no material modifications were made to the census data.

Experience Study

Best actuarial practices call for a periodic assumption review, and Nyhart recommends the Township to complete an actuarial assumption review (also referred to as an experience study) in the future.

Health Care Coverage Election Rate

Active employees with current coverage: 100% of eligible will use a portion of benefits, as specified in the Per Capita Costs section.
Active employees with no coverage: 0%

Inactive employees with current coverage: 100% of eligible will use a portion of benefits, as specified in the Per Capita Costs section.
Inactive employees with no coverage: 0%

Spousal Coverage

Not applicable

Disability

None

Mortality

General Employees and Retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2021

Surviving Spouses: SOA Pub-2010 Contingent Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2021

The plan does not have sufficient data to have credible experience. Therefore, mortality assumptions are set to reflect general population trends based upon Pub-2010 Mortality tables and the most recent generational projection scale MP-2021 released by the Society of Actuaries (SOA) for future mortality improvements.

Turnover Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage. The rates represent the probability of termination in the next 12 months. The termination rates are based on the MERS actuarial valuation as of December 31, 2023. The assumptions from these state-wide valuations provide reasonable estimates of experience for municipal employers such as the Charter Township of Highland. Sample annual turnover rates are as shown below:

YOS	Rate
0	23.4%
5	8.3%
10	5.4%
15	4.0%
20	3.1%
25+	2.6%

Retirement Rate

Annual rates of retirement are as shown below, which is based on the historical retirement experience through December 31, 2014.

Age	Rate
60 – 61	10%
62	30%
63 – 64	15%
65 – 66	40%
67 – 74	10%
75+	100%

Health Care Trend Rates

FYE	Medical/Rx	Vision
2025	7.50%	3.00%
2026	7.00%	3.00%
2027	6.50%	3.00%
2028	6.00%	3.00%
2029	5.50%	3.00%
2030	5.00%	3.00%
2031+	4.50%	3.00%

The initial trend rate was based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

Health Care Trend Rates apply to pre-65 benefits only. Post-65 reimbursement amounts are assumed to remain constant, so is the buyout benefit.

Retiree Contributions

Retiree contributions are assumed to increase according to health care trend rates.

Per Capita Costs

Annual per capita costs are based on the 2025 premium rates by age. The costs are assumed to increase with health care trend rates. Annual per capita costs are as shown below:

Age	Medical/Rx	Vision
60	$ 10,105	$ 74
61	$ 10,459	$ 73
62	$ 10,692	$ 73
63	$ 10,983	$ 72
64	$ 11,159	$ 71

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

For retirees over the age of 65, the assumed utilization of reimbursement benefit provided by the Township is as follows:

- 50% for medical/rx – equivalent to $2,700 reimbursement annually
- 50% for dental – equivalent to $500 reimbursement annually
- 60% for vision – equivalent to $180 reimbursement annually

Neither the maximum reimbursement amounts, nor the portion that retirees use, is assumed to increase in the future

Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a future retiree age 64 retiring with TEN years of service and is enrolled in the medical/rx/vision plan. Numbers below do not include dental benefits.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A – B
Retiree	$ 935.87	$ 655.11	$ 280.76

Implicit Subsidy

The Township's premium rates vary by age and are assumed to be representative of retiree costs. Therefore, there is no implicit subsidy.

Models

ProVal

Valuation software developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing postretirement medical valuations. We coded the plan provisions, assumptions, methods and participant data summarized in this report, and reviewed the liability and cost outputs for reasonableness. We are not aware of any weakness or limitations in the software and have determined it is appropriate for performing this valuation.

APPENDIX

Appendix

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

Comparison of Participant Demographic Information

The active participants' number below may include active employees who currently have no health care coverage. Refer to the Summary of Participants section for an accurate breakdown of active employees with and without coverage.

	As of December 31, 2021	As of December 31, 2024
Active Participants	4	3
Retired Participants	13	13
Averages for Active		
Age	60.0	60.3
Service	26.0	30.3
Averages for Inactive		
Age	76.0	78.2

Detailed Actuary's Notes

There were no substantive plan provision changes since the last full valuation, which was for the fiscal year ending December 31, 2021. The Township did not report GASB 74/75 liabilities in their financial statements for FYE 12/31/2019, 12/31/2020, 12/31/2022, and 12/31/2023.

The following assumptions have been updated since the prior valuation:

1. Health care trend rates for medical/rx costs have been set to an initial rate of 7.50% decreasing by 0.50% annually to an ultimate rate of 4.50%. Health care trend rates for vision costs they have been set to a constant rate of 3.00% per year. This change caused an increase of in the Township's liabilities.

2. The retirement rates were updated to be based on the Michigan Employees Retirement System (MERS) actuarial valuation as of December 31, 2023. This change caused a decrease of in the Township's liabilities.

Additionally, actual premium changes for 2025 and per capita claims costs were reflected, resulting in a slight increase in liabilities. The updated census data resulted in a decrease in liabilities due to a decrease in the number of eligible active and retired employees.

Summary of Medical Benefits

A brief summary of the health plan offered by the Township effective on January 1, 2025 is as shown below. The out-of-pocket maximum includes the deductible, coinsurance, and copayments.

	BCN HRA HMO Platinum $5000 VA
Deductible (EE / EE + Sp)	$5,000 / $10,000
Coinsurance (Township portion)	80%
Out-of-Pocket Maximum (EE / EE + Sp)	$6,350 / $12,700
Co-pay / co-insurances for:	
Primary Care Office Visit	$20
Urgent Care	$50
Emergency Room	$150
Prescription drugs	
Retail (Generic / Pref / Non-Pref)	TBD
Mail Order (Generic/ Pref / Non-Pref)	TBD

Appendix

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

PA 202 Uniform Assumption Disclosures

The information presented below is for the purposes of filing Form No. 5572 under PA 202 uniform assumption requirements. Per regulation, Form No. 5572 must be filed no later than six months after the end of the fiscal year. Governmental fund revenues are not shown below and should not be determined by the Township. Refer to the Michigan Department of Treasury website for additional information.

Form 5572 Line	Description	Charter Township of Highland
Line 28	Actuarial Value of Assets	$ 815,207
Line 29	Actuarial Accrued Liability	$ 415,497
Line 31	Actuarially Determined Contribution for FY 2024	$ 0

Line 31 (Actuarially Determined Contribution) was calculated using level dollar amortization with a 5.50% discount rate. The amortization period is a closed, 20-year period with 13 years remaining for FY 2024.

Under PA 202 requirements, uniform assumption setting is mandated in reporting of liabilities, assets, and ADCs. The following is a description of the PA 202 uniform assumption guidance and final assumptions used for the Township for purposes of calculating the figures above.

Assumption	Uniform Assumption Guidance	Township Assumption
Investment Rate of Return	Maximum of 6.90%	5.50% for funding/ADC purposes)
Discount Rate	Blended discount rate calculated per GASB 74/75: • Maximum of 6.90% where plan assets are sufficient to make projected benefit payments • 3.65% for periods where assets are insufficient to make projected benefit payments	5.50% (for calculation of the OPEB liability as of December 31, 2024)
Salary Increase	Minimum of 3.25% or based on actuarial experience study within the past 5 years	Same as PA 202 uniform assumption
Mortality Table	A version of Pub-2010 with Scale MP-2021 generational mortality improvement or based on actuarial experience study within the past 5 years	Same Pub-2010 mortality tables as GASB 75 valuation with Scale MP-2021 generational mortality improvement
Amortization Period	Maximum closed period of 25 years for Retiree Health Systems	For FY 2024, 13 years on a closed period basis
Asset Valuation	Market Value as reported on Financial Statements	Same as the GASB 74/75 valuation
Healthcare Inflation	Non-Medicare: 7.25% decreasing 0.25% per year to a 4.50% long-term rate Medicare: 5.50% decreasing 0.25% per year to 4.50% long-term rate	Non-Medicare: Same as PA 202 uniform assumption Medicare: 0%

GLOSSARY

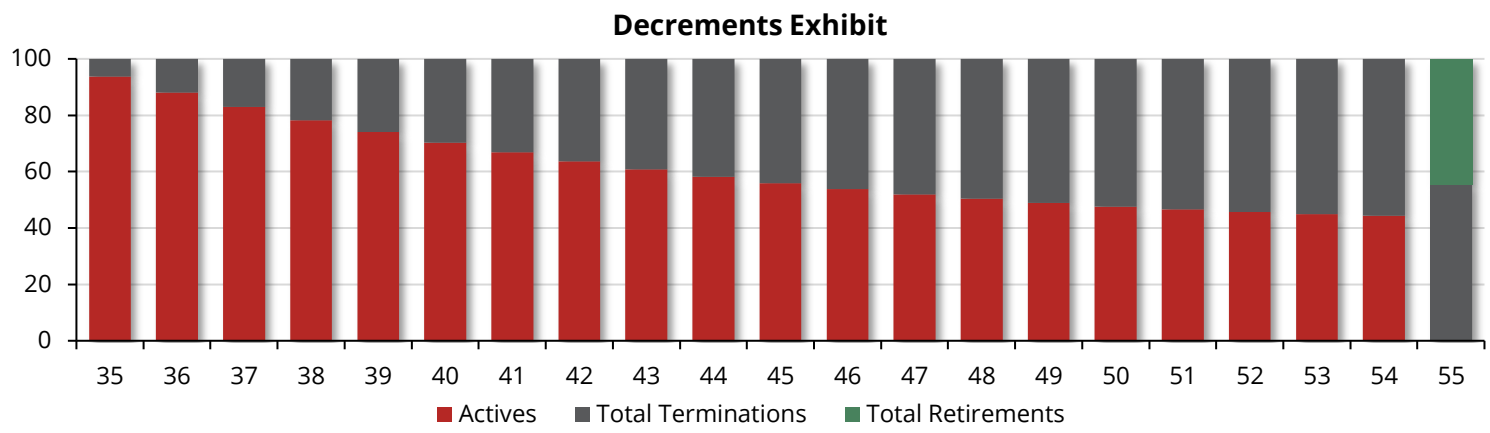
Glossary – Decrements Exhibit

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.43 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year[5]	# of Retirements per Year	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year	# of Retirements per Year	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430



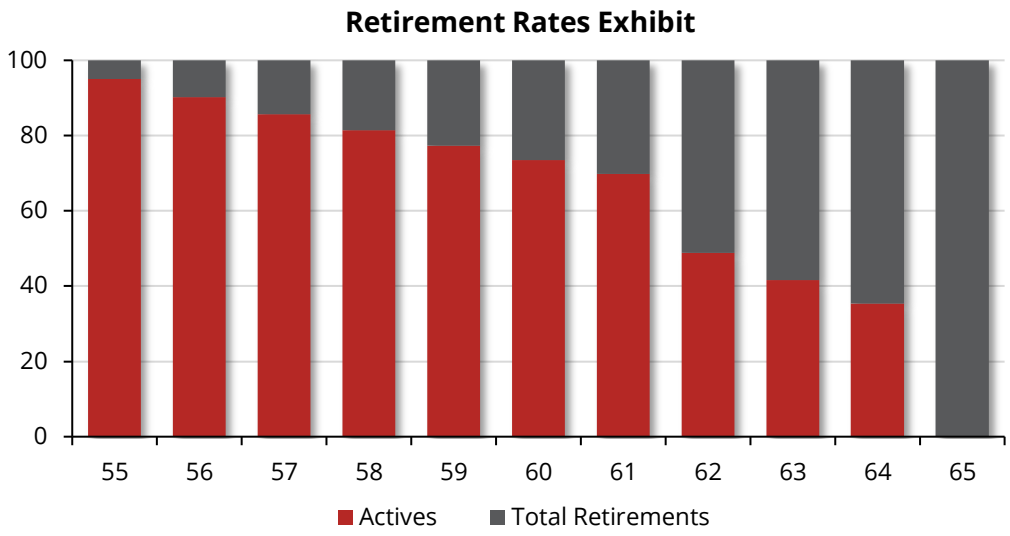
[5] The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Retirement Rates Exhibit

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



* The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Definitions

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

GASB 75 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

1. **Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

2. **Actuarial Cost Method** – A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total OPEB Liability.

3. **Actuarially Determined Contribution** - A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.

4. **Actuarial Present Value** – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
    a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
    b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
    c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

5. **Deferred Outflow / (Inflow) of Resources** – represents the following items that have not been recognized in the OPEB Expense:
    a. Differences between expected and actual experience of the OPEB plan
    b. Changes in assumptions
    c. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

6. **Explicit Subsidy** – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.

7. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the Total OPEB Liability.

Glossary – Definitions

Charter Township of Highland GASB 74/75 Valuation for Fiscal Year Ending December 31, 2024

8. **Healthcare Cost Trend Rate** – The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

9. **Implicit Subsidy** – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.

10. **OPEB** – Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

11. **OPEB Expense** – Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.

12. **Pay-as-you-go** – A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

13. **Per Capita Costs** – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.

14. **Present Value of Future Benefits** – Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.

15. **Real Rate of Return** – the rate of return on an investment after adjustment to eliminate inflation.

Glossary – Definitions

16. **Select and Ultimate Rates** – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.

17. **Service Cost** – The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.

18. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.

19. **Total OPEB Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).