

The Water and Power Employees' Retirement, Disability and Death Benefit Insurance Plan

**Review of the Disability Fund
as of July 1, 2024**



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February 5, 2025

Board of Administration
The Water and Power Employees' Retirement Plan of the City of Los Angeles
111 North Hope Street, Room 357
Los Angeles, California 90012

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2024. It establishes the funding requirements for fiscal year 2024-2025 and analyzes the preceding year's experience.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board of Administration (the Board), based upon information provided by the Retirement Office.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. 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; and changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Eva Yum, FSA, MAAA, and Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

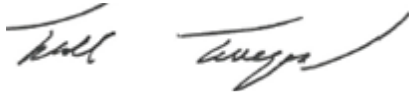
Board of Administration
The Water and Power Employees' Retirement Plan of the City of Los Angeles
February 5, 2025

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal



Todd Tauzer, FSA, MAAA, FCA, CERA
Senior Vice President and Actuary



Eva Yum, FSA, MAAA, EA
Vice President and Actuary

JD/jl

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the Disability Fund of The Water and Power Employees' Retirement Disability and Death Benefit Insurance Plan of the City of Los Angeles ("the Fund") as of July 1, 2024. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Fund, as administered by the Board;
- The characteristics of covered active members and disabled members as of March 31, 2024, provided by the Retirement Office;
- The assets of the Fund as of June 30, 2024, provided by the Retirement Office;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the July 1, 2024 valuation; and
- The funding policy adopted by the Board.

The Temporary Disability benefits and Permanent Total Disability benefits are included in this review. The funding for the Temporary Disability Benefit includes both the Temporary Disability Benefit and the Extended Temporary Disability Benefit. Only the Supplemental Industrial Disability benefit is funded by the Department on a "pay-as-you-go" basis. All the disability benefits are summarized in *Section 3* of this report.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2024 through June 30, 2025.

Section 1: Actuarial Valuation Summary

Valuation highlights

Assets

1. The total reserve for the disability benefits has decreased from \$41.3 million on June 30, 2023 to \$39.9 million on June 30, 2024. The member contributions amounted to about \$539,000 for the 2022-2023 fiscal year and about \$558,000 for the 2023-2024 fiscal year. Department contributions amounted to about \$15.6 million for the 2022-2023 fiscal year and \$17.9 million for the 2023-2024 fiscal year. A summary of income, expenses and plan assets is shown in *Section 2, Subsection A* as shown on pages 10-11.
2. The General Reserve for the Temporary Disability and Extended Temporary Disability Benefit Fund has decreased from \$4.2 million as of June 30, 2023 to \$3.2 million as of June 30, 2024 as shown in *Section 2, Subsection A* on page 12.
3. The General Reserve for the Permanent Total Disability Fund increased from \$19.4 million as of June 30, 2023 to \$20.0 million as of June 30, 2024 as shown in *Section 2, Subsection A* on page 13.

Contributions

4. For purposes of determining the contribution rate for both the Temporary Disability and Permanent Total Disability Funds, in 2019 the Board adopted a non-declining (“rolling”) five-year period for the general reserve to reach the target reserve level. For both funds, the general reserve is greater than the target reserve level as of June 30, 2024.
5. The recommended Department contribution rate for the Temporary and Extended Temporary Disability Benefit Fund has remained at \$1.15 per \$100 of compensation. Details are provided in *Section 2, Subsection B* on pages 16-17.
6. The recommended Department contribution rate for the Permanent Total Disability Fund remains at \$0 per \$100 of compensation. Details are provided in *Section 2, Subsection D* on page 24.

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Member information	An actuarial valuation for a plan is based on data provided to the actuary by the Retirement Office. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the market value of assets as of the valuation date, as provided by the Retirement Office.
Actuarial assumptions	There is a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the WPERP. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the WPERP is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting or tax advice and is not acting as a fiduciary to the Plan. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The WPERP should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the WPERP upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

Section 2: Actuarial Valuation Results

A. Introduction and consolidated financial information

In this section, we give a general description of the method used to fund the various disability benefits of the Department of Water and Power. Under the funding method used, the total annual contribution to the Disability Fund equals the present value of all future payments for those expected to become disabled during the year, with a further adjustment for any interest credited to the reserves. The present value referred to is for disabilities that “accrue” in a given year and is called the “incurred claims” for the year.

Under this funding method no reserves are expected to accumulate to help cover future claims beyond those incurred during the forthcoming year.

The incurred claims for a year are estimated as the paid claims for the year plus the increase in claim reserves from one fiscal year-end to another. The claim reserve as of any year-end is the present value of all future disability payments on all claims that remain “open” (i.e., still disabled).

Amounts of paid claims, open claims (number and amount), the claim reserves and the general reserves are provided by the Retirement Office and accepted by Segal without audit.

The total annual contribution to the Disability Fund is levied as a dollar rate per \$100 of covered compensation. There are separate rates for Temporary Disability (including Extended Temporary Disability) and Permanent Total Disability; these rates in turn are split between employees and the Department of Water and Power. Employees pay \$1.00 each biweekly payroll period for both Temporary and Permanent Disability benefits.

In subsequent pages we recommend contribution rates for the various benefits based on a review of the past experience of the funds. We present tables that show the actual annual rate per \$100 of covered payroll. However, there has been substantial fluctuation in these rates over the years. Accordingly, we recommend a rate that, in our judgment, reflects a reasonable balance of recent experience and probable future trends.

Our recommended contribution rates also are designed to maintain a general reserve for each fund. The general reserve is maintained primarily to provide funds in the event of adverse experience. In subsequent pages, we state a recommended level for each general reserve that is based on historical practices. However, in practice the general reserve is set equal to any balance of funds at book value available over claim reserves. Thus, it is unlikely that the general reserve will be exactly at recommended levels at any given time. Rather, the recommended level should be regarded as a long-term goal for the general reserve.

In the following sections, we present our detailed analysis of the Temporary Disability Benefits and the Permanent Total Disability Benefits.

Section 2: Actuarial Valuation Results

Chart 1: Consolidated Summary Statement of Income and Expenses for Year Ended June 30

Line Description	2024	2023
Employer Contributions		
• Temporary and Extended Temporary Disability benefit	\$15,452,891	\$13,343,147
• Permanent Total Disability benefit	0	0
• Supplemental Disability benefit	1,168,591	1,005,096
• Administrative expenses	1,293,181	1,280,345
Total employer contribution income	\$17,914,663	\$15,628,588
Employee contributions		
• Temporary and Extended Temporary Disability benefit	\$279,252	\$269,474
• Permanent Total Disability benefit	278,504	269,475
Total employee contribution income	\$557,756	\$538,949
Investment income		
• Interest income	\$1,306,053	\$1,159,933
• Net appreciation (depreciation) in market value	(223,920)	(1,262,956)
• Less investment fees	(34,074)	(37,687)
Net investment income	\$1,048,059	\$(140,710)
Total income available for benefits	\$19,520,478	\$16,026,827
Less benefit payments		
• Temporary Disability Benefit	\$15,769,242	\$14,896,259
• Extended temporary	809,299	511,407
• Permanent Total Disability benefit	1,871,135	1,929,599
• Supplemental Disability benefit	1,168,591	1,005,096
Total distributions	\$19,618,267	\$18,342,361
Administrative expenses	1,291,533	1,278,552
Total deductions	\$20,909,800	\$19,620,913
Net increase (decrease) in reserve	\$(1,389,322)	\$(3,594,086)

Note: Results may be slightly off due to rounding.

Section 2: Actuarial Valuation Results

Chart 2: Consolidated Summary Statement of Plan Assets for Year Ended June 30

Line Description	2024	2023
Cash equivalents ¹	\$2,016,847	\$1,330,577
Accounts receivable:		
• Employer contributions	\$2,985,285	\$3,208,392
• Accrued investment income	103,174	110,302
• Other	2,005,804	1,923,517
• Contingent disability benefit advance	3,310,339	3,310,339
Total accounts receivable	\$8,404,602	\$8,552,550
Investments:		
• Fixed income	\$29,274,840	\$31,225,723
• Short-term investments	613,616	580,841
Total investments at market value	\$29,888,456	\$31,806,564
Total assets	\$40,309,905	\$41,689,691
Less accounts payable	\$(443,088)	\$(433,552)
Net assets at market value	\$39,866,817	\$41,256,139

Note: Results may be slightly off due to rounding.

¹ Net of outstanding checks.

Section 2: Actuarial Valuation Results

Chart 3: Temporary and Extended Temporary Disability Reserves for Year Ended June 30

Line Description	2024	2023
Total reserve at the beginning of the year	\$9,603,989	\$11,076,774
• Contributions	\$15,732,143	\$13,612,621
• Benefits paid	(16,578,541)	(15,407,666)
• Interest earned	304,251	322,260
Change in total reserve	\$(542,147)	\$(1,472,785)
Total reserve at the end of the year	\$9,061,842	\$9,603,989
• Number of open claims at end of year	232	227
• Reserve factor ¹	\$22,700	\$21,000
Open claim reserve: Number of open claims × Reserve factor¹	5,266,400	\$4,767,000
Pending claim reserve: 1/26 × Benefits paid	637,636	592,603
Total claim reserve at end of the year	\$5,904,036	\$5,359,603
Total general reserve at the end of the year: Total reserve - total claim reserve	\$3,157,806	\$4,244,387

Note: Results may be slightly off due to rounding.

¹ As specified in Section IIID(2) of the Plan and provided by the Retirement Office.

Section 2: Actuarial Valuation Results

Chart 4: Permanent Total Disability (PTD) Reserves for Year Ended June 30

Line Description	2024	2023
Total reserve at the beginning of the year	\$29,856,673	\$30,575,111
• Contributions	\$278,504	\$269,475
• Benefits paid	(1,871,135)	(1,929,599)
• Interest earned	963,059	941,685
Change in total reserve	\$(629,572)	\$(718,439)
Total reserve at the end of the year	\$29,227,101	\$29,856,673
Open (or reported) claim reserve ¹ (Present value of PTD reported cases)	\$8,997,612	\$10,142,039
Pending claim reserve (current year contributions)	278,504	269,475
Total claim reserve at end of the year	\$9,276,116	\$10,411,514
Total general reserve at the end of the year:	\$19,950,985	\$19,445,159
Total reserve – total claim reserve		

Note: Results may be slightly off due to rounding.

¹ Provided by the Retirement Office.

Section 2: Actuarial Valuation Results

B. Temporary and Extended Temporary Disability benefits

The Temporary Disability Benefits referred to in this section normally commence on the 15th calendar day of disability and terminate at the end of the 12th month of disability. The monthly benefit is 40% to 85% of compensation, depending on length of service and disability. The Extended Temporary Disability Benefits are payable from the end of the 12th month of disability through the 24th month of disability if not qualified for Permanent Total Disability. The monthly benefit is 33 1/3% of compensation. The table below shows a history of the contribution rates for the Temporary and Extended Temporary Disability Benefits. The table shown in *Section 2 Subsection C* (page 18) includes a summary of the cost of the Temporary Disability Benefits from inception of the Plan to June 30, 2024.

Chart 5: Rates of Contribution Per \$100 of Compensation for Temporary and Extended Temporary Disability Benefits

As of June 30	By Member	By Department	Total
1939–1940	\$0.36	\$0.24	\$0.60
1941–1943	0.47	0.31	0.78
1943–1948	0.39	0.26	0.65
1948–1954	0.59	0.39	0.98
1954–1957	0.47	0.31	0.78
1958–1959	0.36	0.24	0.60
1960–1974	0.27	0.18	0.45
1975–1976	0.39	0.26	0.65
1976–1981	0.45	0.30	0.75
1981–1988	1	1	0.75
1988–1993	1	1	0.61
1994	1	1	0.45
1995–1996	1	1	0.35
1997	1	1	0.30

¹ From January 1980 to January 1984, employees paid \$1 per month and the Department paid the balance of the total rate. As of January 1984, the employee amount was increased to \$1 per biweekly payroll period.

Section 2: Actuarial Valuation Results

As of June 30	By Member	By Department	Total
1998–1999	1	1	\$0.25
2000–2001	1	1	0.35
2002–2004	1	1	0.68 ²
2005–2006	1	1	0.74
2007	1	1	1.55
2008	1	1	2.18
2009	1	1	1.73
2010	1	1	1.37
2011	1	1	1.32
2012	1	1	1.46
2013	1	1	1.55
2014	1	1	1.54
2015	1	1	1.68
2016	1	1	1.74
2017	1	1	1.55
2018	1	1	1.47
2019	1	1	1.34
2020	1	1	1.33
2021	1	1	1.27
2022	1	1	1.09
2023	1	1	1.07
2024	1	1	1.17

¹ From January 1980 to January 1984, employees paid \$1 per month and the Department paid the balance of the total rate. As of January 1984, the employee amount was increased to \$1 per biweekly payroll period.

² Starting with the July 1, 2000 valuation, this includes both the Temporary Disability Benefit and the Extended Temporary Disability Benefit.

Section 2: Actuarial Valuation Results

For Temporary and Extended Temporary Disability, the claim reserve is calculated as the sum of:

1. The open claim reserve, which is the number of open claims times the reserve factor specified in Section III D (2) of the Plan, and
2. The pending claim reserve, which is 1/26 of the benefits paid during the preceding fiscal year.

Pursuant to Section III D (2) of the Plan, the Temporary and Extended Temporary Disability open claim reserve at the end of each year is determined by multiplying the number of open claims at the end of the year by a reserve factor of \$22,700 for 2024. The reserve factor has increased from \$21,000 for 2023. The current reserve factor of \$22,700 was provided by the Retirement Office, and accepted by Segal without audit. The details of the claim reserve and general reserve are shown in *Section 2, Chart 3*.

Incurred claims at an annual rate per \$100 of covered payroll are calculated as described in *Section 2, Subsection A* and *Section 3, Exhibit 1*. Since 1980, the goal for the general reserve has been to maintain it at approximately 20% of the claim reserve. The claim reserve is \$5,904,036 as of June 30, 2024. Thus, the “target” is equal to \$1,180,807 (20% x \$5,904,036), as compared to the actual general reserve of \$3,157,806 as of June 30, 2024. Therefore, as of June 30, 2024, the general reserve surpasses the funding target by \$1,976,999. The Board adopted the funding period for the general reserve to reach the target reserve level to be a five-year rolling period effective with the July 1, 2019 valuation.

Contribution development

The Temporary and Extended Temporary Disability Experience Table as shown in *Section 2, Subsection C* indicates that the average cost for the last 20 years per \$100 of covered payroll is \$1.44 for both the Temporary and Extended Temporary Disability Benefits. However, based on the two-year average distributions, the total contribution rate needed to pay for expected claims is estimated at \$1.20 per \$100 of covered payroll. In order to reduce the general reserve to the target level over the current policy period of five years, we recommend a total contribution of \$1.17 per \$100 of covered payroll. After taking into account the employee contribution of \$1 per biweekly payroll period (which amounts to approximately \$0.02 per \$100 of covered payroll), the net recommended Department rate is \$1.15 per \$100 of covered payroll. For comparison, the recommended contribution rate in the prior valuation was also \$1.15 per \$100 of covered payroll.

In 2000, \$11 million was transferred over from the Permanent Total Disability Fund and the entire Temporary and Extended Temporary Disability Benefit became payable from this Fund. Then, from 2000 through 2007, the general reserve followed a decreasing trend due to the contribution rates being lower than the increased claim rates. However, this trend reversed itself during 2008 through 2010 and then decreased during 2010 to 2012. During 2013, the general reserve increased due to a decrease in the claim reserve and a decrease in benefit payments. During 2014, the general reserve decreased due to an increase in the claims reserve and the increase in benefit payments. During 2015 to 2021, the general reserve increased due to the contribution rates being higher than the claim rates. During 2022 to 2023, the general reserve decreased due to an increase in benefit payments. The general

Section 2: Actuarial Valuation Results

reserve decreased from the last year due to an increase in benefit payments and an increase in the claims reserve. The claim reserve has increased from the last year due to an increase in the reserve factor determined by the Retirement Office as noted above, and an increase in open claims.

Section 2: Actuarial Valuation Results

C. Temporary and Extended Temporary Disability Experience Table

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve
1939	\$9,705,000	\$33,138	\$44,138	\$0.45	\$0.45	\$14,090
1940	14,015,000	60,138	65,797	0.47	0.46	45,061
1941	13,350,000	73,867	78,867	0.59	0.51	70,323
1942	13,415,000	79,870	79,870	0.60	0.53	95,090
1943	12,645,000	87,933	87,933	0.70	0.56	89,351
1944	12,400,000	108,197	113,197	0.91	0.62	56,753
1945	12,396,000	98,138	104,138	0.84	0.65	33,189
1946	15,293,000	123,539	123,539	0.81	0.68	9,056
1947	20,027,000	156,483	165,483	0.83	0.70	(8,741)
1948	23,316,000	161,558	158,558	0.68	0.70	61,194
1949	27,386,000	157,975	155,975	0.57	0.68	173,506
1950	30,105,000	163,475	175,476	0.58	0.66	293,063
1951	30,130,000	180,286	177,286	0.59	0.65	411,057
1952	37,792,000	204,381	208,381	0.55	0.64	573,038
1953	40,678,000	228,354	262,354	0.64	0.64	757,895
1954	44,915,000	255,289	244,289	0.54	0.63	892,666
1955	50,632,000	241,898	215,898	0.43	0.60	1,102,717
1956	53,988,000	244,824	242,824	0.45	0.59	1,317,674
1957	56,225,000	268,883	280,883	0.50	0.58	1,419,437
1958	63,087,000	286,924	291,924	0.46	0.56	1,557,783

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve
1959	\$65,930,000	\$368,644	\$414,644	\$0.63	\$0.57	\$1,578,671
1960	65,993,000	388,060	305,260	0.46	0.56	1,628,091
1961	68,055,000	381,033	380,833	0.56	0.56	1,611,264
1962	73,192,000	393,013	404,413	0.55	0.56	1,593,485
1963	78,546,000	500,671	512,371	0.65	0.57	1,491,219
1964	83,672,000	562,565	518,765	0.62	0.57	1,401,956
1965	87,976,000	536,280	543,480	0.62	0.58	1,304,304
1966	92,885,000	554,020	548,920	0.59	0.58	1,220,641
1967	98,253,000	566,985	580,185	0.59	0.58	1,127,344
1968	103,283,000	634,571	633,871	0.61	0.58	999,592
1969	111,396,000	704,242	703,542	0.63	0.58	833,701
1970	121,866,000	767,820	775,170	0.64	0.59	637,461
1971	131,730,000	889,228	897,478	0.68	0.59	354,292
1972	140,154,000	859,374	864,575	0.62	0.60	132,771
1973	143,834,000	1,011,796	1,034,196	0.72	0.61	(253,712)
1974	146,962,000	1,140,512	1,175,512	0.80	0.62	(483,644)
1975	156,628,000	1,190,786	1,206,236	0.77	0.63	(702,745)
1976	163,951,000	1,304,122	1,325,572	0.81	0.64	(852,027)
1977	165,258,000	1,300,411	1,312,161	0.79	0.65	(959,819)
1978	172,256,000	1,404,379	1,393,979	0.81	0.66	(1,103,713)

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
1979	\$177,648,000	\$1,378,601	\$1,410,042	\$0.79	\$0.67	\$(107,066)
1980	175,962,000	1,400,805	1,350,503	0.77	0.67	(132,312)
1981	202,902,000	1,496,480	1,514,388	0.75	0.68	64,895
1982	245,734,000	1,394,848	1,438,322	0.59	0.67	505,214
1983	274,644,000	1,687,704	1,678,899	0.61	0.67	957,656
1984	288,311,000	1,789,909	1,864,263	0.65	0.67	1,370,865
1985	310,359,000	1,975,135	1,977,432	0.64	0.66	1,875,475
1986	327,365,000	2,210,661	2,251,124	0.69	0.67	2,157,948
1987	360,065,000	1,969,935	2,005,236	0.56	0.66	2,728,701
1988	400,537,000	2,290,491	2,260,068	0.56	0.65	3,348,749
1989	394,086,000	2,261,337	2,248,205	0.57	0.64 ¹	3,849,928
1990	411,248,000	2,171,299	2,160,636	0.53	0.62 ¹	4,580,470
1991	402,648,000	2,233,586	2,194,051	0.54	0.59 ¹	5,286,005
1992	475,252,000	2,354,177	2,375,545	0.50	0.59 ¹	6,298,902
1993	464,000,000	2,348,727	2,373,719	0.51	0.58 ¹	6,888,804
1994	470,000,000	2,516,640	2,567,498	0.55	0.57 ¹	6,709,671
1995	450,713,000	2,964,258	2,933,789	0.65	0.57 ¹	5,845,370
1996	441,956,000	2,225,030	2,076,306	0.47	0.54 ¹	5,593,988
1997	472,678,000	2,019,565	2,016,440	0.43	0.53 ¹	5,286,560
1998	417,262,000	2,416,341	2,473,601	0.59	0.53 ¹	4,210,250

¹ Average of 10 most recent rates for 1989 to 1999, prior to the addition of the entire Temporary and Extended Disability Benefit.

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
1999	\$355,148,948	\$1,858,677	\$2,016,329	\$0.57	\$0.53 ¹	\$3,371,035
2000	369,509,233	4,682,621	4,809,494	1.30	1.30 ¹	13,339,138 ²
2001	403,265,472	4,211,036	4,426,638	1.10	1.20 ¹	11,141,509
2002	430,397,884	4,584,284	4,528,640	1.05	1.15 ¹	9,999,795
2003	472,432,303	5,306,242	5,388,510	1.14	1.15 ¹	8,353,541
2004	522,227,280	6,210,253	6,246,423	1.20	1.16 ¹	5,966,023
2005	554,839,816	7,298,197	7,480,641	1.35	1.19 ¹	2,715,895
2006	574,315,572	8,897,820	9,028,144	1.57	1.24 ¹	(2,009,091)
2007	604,514,525	9,502,988	9,556,168	1.58	1.29 ¹	(4,328,285)
2008	623,634,208	9,578,292	9,540,484	1.53	1.31 ¹	(1,103,230)
2009	696,704,083	8,889,938	9,337,463	1.34	1.32 ¹	2,719,985
2010	767,912,436	10,947,771	11,262,418	1.47	1.33 ¹	3,006,739
2011	791,760,493	11,720,424	13,268,642	1.68	1.36 ¹	421,664
2012	805,607,436	12,469,833	13,051,706	1.62	1.38 ¹	(1,243,338)
2013	817,421,028	12,130,514	11,770,414	1.44	1.38 ¹	(538,036)
2014	819,923,866	14,171,121	14,648,006	1.79	1.41 ¹	(2,476,726)
2015	839,213,254	13,158,645	13,500,304	1.61	1.42 ¹	(2,270,074)
2016	861,818,854	12,614,416	12,573,684	1.46	1.43 ¹	19,712
2017	892,332,196	13,251,004	13,616,488	1.53	1.43 ¹	1,003,421

¹ Average of 10 most recent rates for 1989 to 1999, prior to the addition of the entire Temporary and Extended Disability Benefit. Average of rates after addition of the entire Temporary Disability Benefits starting in 2000.

² In 2000, \$11 million was transferred from the Permanent Total Disability Fund. Starting in 2000, the entire Temporary and Extended Temporary Disability benefit became payable.

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
2018	\$953,635,670	\$13,368,674	\$13,390,600	\$1.40	\$1.43 ¹	\$2,118,648
2019	1,028,212,002	13,673,983	13,934,525	1.36	1.43 ¹	2,883,277
2020	1,130,066,141	14,987,328	14,025,141	1.24	1.42 ¹	4,238,519
2021	1,121,883,556	11,986,880	12,172,378	1.08	1.42 ¹	6,875,321
2022	1,178,016,102	14,293,911	15,359,543	1.30	1.43 ¹	5,615,508
2023	1,259,245,870	15,407,666	15,306,003	1.22	1.44 ¹	4,244,387
2024	1,403,031,222	16,578,541	17,122,974	1.22	1.44 ¹	3,157,806

Note: Starting in 1987, expenses are not included.

¹ Average of rates after addition of the entire Temporary and Extended Disability Benefits. Starting in 2019, averages of rates for last 20 years.

Section 2: Actuarial Valuation Results

D. Permanent Total Disability benefits

Permanent Total Disability Benefits may commence as early as the 13th month of disability or as late as the 25th month, depending on the member's condition and Extended Temporary Disability Coverage. The monthly benefit is an amount equal to 40% of the member's compensation. Cost-of-living benefits, with a 3% maximum increase per year for Tier 1 and a 2% maximum increase per year for Tier 2 (similar to those provided to service retirees), were adopted as of April 1, 1970. The table below shows a history of the contribution rates for the Permanent Total Disability Benefits. The table shown in *Section 2, Subsection E* (page 25) includes a summary of the cost of Permanent Total Disability Benefits from inception of the Plan to June 30, 2024.

Chart 6: Rates of Contribution Per \$100 of Compensation for Permanent Total Disability Benefits

As of June 30	By Member	By Department	Total
1938 – 1942	\$0.62	\$0.41	\$1.03
1942 – 1947	0.52	0.34	0.86
1947 – 1953	0.62	0.41	1.03
1953 – 1956	0.52	0.34	0.86
1956 – 1959	0.36	0.24	0.60
1959 – 1969	0.21	0.14	0.35
1969 – 1973	0.12	0.08	0.20
1973 – 1975	0.24	0.16	0.40
1975 – 1980	0.36	0.24	0.60
1980 – 1981	1	1	0.60
1981 – 1987	1	1	0.55
1987 – 1992	1	1	0.25
1992 – 1998	1	1	0.05
1998 – 2024	1	0.00	1

¹ From January 1980 to January 1984, employees paid \$1 per month and the Department paid the balance of the total rate. As of January 1984, the employee amount was increased to \$1 per biweekly payroll period.

Section 2: Actuarial Valuation Results

For Permanent Total Disability Benefit, the claim reserve is calculated as the sum of:

1. The open (or reported) claim reserve, which is the present value of future disability benefits for open claims, and
2. The pending claim reserve, which is the amount of contributions made during the fiscal year.

The rate of interest used by the Board in the present value calculation is 2.75%. The incurred claims and the annual experience rate per \$100 of covered payroll were calculated as described in Section 2, Subsection A and Section 3, Exhibit 3. The details of the claim reserve and general reserve are shown in Section 2, Chart 4. The current goal for the general reserve is that it be maintained at approximately 20% of the claim reserve. The claim reserve is \$9,276,116 as of June 30, 2024. Thus, the “target” is equal to \$1,855,223 (20% x \$9,276,116), as compared to the actual general reserve of \$19,950,985 as of June 30, 2024. Therefore, as of June 30, 2024, the general reserve surpasses the funding target by \$18,095,762.

Contribution development

The Permanent Total Disability Experience Table as shown in Section 2, Subsection E indicates that the average cost for the last 20 years per \$100 of covered payroll is \$0.20 before taking into account interest on the general reserve. The annual rate of contribution as of June 30, 2024 would have been \$0.05 per \$100 of covered payroll before taking into account interest on the general reserve. Based on reserves as of June 30, 2024, the expected interest credit for the next year is \$548,652, or \$0.04 per \$100 of covered payroll (assuming a 2.75% investment return). The expected interest on the reserves would reduce the \$0.20 per \$100 of payroll and \$0.05 per \$100 of payroll contribution rates to \$0.16 and \$0.01, respectively.

The general reserve is so large that interest alone is expected to be enough to pay a significant portion of the claims for many years to come. Thus, we recommend that the Board maintain the Department contribution of zero cents per \$100 of covered compensation so that the general reserve can be reduced closer to its target level over time.

For several years, the experience table has shown a downward trend in the annual cost per \$100 of covered payroll. In 1983, the claim cost returned to earlier levels, but this was artificially high due to the change in reflecting cost-of-living increases. It appears that the Fund has reached a somewhat stable cumulative rate of claim costs, although year-by-year costs are still fluctuating.

Section 2: Actuarial Valuation Results

E. Permanent Total Disability experience table

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred ¹	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll ¹	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
1939	\$9,742,000	\$3,711	\$87,711	\$0.90	\$0.90	\$13,604
1940	13,989,000	21,342	103,588	0.74	0.81	56,344
1941	13,266,000	24,788	74,936	0.56	0.72	122,383
1942	13,306,000	32,566	91,896	0.69	0.71	175,539
1943	12,574,000	43,318	74,067	0.59	0.69	219,667
1944	12,319,000	58,699	83,340	0.68	0.69	252,063
1945	12,309,000	85,014	146,059	1.19	0.76	218,072
1946	15,152,000	89,721	241,219	1.59	0.88	111,847
1947	19,836,000	109,058	270,398	1.36	0.96	18,764
1948	23,235,000	120,837	175,320	0.75	0.93	80,980
1949	27,275,000	136,224	133,200	0.49	0.86	233,675
1950	29,974,000	138,210	96,082	0.32	0.78	458,989
1951	29,990,000	135,367	144,943	0.48	0.74	632,438
1952	37,565,000	134,551	11,043	0.03	0.64	1,044,175
1953	40,464,000	156,803	403,365	1.00	0.76	1,055,235
1954	44,971,000	184,131	166,033	0.37	0.64	1,316,150
1955	49,389,000	192,397	234,939	0.48	0.62	1,547,758
1956	50,836,000	179,587	14,956	0.03	0.56	2,021,772
1957	52,720,000	180,814	249,641	0.47	0.55	2,157,769
1958	58,829,000	152,089	33,695	0.06	0.50	2,560,220

¹ Reflects credit of interest earnings on claim reserves but not on the general reserve.

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred ¹	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll ¹	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
1959	\$61,495,000	\$146,785	\$381,672	\$0.62	\$0.51	\$2,615,720
1960	64,964,000	187,826	367,442	0.57	0.52	2,572,558
1961	67,012,000	216,655	509,906	0.76	0.54	2,394,036
1962	71,708,000	230,601	205,588	0.29	0.52	2,526,768
1963	77,236,000	227,517	327,404	0.42	0.51	2,560,680
1964	82,455,000	240,242	319,583	0.39	0.50	2,624,717
1965	86,833,000	248,687	291,596	0.34	0.48	2,736,710
1966	91,488,000	277,855	395,424	0.43	0.48	2,763,324
1967	96,225,000	286,761	202,661	0.21	0.46	3,009,729
1968	101,556,000	298,893	401,943	0.40	0.46	3,079,294
1969	109,554,000	334,656	731,158	0.67	0.47	2,840,069
1970	120,246,000	374,358	729,926	0.61	0.48	2,446,761
1971	130,096,000	376,744	245,854	0.19	0.46	2,561,379
1972	138,857,000	446,816	1,012,405	0.73	0.48	1,902,860
1973	143,308,000	502,274	930,350	0.65	0.49	1,283,193
1974	146,886,000	582,628	1,244,725	0.85	0.52	651,223
1975	156,760,000	682,830	1,483,906	0.95	0.54	(214,183)
1976	164,183,000	761,200	1,332,986	0.81	0.56	(644,432)
1977	165,224,000	867,586	1,629,326	0.99	0.59	(1,348,628)
1978	171,767,000	920,799	1,042,386	0.61	0.59	(1,432,449)
1979	176,576,000	907,163	972,121	0.55	0.59	1,348,852

¹ Reflects credit of interest earnings on claim reserves but not on the general reserve.

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred ¹	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll ¹	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
1980	\$177,340,000	\$912,703	\$837,008	\$0.47	\$0.58	\$1,887,689
1981	202,994,000	1,006,200	369,334	0.18	0.55	2,750,719
1982	245,580,000	946,778	29,798	0.01	0.51	4,404,597
1983	274,629,000	978,647	1,755,073	0.64 ²	0.52	4,534,031
1984	288,289,000	1,000,319	725,141	0.21	0.50	5,879,532
1985	310,360,000	1,006,631	591,410	0.19	0.48	7,623,235
1986	321,523,000	974,376	569,547	0.18	0.46	9,284,884
1987	360,072,000	901,033	121,268	0.03	0.45	11,090,748
1988	401,029,000	946,468	840,245	0.21	0.44	13,253,261
1989	394,084,000	1,024,870	1,563,694	0.40	0.47 ³	13,929,718
1990	411,248,000	1,038,907	594,815	0.14	0.45 ³	15,723,997
1991	405,132,000	1,046,404	739,845	0.18	0.45 ³	18,108,405
1992	472,984,000	1,054,203	989,998	0.21	0.42 ³	20,483,790
1993	464,000,000	1,102,722	1,652,617	0.36	0.41 ³	21,843,275
1994	470,000,000	1,058,778	320,344	0.07	0.37 ³	24,150,799
1995	515,122,000	1,059,537	1,506,726	0.29	0.34 ³	25,312,906
1996	456,604,000	1,027,066	1,230,694	0.27	0.27 ³	26,514,847
1997	460,540,000	930,321	1,166,197	0.25	0.27 ³	28,156,245
1998	432,750,000	1,022,029	839,204	0.19	0.25 ³	30,206,085
1999	355,148,948	944,740	1,257,860	0.35	0.24 ³	32,320,298

¹ Reflects credit of interest earnings on claim reserves but not on the general reserve.

² This rate is artificially high due to the introduction of cost-of-living increases in the Claim Reserve Calculation.

³ Average of rates for last 20 years.

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred ¹	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll ¹	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
2000	\$369,509,233	\$1,023,333	\$1,336,453	\$0.36	\$0.24 ²	\$22,231,871
2001	403,265,472	1,037,601	681,004	0.17	0.24 ²	24,428,829
2002	430,397,884	1,107,061	2,760,650	0.64	0.27 ²	23,552,296
2003	472,432,303	1,154,061	1,451,604	0.31	0.25 ²	24,159,068
2004	522,227,280	1,235,285	2,557,099	0.49	0.26 ²	23,211,839
2005	554,839,816	1,344,393	1,237,126	0.22	0.26 ²	25,396,120
2006	574,315,572	1,416,598	684,738	0.12	0.26 ²	26,438,032
2007	604,514,525	1,493,732	2,624,785	0.43	0.28 ²	25,697,531
2008	623,634,208	1,542,574	2,366,329	0.38	0.29 ²	25,256,078
2009	696,704,083	1,579,230	2,615,312	0.38	0.29 ²	24,645,343
2010	767,912,436	1,671,993	703,497	0.09	0.29 ²	25,810,871
2011	791,760,493	2,012,392	422,748	0.05	0.28 ²	27,094,608
2012	805,607,436	1,837,781	406,382	0.05	0.27 ²	28,145,999
2013	817,421,028	1,853,493	1,452,570	0.18	0.26 ²	27,886,706
2014	819,923,866	1,883,397	1,437,362	0.18	0.27 ²	27,842,135
2015	839,213,254	1,840,316	3,325,516	0.40	0.27 ²	25,466,109
2016	861,818,854	1,734,775	796,486	0.09	0.26 ²	25,643,332
2017	892,332,196	1,700,103	3,680,032	0.41	0.27 ²	22,846,141
2018	953,635,670	1,853,258	2,592,793	0.27	0.28 ²	21,304,975
2019	1,028,212,002	1,901,678	2,056,125	0.20	0.27 ²	20,707,032

¹ Reflects credit of interest earnings on claim reserves but not on the general reserve.

² Average of rates for last 20 years.

Section 2: Actuarial Valuation Results

Year Ended June 30	Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred ¹	Annual Rate of Incurred Claims and Expenses per \$100 of Covered Payroll ¹	Cumulative Rate of Incurred Claims and Expenses per \$100 of Covered Payroll	General Reserve
2020	\$1,130,066,141	\$1,990,431	\$1,619,054	\$0.14	\$0.26 ²	\$20,594,416
2021	1,121,883,556	1,963,922	1,237,227	0.11	0.26 ²	20,239,478
2022	1,178,016,102	2,066,050	955,367	0.08	0.23 ²	20,082,350
2023	1,259,245,870	1,929,599	1,848,352	0.15	0.22 ²	19,445,159
2024	1,403,031,222	1,871,135	735,737	0.05	0.20 ²	19,950,985

Note: Starting in 1987, expenses are not included.

¹ Reflects credit of interest earnings on claim reserves but not on the general reserve.

² Average of rates for last 20 years.

Section 3: Actuarial Valuation Basis

Exhibit 1: Actuarial assumptions and methods used for Temporary and Extended Temporary Disability benefit

Plan year

July 1 through June 30

Definition of active member

First day of biweekly payroll period following employment for new Department employees or immediately following transfer from other City departments.

Projected covered payroll

\$1,565,869,644 for 2024-2025 plan year.

Projected distributions

\$18,813,305 for first year (projected covered payroll times two-year average of actual distributions as a percent of actual payroll), increasing 3.00% per year thereafter.

Net investment return

2.75%, net of investment expenses. The information and analysis used in selecting this assumption is shown in the Review of Investment Return Assumption for Death and Disability Funds letter dated May 20, 2022.

Consumer Price Index (CPI)

Increase of 2.50% per year.

Appendix A: Definition of Pension Terms

Payroll growth

Increase of 3.00% per year, based on inflation of 2.50% plus “across the board” salary increases of 0.50% per year. This assumption is used to project contributions and distributions in determining the target general reserve at the end of the fixed five-year period.

Member contribution rate

Employees start contributing on the first day of the payroll period following the completion of 26 continuous weeks of Department and/or City service at the rate of \$1.00 for each biweekly payroll period.

Department contribution rate

Rate recommended by Board’s Actuary multiplied by the total monthly equivalent of compensation.

Funding method

Annual contributions equal the present value of all future disability payments for those expected to become disabled during the year with a further adjustment for interest credited to the reserves. Subject to modification by the Board’s funding policy.

Funding policy

Recommend a contribution rate to reach a target general reserve equal to 20% of the claim reserve at the end of a fixed (rolling) five-year period.

Claim Reserve

The sum of the Open Claim Reserve and the Pending Claim Reserve.

Open Claim Reserve

The number of open claims times the reserve factor specified in Section IIID(2) of the Plan.

The reserve factor was increased to \$15,050 in 2012, \$16,000 in 2013, \$17,600 in 2014, \$18,450 in 2015, \$18,700 in 2016, decreased to \$18,100 in 2017, increased to \$18,400 in 2018, \$19,200 in 2019, \$20,300 in 2020, \$20,600 in 2021, \$20,900 in 2022, \$21,000 in 2023 and \$22,700 in 2024.

Appendix A: Definition of Pension Terms

These reserve factors are provided by the Retirement Office and accepted by Segal without audit.

Pending Claim Reserve

1/26 of the total benefits paid during the preceding fiscal year.

Incurred claims

Paid claims for the year plus the increase in claim reserves.

Models

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary. The model for the funding policy for this valuation (maintaining a target general reserve at the end of a rolling five-year period) is developed by the client team under the supervision of the responsible actuary.

Justification for change in actuarial assumptions, methods or models

There have been no changes in actuarial assumptions, methods or models since the prior valuation.

Appendix A: Definition of Pension Terms

Exhibit 2: Summary of Temporary and Extended Temporary Disability benefit

Age requirement

Any age

Service requirement

Six months of continuous service.

Temporary Disability benefit

The biweekly benefit is a percentage of the biweekly compensation payable from the 15th day of disability through the end of the 12th month of disability. The percentage is based on the following table.

Maximum Period Payable at Percentage of Compensation

Period of Continuous Service Not Less Than	Period of Continuous Service Less Than	85%	60%	50%	40%
6 months	3 years	2 weeks	1 week	26 weeks	21 weeks
3 years	5 years	4 weeks	2 weeks	26 weeks	18 weeks
5 years	10 years	6 weeks	3 weeks	26 weeks	15 weeks
10 years	15 years	18 weeks	10 weeks	22 weeks	—
15 years	20 years	20 weeks	12 weeks	18 weeks	—
20 years	25 years	22 weeks	14 weeks	14 weeks	—
25 years	30 years	24 weeks	16 weeks	10 weeks	—
30 years	35 years	26 weeks	18 weeks	6 weeks	—
35 years		28 weeks	20 weeks	2 weeks	—

Appendix A: Definition of Pension Terms

Extended Temporary Disability requirements

Received 50 weeks of Temporary Disability benefits and is not eligible for Permanent Total Disability.

Extended Temporary Disability benefit

The biweekly benefit is 33 1/3 percent of their biweekly compensation payable from the end of the 12th month of disability through the 24th month of disability. However, if a member qualifies for Permanent Total Disability while such member is receiving Extended Temporary Disability benefits, such benefits shall be terminated and the member shall receive the Permanent Total Disability benefits to which they are entitled.

Changes in plan provisions

There have been no changes in plan provisions since the prior valuation.

Appendix A: Definition of Pension Terms

Exhibit 3: Actuarial assumptions and methods used for Permanent Total Disability benefit

Plan year

July 1 through June 30

Definition of active member

First day of biweekly payroll period following employment for new Department employees or immediately following transfer from other City departments.

Projected covered payroll

\$1,565,869,644 for 2024–2025 plan year.

Net investment return

2.75%, net of investment expenses. The information and analysis used in selecting this assumption is shown in the Review of Investment Return Assumption for Death and Disability Funds letter dated May 20, 2022.

Consumer Price Index (CPI)

CPI Increase of 2.50% per year

Payroll growth

Increase of 3.00% per year, based on inflation of 2.50% plus “across the board” salary increases of 0.50% per year. This assumption is used to project contributions and distributions in determining the target general reserve at the end of the fixed five-year period.

Member contribution rate

Employees start contributing on the first day of the payroll period following the completion of 26 continuous weeks of Department and/or City service at the rate of \$1.00 for each biweekly payroll period.

Appendix A: Definition of Pension Terms

Department contribution rate

Rate recommended by Board's Actuary multiplied by the total monthly equivalent of compensation.

Funding method

Annual contributions equal the present value of all future disability payments for those expected to become disabled during the year with a further adjustment for interest credited to the reserves. Subject to modification by the Board's funding policy.

Funding policy

Recommend a contribution rate to maintain a target general reserve equal to 20% of the claim reserve at the end of a fixed (rolling) five-year period.

Claim Reserve

The sum of the Open Claim Reserve and the Pending Claim Reserve.

Open Claim Reserve

The present value of future disability benefits for open claims.

Pending Claim Reserve

Contributions made during the fiscal year.

Incurred claims

Paid claims for the year plus the increase in claim reserves.

Models

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user

Appendix A: Definition of Pension Terms

control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary. The model for the funding policy for this valuation (maintaining a target reserve at the end of a rolling five-year period) is developed by the client team under the supervision of the responsible actuary.

Justification for change in actuarial assumptions, methods or models

There have been no changes in actuarial assumptions, methods or models since the prior valuation.

Appendix A: Definition of Pension Terms

Exhibit 4: Summary of Permanent Total Disability benefit

Age requirement

Any age

Service requirement

Six months continuous service.

Other requirements

Received 50 weeks of Temporary Disability benefits and satisfies the rules for Permanent Total Disability.

Monthly benefit

The monthly benefit is 40 percent of the monthly compensation payable from the end of the 12th month of disability (or later if benefits are payable under the extended temporary disability benefit) until the first day of the calendar month following the 65th birthday. If Permanent Total Disability benefits commence after the member's 60th birthday, the benefit is payable for 60 months. Permanent and Total Disability benefits are subject to annual cost-of-living adjustments, based on the CPI up to a maximum of 3% per year for Tier 1 and a maximum of 2% per year for Tier 2.

Changes in plan provisions

There have been no changes in plan provisions since the prior valuation.

Appendix A: Definition of Pension Terms

Exhibit 5: Actuarial assumptions and methods used for Supplemental Industrial Disability benefit

Plan year

July 1 through June 30

Definition of active member

First day of biweekly payroll period following employment for new Department employees or immediately following transfer from other City departments.

Projected covered payroll

\$1,565,869,644 for 2024–2025 plan year.

Net investment return

2.75%, net of investment expenses. The information and analysis used in selecting this assumption is shown in the Review of Investment Return Assumption for Death and Disability Funds letter dated May 20, 2022.

Member contribution rate

None

Department contribution rate

Funded on a cash basis

Funding method

Pay as you go

Appendix A: Definition of Pension Terms

Funding policy

Funded on a cash basis

Claim Reserve

None

Open Claim Reserve

None

Pending Claim Reserve

None

Incurred claims

Paid claims for the year

Justification for change in actuarial assumptions, methods or models

There have been no changes in actuarial assumptions, methods or models since the prior valuation.

Appendix A: Definition of Pension Terms

Exhibit 6: Summary of Supplemental Industrial Disability benefit

Age requirement

Any age

Service requirement

Six months of continuous service.

Additional requirements

Injury or disease which arises out of and in the course of employment in the Department. Receiving workers' compensation benefits.

Supplemental benefit

For the first 10 days the biweekly benefit is their biweekly compensation offset by the amount received from workers' compensation. Afterwards, the biweekly benefit is the Temporary, Extended Temporary, or Permanent Total Disability benefits offset by the amount received from workers' compensation.

Changes in plan provisions

There have been no changes in plan provisions since the prior valuation.

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