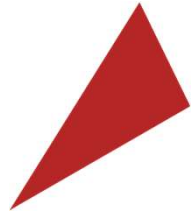




City of East Providence, Rhode Island Police and Fire Fighters Retirement System

10/31/2023 Cost Projections

September 25, 2024



Important Comments About Cost Information Included in this Report

Results and information prior to October 31, 2016 were provided by Fallon Pension Actuaries, Inc.

The cost projections contained in this report are based on data as of October 31, 2023. Assumptions used in measuring the liabilities are consistent with the October 31, 2023 actuarial report unless stated otherwise. Reasonable actuarial techniques and assumptions were used to produce the cost projections. Data was provided by the City of East Providence.

The following pages show cost projections under specific projected scenarios and are intended to be illustrative. Actual results will vary from projections shown in this report due to such factors as deviation in actual participant experience, variance of realized asset returns, future adjustments to actuarial assumptions or methodologies, and changes in the plan's provisions or governing laws. These projections are made in part to satisfy the municipality's obligation to provide a funding improvement plan to emerge from critical status, as described in §45-65-6 of state statutes.

These projections reflect numerous assumptions, and one should focus on the general trend of the results rather than the absolute dollar amounts.



Introduction

- As a result of requirements under the Rhode Island Retirement Security Act of 2011 (RIRSA), the Retirement System’s funded percentage had fallen below 60.0% as of 10/31/2011 and thus was considered to be in “critical status” as of 10/31/2011. A Funding Improvement Plan (FIP) was completed November 12, 2012 to demonstrate alternative plans to emerge from critical status within 20 years by 10/31/2031.
- As detailed in the 12/12/2012 report prepared by Fallon Pension Actuaries, Inc., the Budget Commission decided to adopt Options 2 and 3 detailed in the report. As a basic summary, Option 2 detailed the intention to pay the annual recommended contribution determined by the actuary each year and Option 3 detailed changes in plan design to lower the ongoing liability of the Plan.
- The City of East Providence has been consistent with their decision to pay the recommended contribution each year and make plan design changes.

Plan Year Ending 10/31	Payment against the Actuarial Recommended Funding Contribution
2013	97.9%
2014	103.1%
2015	114.6%
2016	98.2%
2017*	86.8%
2018	108.4%
2019	103.9%
2020	100.0%
2021	100.0%
2022	103.8%
2023	95.8%

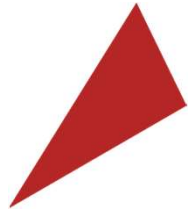
*Note that due to timing, the contribution made during the plan year ending 10/31/2017 was not yet known when budgeting and contributing for the Plan Year. The intent of the plan sponsor is to continue to contribute the recommended contribution. The recommended contribution methodology had been revised beginning on 10/31/2017 such that the plan year contribution will be determined based on results at least a year in advance.



Funding Progress

- In addition to the changes made in conjunction with the FIP, the City also made a significant contribution of \$49.2 million in the plan year ending October 31, 2013. These funds were provided to the City as a result of the City's Police participation in an investigation of Google, Inc. for allowing online Canadian pharmacies to place advertisements targeting consumers in the United States, resulting in the unlawful importation of prescription drugs. This significant contribution caused the plan to immediately emerge from critical status.
- The Retirement System's funded percentage was greater than 60.0% from 2013-2015, but the Retirement System's funded percentage dipped below the 60% threshold at 10/31/2016 and is still below the 60% threshold as of 10/31/2023.

Plan Year Ending 10/31	Funded Percentage
2013	62.3%
2014	61.4%
2015	60.0%
2016	54.8%
2017	58.5%
2018	57.2%
2019	56.8%
2020	54.3%
2021	54.4%
2022	54.5%
2023	54.0%



Funding Improvement Plan (FIP)

- It is still the intention of the City of East Providence to make the annual actuarial recommended contribution each year.
- Based on the most recent valuation and cost projections on the following page, it is expected the Retirement System will emerge from critical status starting with the plan year beginning 10/31/2031. Therefore, the Retirement System is still making requisite progress under the Funding Improvement Plan.
- In the previous year, the Retirement System had been projected to emerge from critical status by 10/31/2030. Worse than expected asset performance and demographic losses during the plan year ending 10/31/2023 delayed the projected emergence from critical status by 1 year.



10/31/2023 Cost Projection

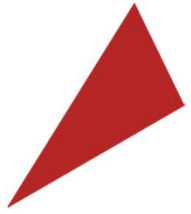
Valuation Date (10/31)	Plan Year Ending (10/31)	Payment against the ARFC	Employer Normal Cost	Amortization	Projected Payroll	Employer Contribution as a % of payroll	Employer ARFC	Employer Contribution	Increase	Benefit Payments	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability	Unfunded Liability	Funded Ratio
2011	2012	21.1%	1,894,000	5,631,388	12,326,000	12.9%	7,525,388	1,590,445		8,964,308	53,521,413	159,321,987	105,800,574	33.6%
2012	2013	97.9%	1,950,978	6,000,482	12,542,000	62.1%	7,951,460	7,784,310	389.4%	9,314,049	52,075,375	164,802,828	112,727,453	31.6%
2013	2014	103.1%	1,967,342	3,469,538	12,666,939	44.3%	5,436,880	5,606,148	-28.0%	9,746,290	107,769,539	172,949,660	65,180,121	62.3%
2014	2015	114.6%	1,896,610	3,720,901	13,861,789	46.4%	5,617,511	6,435,589	14.8%	10,237,038	111,060,482	180,962,809	69,902,327	61.4%
2015	2016	98.2%	1,886,773	4,034,879	14,628,273	39.8%	5,921,652	5,816,231	-9.6%	10,784,177	113,803,022	189,603,866	75,800,844	60.0%
2016	2017	86.8%	2,134,412	5,155,427	15,021,061	42.1%	7,289,839	6,327,364	8.8%	11,311,227	115,793,717	211,150,930	95,357,213	54.8%
2017	2018	108.4%	1,988,497	5,031,375	14,517,769	52.4%	7,019,872	7,610,501	20.3%	12,246,488	128,310,000	219,314,469	91,004,469	58.5%
2017	2019	103.9%	1,988,497	5,205,611	15,062,185	51.6%	7,470,844	7,764,971	2.0%	12,770,136	128,310,000	219,314,469	91,004,469	58.5%
2018	2020	100.0%	2,039,793	5,853,706	15,842,646	51.7%	8,190,648	8,190,648	5.5%	13,571,437	132,323,097	231,157,560	98,834,463	57.2%
2019	2021	100.0%	2,016,234	6,322,943	15,790,230	54.8%	8,653,046	8,653,046	5.6%	14,231,858	136,158,048	239,751,998	103,593,950	56.8%
2020	2022	103.8%	2,191,246	7,465,129	15,728,613	66.1%	10,019,126	10,404,477	20.2%	15,237,719	140,045,905	257,803,498	117,757,593	54.3%
2021	2023	95.8%	2,361,635	8,026,540	16,280,755	63.4%	10,777,860	10,321,126	-0.8%	16,126,117	149,525,489	274,656,092	125,130,603	54.4%
2022	2024	100.0%	2,250,245	8,541,607	15,561,500	72.0%	11,204,280	11,204,280	8.6%	17,260,299	154,357,737	283,133,254	128,775,517	54.5%
2023	2025	100.0%	2,585,109	9,771,039	17,366,187	73.3%	12,729,415	12,729,415	13.6%	17,984,044	157,266,969	291,430,277	134,163,308	54.0%
2024	2026	100.0%	2,538,588	10,511,651	17,787,630	75.6%	13,447,448	13,447,448	5.6%	18,701,362	159,578,965	299,251,837	139,672,872	53.3%
2025	2027	100.0%	2,573,786	11,083,203	18,203,478	77.3%	14,071,288	14,071,288	4.6%	19,398,126	164,754,962	306,865,730	142,110,768	53.7%
2026	2028	100.0%	2,616,545	12,003,950	18,799,149	80.1%	15,058,118	15,058,118	7.0%	20,141,233	165,632,646	314,391,840	148,759,194	52.7%
2027	2029	100.0%	2,649,001	12,541,208	19,462,397	80.4%	15,647,767	15,647,767	3.9%	20,890,787	172,704,494	321,853,425	149,148,931	53.7%
2028	2030	100.0%	2,679,430	12,935,069	20,126,499	79.9%	16,081,073	16,081,073	2.8%	21,589,335	182,425,156	329,183,581	146,758,425	55.4%
2029	2031	100.0%	2,707,880	13,328,276	20,698,419	79.8%	16,517,338	16,517,338	2.7%	22,187,922	192,769,618	336,367,307	143,597,689	57.3%
2030	2032	100.0%	2,759,252	13,732,555	21,358,220	79.5%	16,979,785	16,979,785	2.8%	22,788,036	203,662,907	343,438,862	139,775,955	59.3%
2031	2033	100.0%	2,805,158	14,150,654	22,094,358	79.0%	17,454,543	17,454,543	2.8%	23,366,354	215,265,795	350,533,026	135,267,231	61.4%
2032	2034	100.0%	2,843,000	14,581,653	22,815,357	78.7%	17,955,686	17,955,686	2.9%	23,972,047	227,650,924	357,639,129	129,988,205	63.7%
2033	2035	100.0%	2,882,007	15,025,403	23,565,395	78.3%	18,451,704	18,451,704	2.8%	24,536,244	240,909,026	364,770,704	123,861,678	66.0%
2034	2036	100.0%	2,920,075	15,481,257	24,307,743	78.0%	18,960,040	18,960,040	2.8%	25,037,297	255,106,073	371,904,243	116,798,170	68.6%
2035	2037	100.0%	2,993,606	15,950,848	25,087,380	77.8%	19,517,982	19,517,982	2.9%	25,454,809	270,347,883	379,082,386	108,734,503	71.3%
2036	2038	100.0%	3,095,778	16,437,455	25,960,771	77.5%	20,119,598	20,119,598	3.1%	25,880,959	286,806,882	386,430,460	99,623,578	74.2%
2037	2039	100.0%	3,190,863	15,269,669	26,909,372	70.7%	19,024,926	19,024,926	-5.4%	26,302,298	304,725,200	394,092,387	89,367,187	77.3%
2038	2040	100.0%	3,276,041	14,737,196	27,901,305	66.5%	18,554,368	18,554,368	-2.5%	26,728,537	324,239,997	402,067,628	77,827,631	80.6%
2039	2041	100.0%	3,374,908	14,632,876	28,873,005	64.2%	18,536,469	18,536,469	-0.1%	27,172,224	343,648,945	410,369,467	66,720,522	83.7%
2040	2042	100.0%	3,489,119	13,313,466	29,865,087	57.9%	17,291,885	17,291,885	-6.7%	27,686,234	363,614,616	419,037,352	55,422,736	86.8%
2041	2043	100.0%	3,584,631	12,735,616	30,868,571	54.5%	16,823,371	16,823,371	-2.7%	28,259,068	384,654,791	428,106,590	43,451,799	89.9%
2042	2044	100.0%	3,673,190	12,641,712	31,836,536	52.8%	16,809,691	16,809,691	-0.1%	28,788,268	405,444,037	437,498,063	32,054,026	92.7%
2043	2045	100.0%	3,785,995	12,320,477	32,786,056	50.6%	16,589,744	16,589,744	-1.3%	29,515,084	426,731,465	447,162,629	20,431,164	95.4%
2044	2046	100.0%	3,881,196	11,839,505	33,811,327	47.9%	16,195,626	16,195,626	-2.4%	30,239,214	449,102,917	457,208,470	8,105,553	98.2%
2045	2047	100.0%	3,986,660	0	34,672,886	11.8%	4,091,401	4,091,401	-74.7%	31,023,876	472,195,361	467,423,811	-4,771,550	101.0%
2046	2048	100.0%	4,080,595	0	35,580,841	11.8%	4,198,539	4,198,539	2.6%	31,881,412	495,882,668	477,840,490	-18,042,178	103.8%
2047	2049	100.0%	4,176,284	0	36,413,814	11.8%	4,296,830	4,296,830	2.3%	32,758,674	507,575,487	488,386,990	-19,188,497	103.9%

Unless otherwise noted on the following pages, projections above are based on data, assumptions, methods, and plan provisions as detailed in the 10/31/2023 valuation report dated July 2, 2024.

"ARFC" refers to the "Actuarial Recommended Funding Contribution".

These numbers are estimates only and are not guarantees of future plan costs.

*Note an additional \$49.2 million was contributed during the plan year ending 10/31/2013 as a result of City of East Providence Police's participation in the investigation of Google, Inc.



Assumptions for Cost Projection

Category	Assumption
Asset Return, Interest Rate	Plan assets earn 7.25% annually, except as specified otherwise
Active Population	The number of active employees stays constant at 205 throughout the projection period.
City Contributions	The City contributes the full Actuarial Recommended Contribution (ARC) each year or as otherwise noted
Contributions Shown	Include only Employer Defined Benefit money, unless otherwise noted
Actuarial Recommended Funding Contribution Calculation	Consists of 2 pieces – benefits being earned during the current year and the amount to cover the amortization of the unfunded liability
Future New Entrants	Modeled after actual new entrant data from 2021-2023. New entrants were modeled for Police and Fire employees separately. Fire employees are assumed to be hired as Privates with the City.
Salary Growth	7.0% increases for those under 5 years of service, and 4.0% thereafter compounded annually, plus longevity increases according to bargaining agreements. This include merit, inflation, and any other type of wage increase. The City provides all pension wages including longevity as part of the reported earnings.



Assumptions for Cost Projection

Category	Assumption
Mortality	<p>Healthy Lives - Pub-2010 Safety amount-weighted tables, with generational improvements from 2010 based on assumptions from the 2021 Social Security Administration (SSA) Trustees' Report. Survivors and beneficiaries utilize the Pub-2010 Continuing Survivor mortality tables with the same projected generational improvement.</p> <p>Disabled Lives - Pub-2010 Safety Disabled Retiree Mortality table with generational improvements from 2010 based on assumptions from the 2021 SSA Trustees' Report</p>
Inflation	Inflation is assumed at 2.5% per year unless explicitly stated otherwise
Retirement Rates, Withdrawal Rates, Disability Rates, COLA, Married Percentage	All other assumptions match those used in the October 31, 2023 valuation
Results and Information Prior to 10/31/2016	All results and information prior to October 31, 2016 were prepared and provided by Fallon Pension Actuaries, Inc.



Certification

This report was prepared for the Pension Board of the City of East Providence to show the projected ongoing funded status and cost of the City of East Providence, Rhode Island Police and Fire Fighters Retirement System. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than the intended use.

Except where indicated otherwise, the results included in this report are based on the same data, assumptions, methods, and plan provisions as the 10/31/2023 funding valuation including the determination of contribution for FYE 10/31/2024. As a result, these sections of the 2023 funding report dated July 2, 2024, should be considered part of this report.

In preparing these results, Nyhart used ProVal valuation software developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing pension 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 weaknesses or limitations in the software and have determined it is appropriate for performing this valuation.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such facts 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 or other additional cost or contribution requirement based on the plan's funded status); and changes in plan provisions of applicable law. The scope of our assignment did not include an analysis of the potential range of future measurements.

This report has been prepared in accordance with generally accepted actuarial principles and practice.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

Jennifer Turk, FSA, EA, MAAA

Jennifer Sterbank, ASA, EA, MAAA