City of Hallandale Beach
Professional/Management
Retirement Plan
4-47771

Actuarial valuation report

for the plan year beginning 10/01/2018
and ending 09/30/2019

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This report is for the defined benefit retirement plan named on the report cover and may only be provided to other parties in its entirety. Employee data and other information you provide, along with benefits described in your plan document are used for the basis of this report. This report includes your actuarial determined contribution. Amounts in this report are not meant for your financial statements or to terminate your plan. Upon request, we will prepare other reports for these purposes.

Summary of results

Current year plan costs

The following is a synopsis of your plan costs for the current year, including the actuarially determined contribution (ADC). For a complete schedule of the cash due and received by the plan, see the Contribution schedule.

The actuarially determined contribution is

$586,646

See Funding calculations for details.

We have received $0 in employer contributions for the current plan year.

Contributing less than the actuarially determined contribution amount will increase your next year's amount.

Factors impacting current year costs

Your actuarially determined contribution has decreased due to changes in the covered group since last year.

Your actuarially determined contribution decreased from $731,430 for the plan year begininng 10/01/2018 to $586,646 for the plan year begininng 10/01/2019.

You can compare your contributions to the actuarially determined contribution for each year in the Historical results section at the back of this report.

Contact your pension actuarial analyst, Gary R Peffer, at

- Peffer.Gary@principal.com
- 800-557-6627 extension 49379
- 412-394-9379

Understanding your plan's funded status

While it is important to know the actuarially determined contribution level, it is also important to understand your plan's funded status. The funded status determines contribution levels and can help you make informed decisions about plan funding, investment policies and benefit changes.

Measures of plan funded status

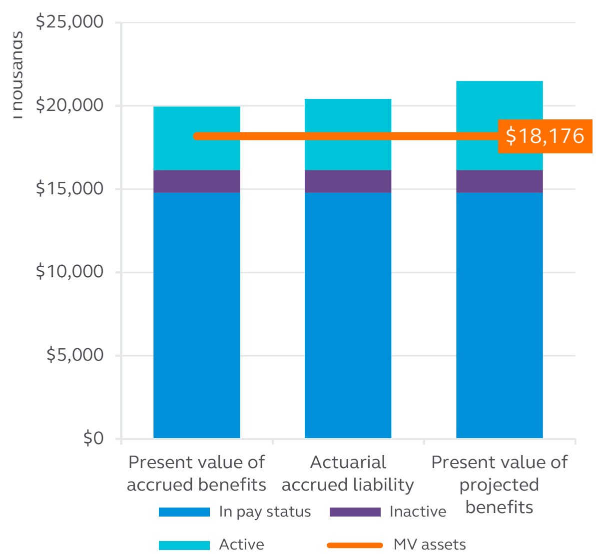
The table below compares the plan's 10/01/2018 market value of assets (the solid line) to 10/01/2018 plan liabilities measured using the assumptions we have made about future events. The liabilities assume:

- No one will enter the plan after the valuation date.
- Your asset allocation will remain the same with a return of 7.25% each year into the future.
- Plan participants will retire, die, terminate, and become disabled based on our assumptions.
- Annual pay per person will increase based on the salary increase assumption.

Three liability measures are shown:

1. **Present value of accrued benefits** - benefits already earned through the valuation date.
2. **Actuarial accrued liability** (AAL) - represents the targeted asset level under your plan's cost method.
3. **Present value of projected benefits** - all benefits expected to be earned through assumed retirement date.

Compare your plan's assets to each of the three liability measures to determine the funded status.



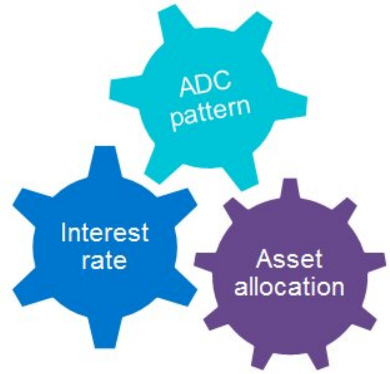
Considerations

These funded status measurements should be evaluated when making decisions about your plan. The goal of the plan's cost method is to accumulate assets equal to the AAL. As long as your AAL is fully funded, you will only need to contribute the plan's Normal Cost each year. Otherwise, you'll also need to contribute amortization payments toward funding this liability.

Understanding how your assets compare to your Present Value of Accrued Benefits is important. At a minimum you want to have enough assets in the plan to cover the present value of the benefits accrued to date.

Funding in excess of the Present Value of Projected Benefits may not be the best use of your organization's funds. However, having excess assets may provide funding and plan design flexibility.

Asset allocation, interest rates and actuarially determined contribution (ADC)



Three key factors are linked in the determination of the pattern and level of the ADC for your plan: your asset allocation, the assumed funding interest rate and the pattern of your ADC. This section discusses how these three factors are related, illustrates the impact of interest rates on measures of benefit liability, and provides information to consider as you review your funding and asset allocation decisions.

The liability measures shown on the previous page and used to calculate your actuarially determined contribution (ADC) reflect assumptions about future investment returns and on your asset allocation. However, future investment returns are not guaranteed, and will fluctuate. To make informed decisions about funding policy, benefit design, and asset allocations, you need to understand the effect of the liability interest rate assumption.

The only sources of funding for your benefits are your cash contributions and asset earnings. The present value of benefits (liability measure) is less than the benefits payable because it is reduced for assumed future asset earnings. When asset earnings fall below expectations, additional cash will be needed to allow payment of all your benefits. Your cost method is used to budget the expected total cost of your plan, and determines the ADC for each plan year.

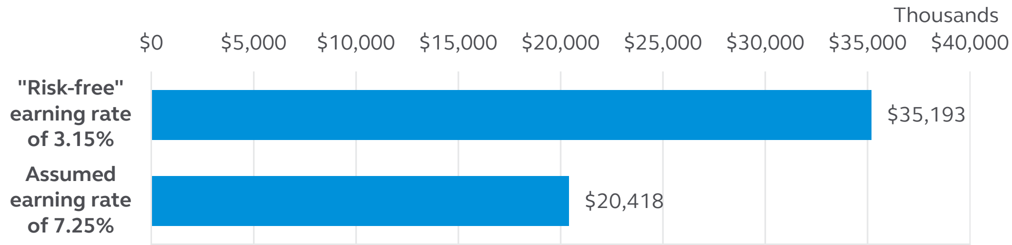
Asset allocations and interest rates

To help understand how the level of ADC can change over time, a best practice is to evaluate the benefit liability ignoring the plan's asset allocation. A recommended approach is to use a conservative "risk-free" interest rate such as U.S. Treasury instruments.

	Diversified asset allocation	"Risk free" return
Expected future returns (interest rates) based on	Your plan's asset allocation	Conservative interest rates such as U.S. Treasury instruments (not your plan's investment allocation)
Current effect	Lower ADC	Higher ADC
Later effect	Potentially higher ADC if returns fall below that assumed	Potentially lower ADC if greater returns are earned

The chart below shows your plan's Actuarial Accrued Liability used in the ADC calculation compared to the liability determined using a "risk-free" interest rate. This chart indicates how much impact asset earnings can have on the cash required to fund benefits over the life of the plan.

Actuarial accrued liability



As you can see above, higher expected returns generate a lower benefit liability. The additional assumed returns between funding basis (7.25%) and risk-free basis (3.15%) are referred to as "risk premium". The $14,774,731 difference in the two liability amounts is the assumed risk premium to be earned over the life of the plan.

The Risk-free results section later in this report shows additional liability comparisons.

Asset allocation and ADC

The interest return assumption we use to measure benefit liabilities for funding is based on your asset allocation. As a result, your asset allocation choices impact your ADC:

- More volatile asset classes may reduce the current ADC for your plan, but will cause both future ADC and funded status to fluctuate more. There is the potential for severe declines in funded status and increases in ADC when markets perform poorly.
- More conservative asset classes may result in a higher ADC, but provide a more stable basis for planning and budgeting.

The more volatile the value of your asset classes, the greater the range of the potential ADC. You can evaluate the potential impact of alternative asset allocations - and how you could balance your long-term cost and the volatility of your annual ADC - through forecasting studies.

Benefit changes and risk-free interest rates

A decision to change plan benefits can have long-term funding implications. Plan sponsors should be cautious about spending what appears to be excess assets in a given plan year on benefit increases. Working with your actuary to request a plan design study can help with your decision.

Recognizing the volatility of the ADC (discussed in the paragraph above), you will want to include the value of the proposed benefit change on a more conservative rate (ex. a risk-free rate) and/or a forecast of long-term funding levels. Discussing the study with your plan actuary can help you decide what, if any, benefit changes you can afford over the long term.

Forecasting: a best practice

Industry experts agree that it is a prudent best practice to review the long-term trends of your plan. We provide historical information at the back of this report. But that is like driving using just your rear view mirror: you only see part of the picture.

Short-term

Neither this year's ADC nor funded status is a good estimate of future amounts because they are volatile from year to year. These measures depend on your plan's assets and benefit liability:

- **Plan asset values** increase or decrease with market returns on investments, contributions made, benefit payments and expenses. Using an asset smoothing method also affects the upcoming year asset values.
- **Benefit liability** is impacted by benefit payments, salary experience, census or demographic changes, and assumption changes.

If you need to budget for next year or explore the potential volatility of results over the next few years, consider requesting a short-term forecast.

Long-term

A 10- or 20-year forecast of your plan's ADC and funded status under both expected and adverse economic scenarios is an excellent planning tool and can be a good investment.

- Comparing the results from your current asset allocation to alternative investment options can provide valuable insights to guide asset allocations. Comparing different funding policies can help evaluate whether your policy will meet your goals and fit in your budget.
- Stress-testing based on economic conditions can help you assess plan risk, and to set funding and investment policies.
- Projecting salary experience, census or demographic changes, and the benefits offered can help identify long-term trends.

If you want to explore the potential volatility of results over an extended time period, consider requesting a long-term forecast.

Keep us informed

Please make us aware of any upcoming plan design or significant participant group changes (such as layoffs, increases in staff, or large retirements). Knowing about possible changes gives us the chance to advise you whether further analysis of the cost impact should be considered.

Contribution schedule

The table below shows the contributions received and payments that are due to meet the Actuarially Determined Contribution (ADC) for this year. You can fund more than this schedule.

- The total cash contributions made for the 2017 plan year is $725,270.
- So far, cash contributions of $ 0 have been received for the 2018 plan year.
- Employee contributions of $53,805 have been received for the 2017 plan year and $8,281 employee contributions have been received through 12/03/2018 for the 10/01/2018 plan year.

Paid or date due	Plan year beginning 2017	Plan year beginning 2018	Plan year beginning 2019
12/28/2017	$181,317.50		
03/23/2018	181,317.50		
06/22/2018	181,317.50		
09/20/2018	181,317.50		
2018-2019		$731,430	
2019-2020			$586,646

Blue shading shows employer contribution due for current plan year.

Funding calculations

Actuarially determined contribution

The actuarially determined contribution (ADC) consists of three parts:

1. Employer normal cost - the cost attributed to the current year (due to the continued accrual of plan benefits for active employees) and plan expenses, then reduced for expected employee contributions.
2. Amortization of any unfunded accumulated past costs (unfunded actuarial accrued liability).
3. Interest on 1 and 2 above to the end of the plan year.

Employer normal cost	$161,569
Plus amortization amounts	390,808
Plus valuation interest to the end of the plan year	40,047
Minus 20 year amortization of credit balance	5,388
Minus valuation interest to the end of the plan year	390

Your actuarially determined contribution (ADC) is $586,646

The actuarially determined contribution is in addition to employee contributions.

The funding policy the City adopted is to use the 10/01/2018 valuation for the City's fiscal year period from 10/01/2019 through 09/30/2020. The 10/01/2018 funding requirements were adjusted to accrue for interest and salary increases at assumed salary scale and interest factors.

2017 employer normal cost - $275,228, Amortization charges - $556,170

Employer normal cost and amortization charges with interest - $891,674

Prior Credit Balance - $85,383, Amortization credits - $125,762, 2017 Contributions - $725,270

Prior Credit Balance, amortization credits and contributions with interest - $951,723

Credit Balance as of 10/1/2018 - $60,049 ($951,723 - $891,674)

Development of total normal cost

Normal cost is the portion of cost assigned to each year based on the cost method and assumptions shown in this report. The normal cost is shared by the employer and the employees based on plan provisions.

Normal cost	$125,200
Plus estimated expenses	39,000
Total normal cost	$164,200
Adjustment for salary increase (6.08%)	9,983
Adjustment for interest (7.25%)	12,628
Total normal cost for 10/1/2019 plan year	186,811
Less employee normal cost (expected employee contributions)	25,242
Employer normal cost	$161,569

Total normal cost	$186,811
Projected compensation for the current year	339,936
Total normal cost as a percentage of compensation	54.95%

Actuarial accrued liability

The actuarial accrued liability (AAL) is the targeted asset level for the plan and is used in the calculation of the unfunded actuarial accrued liability on the following page. The AAL below is the amount after any assumption or plan changes.

Active participants	$4,292,070
Inactive participants	1,359,351
Participants and beneficiaries in pay status	14,766,468
Actuarial accrued liability	$20,417,889

Unfunded actuarial accrued liability

Each year the unfunded actuarial accrued liability (UAAL) is calculated and equals the actuarial accrued liability less the actuarial value of assets. An experience gain or loss occurs when actual plan experience differs from what was assumed. The gain or loss is calculated separately and amortized as a charge (for a loss) or a credit (for a gain). The UAAL is then adjusted for amendments, assumption changes, or method changes and a liability base is created.

Expected unfunded actuarial accrued liability		
10/01/2017 unfunded actuarial accrued liability (UAAL)	$3,070,977	
10/01/2017 employer normal cost	275,228	
Interest on the above items	242,600	
Total expected UAAL without contributions		$3,588,805
Employer contributions	$725,270	
Interest on employer contributions	0	
Total contributions with interest		$725,270
Expected 10/01/2018 unfunded actuarial accrued liability Total expected UAAL less contributions with interest		**$2,863,535**

Actual unfunded actuarial accrued liability		
Actuarial accrued liability	$20,417,889	
Less actuarial value of assets	17,849,230	
10/01/2018 unfunded actuarial accrued liability		**$2,568,659**

Experience (gain) or loss		
Actual unfunded actuarial accrued liability	$2,568,659	
Less expected unfunded actuarial accrued liability	2,863,535	
(Gain)loss		$(294,876)
2017 actuarially determined contribution	$725,270	
Less total contributions with interest	725,270	
Additional (gain)/loss from (excess) shortage of contributions		$0
Total experience (gain) or loss		**$(294,876)**

Your 10/01/2018 unfunded actuarial accued liability is $2,568,659

Schedule of amortization bases

Your cost method allocates a portion of plan funding to be amortized in equal annual installments, rather than to be paid through future normal costs. The following amortization periods will be applied consistently to any amortization bases created 10/01/2016 and later.

- Initial unfunded actuarial accrued liability: 15 years
- Experience gains/losses: 10 years.
- Amendments: 10 years
- Assumption changes: 10 years

Date created	Reason	Initial balance	Remaining years	Outstanding balance	Annual amortization
10/01/2018	Experience (gain)/loss	(294,876)	10	(294,876)	(39,599)
10/01/2017	Experience (Gain)/Loss	177,090	9	164,423	23,782
10/01/2016	Assumption	1,028,958	8	876,426	138,180
10/01/2016	Cost method	(1,209,309)	13	(1,111,477)	(125,762)
10/01/2012	Assumption	559,965	4	353,368	97,822
10/01/2009	Assumption	75,114	1	20,815	20,815
10/01/2005	Benefit Change	912,406	17	843,167	81,924
10/01/2004	Benefit Change	630,839	16	578,221	58,021
10/01/2001	Benefit Change	1,350,593	13	1,198,641	135,625
Total				**2,628,708**	**390,808**

Data and assumptions

Plan assets

We measure your plan's assets at the beginning of each plan year. Plan assets reflect all contributions made for prior plan years. Contributions you may have already made for the 2018 plan year are not included.

Both market value and actuarial value for the 2018 plan year are shown below.

Market value of assets

Investments held by Principal	$18,165,239
Benefit payment (payable)/receivable	11,170
Total market value of assets	**$18,176,409**

Actuarial value of assets

Your plan uses an asset smoothing method for the actuarial value instead of the market value. Using this method allows you to soften the volatility of assets from year to year. The actuarial value of assets is used to calculate your actuarially determined contribution (ADC).

The actuarial value of assets held by Principal is determined on a combined basis. See the following page for the development of this value.

Adjusted market value of investments held by Principal	$17,838,060
Benefit payment payable	11,170
Total actuarial value	**$17,849,230**

The actuarial value of plan assets is **$17,849,230**

Calculation of adjusted market value

To determine the actuarial value of Investments held by Principal, we adjusted the market value by:

- Subtracting any remaining deferred appreciation in excess of expected investment earnings.
- Adding any remaining deferred appreciation short of expected investment earnings (shortfall).

Of the total excess appreciation or shortfall for any one plan year, 25% is allocated to the current plan year and each of the next three plan years.

1 Determine excess appreciation/(shortfall)

Compare actual to expected assets

Market value of assets as of 2017	$17,704,606
Contributions/transfers	779,075
Benefit payments	(1,420,308)
Expenses	(38,933)
Expected 7.25% interest on above items	1,245,744
Expected value of assets as of 10/01/2018	$18,270,184
Market value as of 10/01/2018	$18,176,409
Current year excess appreciation/(shortfall)	**(93,775)**
25% of current year excess appreciation/(shortfall)	(23,444)

2 Allocate deferred appreciation/(shortfall)

	Plan year			
Allocation year	**2015**	**2016**	**2017**	**2018**
2015	$(321,302)			
2016	(321,301)	$11,031		
2017	(321,301)	11,031	$193,240	
2018	(321,301)	11,030	193,240	$(23,444)
2019		11,030	193,240	(23,444)
2020			193,240	(23,444)
2021				(23,443)
Total		$44,122	$772,960	$(93,775)
Deferred		11,030	386,480	(70,331)
Adjustment to market value (sum of deferred amounts)				$327,179

3 Adjust market value for deferred amounts

Market value as of 10/01/2018	$18,176,409
Adjustment to market value (sum of deferred amounts)	327,179
Adjusted value of investments	$17,849,230

Census characteristics

	10/01/2017	10/01/2018	Change
Number of covered participants			
Actives	7	6	-1
Terminated vested	9	9	+0
Disabled	0	0	+0
Retirees	22	23	+1
Total	38	38	+0
Average age			
Actives	48.6	49.2	+0.6
Terminated vested	51.1	52.1	+1.0
Disabled	N/A	N/A	N/A
Retirees	63.2	63.7	+0.5
All	57.7	58.7	+1.0
Reported annual payroll			
Actives	$737,299	$682,868	-7.4%
Average pay per active	105,328	113,811	+8.1%
Average years of service			
Actives	13	15	+15.4%
Monthly projected retirement benefits			
Actives	$51,461	$48,703	-5.4%
Terminated vested	10,545	10,545	+0.0%
Disabled	0	0	+0.0%
Retirees	80,048	83,708	+4.6%

The monthly projected retirement benefit for actives was calculated at normal retirement age (current age if later) with projected service and projected salaries.

Included in the current and prior terminated vested participants are 0 participants who have DROP deferred payments and 2 participants who have employee contributions only.

Included in the current and prior retired participants are 4 participants who are still due DROP account balances.

Benefit cash flows

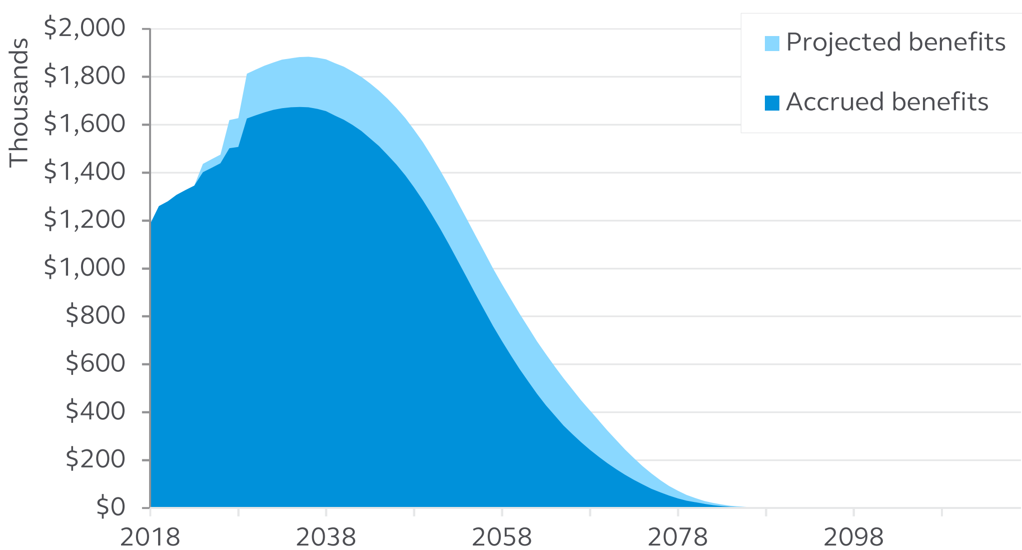
Benefit cash flows are the benefit payments expected to be paid from your plan assets. We provide cash flows to help you calculate and understand your plan obligations and the future liquidity needs of the plan.

You can compare your cash flows to the 10/01/2018 market value of assets, $18,176,409, to evaluate your asset liquidity needs, and whether cash contributions in excess of the actuarially determined contribution may be needed in the short term.

Benefit cash flows can be based on either the current plan participants ("closed group") or a group that assumes future new entrants ("open group"). The benefit payments could be based on the accrued benefits or the projected plan benefits (reflecting future service and salary increases).

In this report, we are showing you the benefit cash flows for a closed group. The graph below shows the total benefits expected to be paid for current participants (closed group). The split between benefits already accrued and those to be earned in the future is indicated on the graph. The top line represents the total projected benefits expected to be paid in each plan year.

Accrued and projected benefit payments - closed group



The table on the next page provides the details of this graph, showing the accrued and projected benefits expected to be paid, by plan year. All benefit cash flows shown on these two pages are based on the demographic assumptions (retirement and withdrawal rates, mortality, salary growth, and form of benefit) as outlined in the Assumptions and methods, but do not reflect an interest discount.

Benefit cash flow detail

Year	Accrued benefit cash flow	Projected benefits cash flow	Year	Accrued benefit cash flow	Projected benefits cash flow	Year	Accrued benefit cash flow	Projected benefits cash flow
2018	1,186,751	1,186,751	2051	1,163,254	1,407,008	2084	5,584	9,357
2019	1,259,872	1,259,872	2052	1,097,324	1,341,620	2085	3,670	6,071
2020	1,279,659	1,279,659	2053	1,029,541	1,273,981	2086	2,379	3,890
2021	1,306,390	1,306,390	2054	961,179	1,205,317	2087	1,520	2,463
2022	1,326,119	1,326,119	2055	892,858	1,136,209	2088	960	1,542
2023	1,345,498	1,345,498	2056	825,093	1,067,128	2089	599	958
2024	1,400,648	1,436,158	2057	759,177	999,331	2090	371	591
2025	1,419,743	1,455,963	2058	696,320	933,986	2091	227	362
2026	1,438,165	1,475,110	2059	636,702	871,174	2092	138	220
2027	1,500,857	1,618,941	2060	580,159	810,603	2093	84	134
2028	1,505,899	1,626,345	2061	526,504	752,030	2094	52	82
2029	1,625,067	1,812,254	2062	475,970	695,659	2095	30	45
2030	1,639,216	1,830,147	2063	428,707	641,648	2096	16	21
2031	1,650,706	1,845,456	2064	384,903	590,229	2097	7	10
2032	1,660,796	1,859,441	2065	344,675	541,410	2098	2	3
2033	1,668,515	1,871,133	2066	307,920	494,824	2099	1	1
2034	1,671,753	1,876,532	2067	274,239	449,991	2100	0	0
2035	1,673,479	1,882,060	2068	242,912	406,246	2101	0	0
2036	1,671,775	1,884,204	2069	213,842	363,650	2102	0	0
2037	1,664,791	1,878,443	2070	186,846	322,401	2103	0	0
2038	1,655,378	1,872,524	2071	161,851	282,555	2104	0	0
2039	1,637,962	1,855,821	2072	138,642	244,126	2105	0	0
2040	1,620,168	1,841,012	2073	117,345	208,059	2106	0	0
2041	1,598,412	1,822,155	2074	97,873	174,564	2107	0	0
2042	1,572,623	1,799,151	2075	80,403	143,911	2108	0	0
2043	1,543,068	1,772,257	2076	64,939	116,340	2109	0	0
2044	1,510,001	1,741,720	2077	51,593	92,316	2110	0	0
2045	1,473,318	1,707,412	2078	40,370	71,957	2111	0	0
2046	1,432,744	1,669,039	2079	30,926	54,759	2112	0	0
2047	1,387,827	1,626,139	2080	23,202	40,715	2113	0	0
2048	1,338,333	1,578,440	2081	16,911	29,325	2114	0	0
2049	1,284,282	1,525,912	2082	12,034	20,618	2115	0	0
2050	1,225,830	1,468,683	2083	8,287	14,048	2116	0	0

Plan provisions

This report reflects the maximum benefit limits under Internal Revenue Code (IRC) Section 415 and maximum compensation limits under IRC Section 401 in effect on the first day of each plan year.

The following is a summary of plan provisions and does not alter the intent or meanings of the provisions contained in the contract or plan document. This report reflects the provisions of the plan signed 08/05/2016 including amendments.

Plan eligibility

Class	Professional/Management class, as determined by the personnel resource system and approved by the City Manager and elected officials subject to provisions of Chapter 112.048, Florida Statutes. Must agree to make required contributions as a condition of employment. No new entrants on or after January 1, 2007.

Normal retirement benefit

Age	Attained age 52 with 10 years of professional/management service with employer. Attained age 60 with 4 years of professional/management service with employer. 25 years of professional/management service with employer.
Form	Ten years certain and life.
Amount (accrued benefit)	The product of (a) and (b): (a) An amount equal to 3.2% of average compensation. (b) Accrual service on such date, plus additional accrual service, if any. This amount will be reduced for each full or partial year that his/her spouse is eligible for the qualified preretirement survivor annuity before the earlier of the date he/she becomes inactive or reaches normal retirement date. For each year of coverage the reduction is 0.25%.
Maximum benefit	Accrued Benefit shall not be more than 80% of average compensation.

Early retirement benefit

Age	Attained age 45.
Service	Ten years of professional/management service with employer.
Form	Same as normal retirement benefit.
Amount	Accrued benefit on early retirement date reduced by 6% for each year up to five that early retirement date precedes normal retirement date.

Late retirement benefit

Age	No maximum age.
Form	Same as normal retirement benefit.
Amount	Accrued benefit on late retirement date. The accrued monthly benefit on normal form should not be less than his/her monthly benefit on the normal form which is the actuarial equivalent of his salary reduction contribution account on such date.

Deferred retirement option plan

Eligibility	An active participant first becomes eligible to elect the DROP upon becoming eligible for normal retirement or the date the participant reaches 80% vested.
Election	An election to participate in the DROP shall constitute an irrevocable election to resign from the service of the employer not later than 60 months after commencement of DROP participation. All participants in the DROP shall be given 45 days in which to consider the terms of the DROP agreement and, after election to participate shall have seven calendar days following execution to revoke said agreement to receive the full five years of participation.
Form	While the employee is in the DROP the pension benefit payments will be made to the DROP account as if the member had terminated employment and elected to receive monthly benefits payable in an amount as determined by the retirement option selected by the member. Prior to October 1, 2008, payments to the DROP will earn or lose interest at the same rate and frequency as the pension fund, minus administrative cost, or if elected by participant on DROP entry the rate of return assumption made annually by the plan's actuary to perform an actuarial valuation. For employees who enter DROP after 2008, will earn the rate of return assumption made annually by the plan's actuary while in DROP and will earn or lose interest at the same rate and frequency as the pension fund, minus administrative cost earn after DROP. Payment options are lump sum, periodic payment, an annuity, a combination or a rollover to another qualified retirement plan, including an individual retirement account.
Amount	At the time of a participant's entry into the DROP, the participant's accrual service, accrued benefit and average compensation shall be calculated as if the participant had actually retired from service. There shall be no further required contributions by participants after entry into the DROP. No additional accrual service shall be earned after entry into the DROP. Any changes in plan benefits shall not apply to participants in the DROP, unless otherwise applicable to retired participants of the plan.

Termination benefit

Vesting percentage	100% after 4 years of vesting service.
Form	Same as normal retirement benefit with income deferred until normal retirement date.
Amount	Equal to the sum of: (a) The amount of retirement annuity which is the actuarial equivalent of his/her salary reduction contribution account. (b) Vesting percentage times the excess of the pension benefit as of the date of termination over (a) above. At any time on or after termination, the participant may elect to receive his/her accumulation in cash in lieu of any and all retirement benefits.

Disability benefit

Service	10 years of professional/management service.
Form	Monthly income payable until death or recovery.
Amount	Accrued benefit on date of disability offset by any Social Security Disability benefit.

Medical stipend

Eligibility	Participant who actively retires from the plan and was hired on or before 01/01/1996.
Amount	An annual benefit of $120 times years of service (maximum 20 years).

Cost of living adjustment

Amount	Adjustment to the retirement benefit of 2% per year if the consumer price index is 0.5% or greater the immediate preceding year.

Death benefit

Greater of A or B below.

A. Single sum death benefit

Form	Lump sum.
Amount	Participant's salary reduction contribution account.

B. Survivor annuity death benefit

Eligibility	Participant has attained age 45 and completed 10 years of professional/management service with the employer. Participant is survived by spouse to whom he/she was continuously married throughout the one-year period ending on the date he dies. Vesting percentage or salary reduction contribution account on the date of death is greater than zero. Active participant that has not waived the Preretirement Survivor Annuity.
Form	Monthly annuity payable to spouse.
Amount	If death occurs, the amount paid to the surviving spouse is equal to the amount that would have been paid had the participant terminated employment on the date of death and survived to his/her earliest retirement age, retired with a qualified joint and 50% survivor annuity in effect, then died the next day.

Salary reduction contributions

Vesting percentage	100% after 4 years of vesting service.
Amount	7% of monthly compensation.

Definitions

Compensation	Total amount paid to an employee, excluding accumulated leave pay, but including assignment and longevity pay.
Average compensation	The average of an employee's monthly compensation for their last two compensation years, (all if less than two).
Required contribution account	Total of participant's required contributions with interest, less any previously paid out contributions. Interest shall be credited in each year at a rate of 3% per annum compounded annually.

Additional accrual service

The total of an employee's additional service to be credited beginning in the 16th year of professional/management service with the employer as described below:

(a) An active participant shall have the option of purchasing up to 5 years of additional accrual service, which shall be calculated in the form of an enhanced multiplier. In order to qualify for this option, the participant must have been employed as a professional/management employee for at least one year.

(b) Employees must exercise this option within 90 days after completion of one year of professional/management service.

(c) An active participant who has elected this option shall contribute for each year of enhanced multiplier purchased. The amount shall be based upon actuarial factors determined by the city. Such contribution may be made in a single-sum or over a period not to exceed 10 years, and may be made as a direct transfer from an IRC Section 403(b) or 457 plan.

All such contributions must be made by the earliest of (i) the date the participant has completed 11 years of service with the employer, (ii) the date of entry into the deferred retirement option plan, or (iii) his/her retirement date.

However, additional accrual service is modified as follows:

If a participant who purchased an enhanced multiplier year(s) does not reach his 16th, 17th, 18th, 19th and/or 20th year of professional/management service with the employer, the contributions made by such participant for the applicable year(s) shall be returned to him with interest compounded annually at 4%, and the enhanced multiplier for such year(s) shall be cancelled in accordance with the following schedule:

Years of professional/management service completed	Contributions returned	Enhanced multiplier years cancelled
15 or less	Those made for years 16-20	5
More than 15, up to 16	Those made for years 17-20	4
More than 16, up to 17	Those made for years 18-20	3
More than 17, up to 18	Those made for years 19-20	2
More than 18, up to 19	Those made for year 20	1
More than 19	None	0

Assumptions and methods

The following assumptions and methods are used in this year's valuation report. The rationale for each non-prescribed economic and demographic assumption is also included.

Some economic assumptions rely on the Principal RAS Long-Term Capital Market Assumptions (CMA) 2016. These assumptions are developed focusing on forward-looking market indicators and valuation models, as well as utilizing the analysis of historical data and trends, the outlook and forecasts from credible economic studies, and investment expert opinions. See Long Term Capital Market Assumptions 2016 for additional information.

Changes since last year

Assumption changes

There have been no assumption changes since the last plan year.

Method changes

No methods affecting the comparability of results were changed since the last valuation report was completed.

Assumptions selected by actuary

Liability interest	During benefit payment period 7.25% Before benefit payment period 7.25%
Asset return	7.25% for the current plan year. Liability interest rate and asset return were selected by plan sponsort.
Interest rate for employee accumulations	3.53%. As defined in the plan document.
Retirement cost of living adjustment	2.00% per year Retirement Cost of Living Adjustment should be consistent with the inflation assumption, not to exceed 2.00% as defined by the plan.
Expected expense	The expected expense included in normal cost is an estimate based on prior year expenses paid from plan assets. This is the best estimate available of upcoming year's expenses.

Retirement	Active and inactive participants are assumed to retire at normal retirement age as defined in Plan provisions. This assumption is based on the results of recent experience analysis and anticipated future experience.
Inflation	2.00% increase per year. See Long-Term Capital Market Assumptions link.
Upcoming salary increases	The preceding year's salary is increased using the S-5 Table from The Actuary's Pension Handbook, increased by 4.50% at each age. This table provides a rate of increase that declines as participants age. Note: not used for Plan accounting calculations.

Age	Upcoming increase
25	8.68%
40	7.22%
55	6.38%

Expected salary increase is composed of salary inflation, a real wage growth and a merit increase. This reflects company salary increase philosophies along with more recent experience of the plan participants.

Compensation limit increase	2.00% increase per year. Compensation limit increase should be consistent with the inflation assumption.
Mortality	Based on RP-2006, 50% blue collar, 50% white collar for males and 100% white collar for females mortality table projected to future years with Scale BB mortality improvement rates.
Disability mortality	Florida disability mortality 2016 – males set back 4 years & females set forward 2 years.
Disability	None. This plan does not offer a subsidized disability benefit therefore the disability assumption is built into the withdrawal assumption.
Withdrawal	None. Due to the size of the plan and limited experience, we are not recognizing a withdrawal assumption prior to retirement. This provides a conservative measurement of obligations.

Marriage	75% married; husbands are 3 years older than wives. This assumption does not have material impact on the results of this report and has been selected based on our best estimate of active workforce.
Form of benefit	Participants are assumed to receive their benefits on the normal form at the assumed retirement age.

Methods selected by plan sponsor

Actuarial value of plan assets	The market value of the Principal accounts is adjusted by spreading the expected value minus the actual value over four years. Contributions received in the current plan year but applied to the prior plan year are added to the actuarial value of the Principal accounts.
Actuarial cost method	The **entry age normal (EAN)** cost method is used for this valuation.

Methods selected by actuary

Retirees	Assets and liabilities for current and future retirees are included.
Vested benefits	A benefit is included in vested benefits when the participant will meet age and service eligibility requirements at the valuation date. The benefit is multiplied by the participant's vesting percentage applicable to each benefit on the valuation date. The following ancillary benefits are always treated as nonvested: disability benefits payable to retirement age unless in pay status, and pre-retirement death benefits in excess of the survivor annuity death benefit except as noted in the Plan provisions.
Deferred Retirement Option Plan (DROP) liability and assets	Participants who are participating in the Deferred Retirement Option Plan but who have not terminated employment are included in the valuation as inactive participants. The future stream of benefit payments is valued as a liability to the plan. The DROP account balances are tracked and will be added to the actuarial value of liabilities for valuation purposes as well. The actuarial value and market value of assets will reflect the total assets of the plan including the DROP account balances.

Actuary statement

This report was prepared at the request of the sponsor of the plan named on the cover of this report. It provides information needed for plan funding. It is not to be used for plan termination estimates, accounting information, or other purposes. If these or other measures of liabilities are needed, please contact me.

In preparing this report, I have relied on:

- reports of participants, salary, and service provided by the plan sponsor as of the last day of the 2017 plan year.
- information for any retirees, beneficiaries, and alternate payees being paid by Principal Life Insurance Co as of the last day of the 2017 plan year, as reported by Principal Life Insurance Company.
- benefit, contribution, and expense transaction information for the preceding plan year, and the market value of assets reported as of the last day of the 2017 plan year by Principal and the plan sponsor.
- plan documents on file with Principal Life Insurance Company, including changes as noted on the Summary of plan provisions page of this report.

Appropriate tests of reasonableness and accuracy have been made and reviewed. The information provided is adequate to support the results in this report.

I confirm that as the actuary for this pension plan. I am completely independent of the plan sponsor and any of its officers or key personnel. Neither I nor anyone closely associated with me has any relationship known to me which would impair my independence.

In my opinion, each assumption and method chosen by the actuary is reasonable (taking into account the experience of the plan and reasonable expectations). Each material economic assumption is consistent with other economic assumptions selected by the actuary for this measurement period. Note that several different assumptions may be reasonable for a given measurement, and different actuaries will apply different professional judgment and may choose different reasonable assumptions. Demographic assumptions are not expected to produce significant cumulative actuarial gains or losses over the measurement period, and the combined effect of the assumptions is reasonable.

I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, this report is complete and accurate, and complies with all relevant pension actuarial standards and legal requirements.

12/18/2018

David A Stocklas, EA, MAAA
Consulting Actuary
Principal℠
Pittsburgh, PA 15222
412.394.9380
Stocklas.Dave@principal.com

Present value of accrued plan benefits

The current year present value of vested and nonvested accrued benefits are based on the assumptions and methods shown earlier in this report. (The salary scale, if any, is not included in the calculation of accrued benefits). All retiree liability is included below except for purchased annuities. These amounts below should not be used for other purposes such as estimating plan termination sufficiency.

The prior year present value of vested and nonvested accrued benefits are based on the assumptions shown in that year's valuation report.

	10/01/2018	10/01/2017
Present value of vested benefits		
Participants in pay status	$14,766,468	$14,684,728
Inactive participants	1,359,351	1,302,160
Active participants	3,355,213	3,132,800
Total	$19,481,032	$19,119,688
Present value of nonvested benefits		
Participants in pay status	$0	$0
Inactive participants (not in pay status)	0	0
Active participants	465,919	521,798
Total	$465,919	$521,798
Total present value of accumulated plan benefits	$19,946,951	$19,641,486
Value of future service and compensation	1,540,428	2,294,143
Total present value of projected plan benefits	21,487,379	21,935,629

Change in present value of accumulated plan benefits	
Present value of accumulated plan benefits as of 10/01/2017	**$19,641,486**
Increase (decrease) during the year due to:	
Increase for interest due to decrease in the discount period	1,373,422
Benefits paid	(1,420,308)
Benefits accumulated and plan experience	352,351
Present value of accumulated plan benefits as of 10/01/2018	**$19,946,951**

Risk-free results

In the Asset allocation, interest rates and actuarially determined contributions, we explained the difference between long term and risk-free returns. The table below shows your plan's liabilities and assets on both the funding and risk-free interest rate basis.

Risk premium

The difference in the liability amounts on a funding basis versus a risk-free basis represents the additional assumed returns to be earned over the life of the plan; this is also referred to as the "risk premium".

Assets

The assets in the funding basis column reflect the asset method used to determine your plan's ADC; the assets in the risk-free basis column are on a mark-to-market basis consistent with the risk-free liabilities.

Results

The unfunded actuarial accrued liability and normal cost on the funding basis are used to calculate your ADC. Those same measures on a risk-free basis show you more conservative results.

If plan's investment returns fall short of the funding basis interest rate, additional contributions will likely be needed.

	Funding basis (ADC)	Risk-free basis
Interest rate	**7.25%**	**3.15%**[1]
Standard deviation	**10.00%**	**- - -**
Normal cost[2]	$147,811	$341,035
Actuarial accrued liability	$20,417,889	$35,192,620
Market value of assets	N/A	$18,176,409
Actuarial value of assets	$17,849,230	N/A
Unfunded actuarial accrued liability	$2,568,659	$17,016,211
Present value of accrued benefits	$19,946,951	$34,680,441

Standard deviation is one way to measure the potential volatility risk in the current asset portfolio. For example, a standard deviation close to 0% would represent a portfolio with minimal volatility risk. For this plan, about two-thirds of your actual annual returns are likely to fall within a range of -2.75% to 17.25% (7.25% -/+ 10.0%)

[1] The 30-year Treasury rate at 09/30/2018 was chosen as the risk-free interest rate. To isolate the impact of the interest rate, all other assumptions are the same. See the Assumptions and methods for other assumptions.

[2] The normal cost does not include any expense estimate or a reduction for estimated employee contributions.

Historical results

	2014	2015	2016	2017	2018
Funded status of accrued benefits					
Present value of accrued benefits (PVAB)	$17,727,075	$17,513,445	$18,889,116	$19,641,486	$19,946,951
Market value of assets (MVA)	15,974,460	15,213,430	16,152,964	17,704,606	18,176,409
Under (over) funded PVAB	$1,752,615	$2,300,015	$2,736,152	$1,936,880	$1,770,542
Accrued benefit funded percentage	90%	87%	86%	90%	91%
Funded status of actuarial accrued liability					
Actuarial accrued liability (AAL)	$18,567,868	$18,403,056	$19,833,370	$20,495,104	$20,417,889
Actuarial value of assets	15,288,727	15,958,692	16,711,403	17,424,127	17,849,230
Unfunded actuarial accrued liability	$3,279,141	$2,444,364	$3,121,967	$3,070,977	$2,568,659
Funded percentage	82%	87%	84%	85%	87%
Normal cost					
Total normal cost (NC)	$281,394	$149,611	$320,506	$297,411	$186,811
Employee NC (expected employee contributions)	60,573	42,477	45,278	38,172	25,242
Employer NC	$220,821	$107,134	$275,228	$259,239	$161,569
Total NC as % of projected current year compensation	39.35%	26.18%	52.48%	57.77%	54.95%
Actuarially determined contribution (ADC)					
Employer normal cost	$220,821	$107,134	$275,228	$259,239	$161,569
Amortization of unfunded AAL	422,300	422,469	401,015	422,747	385,420
Interest	48,234	39,720	49,028	49,444	39,657
Expected Employer ADC	$691,355	$569,324	$725,270	$731,430	$586,646
Expected employee NC	$60,573	$42,477	$45,278	$38,172	$25,242
Actual contributions					
Actual employer contributions	$748,978	$691,355	$569,324	$725,270	--
Percentage of employer's ADC paid	108%	121%	79%	99%	--
Actual employee contributions	$55,316	$61,775	$51,654	$53,805	--
Percentage of employee's NC paid	91%	145%	114%	141%	--
Liability interest rate	7.50%	7.50%	7.25%	7.25%	7.25%
Projected current year compensation	$715,194	$571,436	$610,681	$514,840	$339,936

	2014	2015	2016	2017	2018
Census at beginning of year					
Number of active participants	8	8	8	7	6
Number of terminated vested participants	9	8	8	9	9
Number of disabled participants	0	0	0	0	0
Number of retirees	23	22	22	22	23
Total participants	40	38	38	38	38
Prior year reported payroll	$738,758	$763,897	$814,214	$737,299	$682,868
Plan maturity measures					
Non-active employees as a percentage of total	80%	79%	79%	82%	84%
In pay status PV accrued benefits as a percentage of total	79%	80%	77%	75%	74%
Relative size of plan					
Market value of assets (beginning of year)	$15,974,460	$15,213,430	$16,152,964	$17,704,606	$18,176,409
as a percent of prior year reported payroll	2,162%	1,992%	1,984%	2,401%	2,662%
Actuarial accrued liability (AAL)	$18,567,868	$18,403,056	$19,833,370	$20,495,104	$20,417,889
as a percent of prior year reported payroll	2,513%	2,409%	2,436%	2,780%	2,990%
Prior year benefits paid	$849,115	$1,402,625	$945,611	$956,171	$1,420,308
as a percent of prior year reported payroll	115%	184%	116%	130%	208%
Achievement of economic assumptions					
Expected rate of return	7.50%	7.50%	7.25%	7.25%	7.25%
Actual market value rate of return	-0.84%	7.86%	12.04%	6.63%	--
Average expected salary increase	7.01%	6.96%	6.76%	6.71%	0.00%
Average actual salary increase	3.40%	6.59%	7.53%	2.18%	--
Liability interest rate	7.50%	7.50%	7.25%	7.25%	7.25%

Florida disclosures

This section provides information as required by Part VII of Chapter 112, and by Chapter 60T-1 of the Florida Statutes. To the best of our knowledge, we have reflected in our calculations and assumptions, any event or trend which would materially increase plan costs.

This section also provides the information used to determine the Actuarially determined contribution (ADC). Please see Summary of results of this valuation report for additional information.

Comparative summary of principal valuation results

	Actuarial valuation prepared as of	
Participant data	10/01/2018	10/01/2017
Active members	6	7
Total annual payroll	$682,868	$737,299
Retired members and beneficiaries	23	22
Total annualized benefit	$1,004,496	$960,576
Disabled members receiving benefit	N/A	N/A
Total annualized benefit	N/A	N/A
Terminated vested members	9	9
Total annualized benefit	$126,540	$126,540

Reconciliation of lives	Active	Inactive	Retired
Total last valuation	**7**	**9**	**22**
New lives	0	0	0
Voluntary discontinuances	0	0	0
Vested terminations	0	0	0
Non-vested terminations	0	0	0
Retirements	-1	0	1
Deaths	0	0	0
Other:	0	0	0
Total this valuation	**6**	**9**	**23**

Please refer to the Schedule of active participant data and Census characteristics for demographic information such as the number of participants by age group, years of service, current year compensation, and projected normal retirement benefits. Please refer to Benefit cash flows for a projection of emerging liabilities/cash flow needs.

Total annual payroll Includes participants assumed to retire immediately who are not included in payroll used to calculate normal cost. Neither column includes the salary increase that is used to calculate normal cost.

Assets

Since these funds are commingled with other funds in the general and separate accounts of the Principal Financial Group, it is not possible to identify specific investments as being made for a particular customer. Refer to the reconciliation of assets in this section.

Actuarial valuation prepared as of:	10/01/2018	10/01/2017
Market value of assets		
Participants Fund[1]	$0	$0
Long-term Equity Investments	10,270,559	9,747,646
Short-term Investments	0	0
Real Estate	1,139,812	1,067,895
Bonds/Fixed Income	6,754,867	6,888,135
Other:	11,170	930
Total	$18,176,409	$17,704,606

Actuarial value of assets[2]		
Participants Fund[1]		
Long-term Equity Investments		
Short-term Investments		
Real Estate		
Bonds/Fixed Income		
Other		
Total	$17,849,230	$17,424,127

[1] The participant's fund under the FPI contract is included in total assets. These assets amounts do not include deposits received after the plan year-end.

[2] The actuarial value of assets used in determining annual funding requirements are determined as stated in the Assumption and Methods section report.

Three-year comparison of investment return

The actual percentage was calculated using the Form 5500 Schedule MB investment return method.

Plan year beginning	Actual return on actuarial basis	Actual return on market basis	Assumed return
10/01/2017	6.47%	6.63%	7.25%
10/01/2016	6.56%	12.04%	7.25%
10/01/2015	6.30%	7.86%	7.50%

Based on current assumptions, the market value of assets is projected to last until the plan year beginning 10/01/2030 assuming 0% return on assets. The market value of assets is projected to last until the plan year beginning 10/01/2043 assuming 7.25% return on assets.

Liabilities

Actuarial valuation prepared as of:	10/01/2018	10/01/2017
Present value of all future expected benefit payments:		
Active members		
Retirement benefits	$5,361,560	$5,948,741
Vesting benefits	0	0
Disability benefits	0	0
Death benefits	0	0
Return of contribution	0	0
Medical Stipend	0	0
Total	**$5,361,560**	**$5,948,741**
Terminated vested members		
Total	**$1,359,351**	**$1,302,160**
Retired members and beneficiaries		
Retired (other than disabled) and beneficiaries	$14,766,468	$14,684,728
Disabled members	0	0
Total	**$16,125,819**	**$15,986,888**
Total present value of all future benefit payments	**$21,487,379**	**$21,935,629**

Liabilities due and unpaid:		
Initial actuarial accrued liability	N/A	N/A
Unfunded actuarial accrued liability (UAAL)	N/A	N/A

A list of liability bases is shown in Schedule of amortization bases.

Reconciliation of DROP accounts	Total	Qualified	Non-Qualified
Total DROP accounts on 10/01/2017	$1,744,866	$896,457	$848,409
Additions			
Contributions	0	0	0
Interest and earning	96,385	43,827	52,558
Withdrawals			
Lump sum payments	(632,635)	(441,928)	(190,707)
Total DROP accounts on 10/01/2018	**$1,208,616**	**$498,356**	**$710,260**

Actuarial present value of accrued benefits

Statement of actuarial value of all accrued benefits

Actuarial valuation prepared as of:	10/01/2018	10/01/2017
Vested accrued benefits		
Inactive members and beneficiaries	$16,125,819	$15,986,888
Active members (includes non-forfeitable accumulated member contributions in the amount of $813,914)	3,355,213	3,132,800
Total	**$19,481,032**	**$19,119,688**
Non-vested accrued benefits		
Total	**$465,919**	**$521,798**
Total actuarial present value of all accrued benefits	**$19,946,951**	**$19,641,486**

These values are based on the actuarial assumptions shown in the Assumptions and methods section this report, except that the calculation of accrued benefits does not include a salary scale, (if any).

A statement of changes in total actuarial present value of all accrued benefits is shown in the Present value of accrued benefits section of this report.

Statement of actuarial value of all accrued benefits

Actuarial valuation prepared as of:	**10/01/2018** volatility assumption[1]
Vested accrued benefits	
Inactive members and beneficiaries	$20,325,324
Active members	4,514,808
Total	**$24,840,132**
Non-vested accrued benefits	
Total	**$635,475**
Total actuarial present value of all accrued benefits	**$25,475,607**

[1] The volatility interest rate used is 5.25% which is 2.00% lower than the valuation interest rate as directed in the Florida Statutes. All other assumptions are as shown in the Assumptions and methods section of this report.

Pension cost

Actuarial valuation prepared as of:	10/01/2018	10/01/2017
Base Normal Cost	$125,200	$224,807
Administrative expenses	39,000	37,000
Total Normal Cost for current plan year	164,200	261,807
Adjusted Normal Cost for the upcoming plan year	186,811	259,239
Payment to amortize unfunded liability(ies)	385,420	422,747
Interest to the end of the upcoming plan year	39,657	49,444
Expected plan sponsor contribution	586,646	731,430
(including normal cost, amortization payment and interest, as applicable)		
As % of payroll	54.95%	57.77%
Amount to be contributed by members	25,242	38,172
As % of payroll	7.00%	7.00%

For the current plan year:
Interest is based on 7.25%. The funding policy the City adopted is to use the 10/01/2018 valuation for the City's fiscal year period from 10/1/2019 to 09/30/2020. The 10/01/2018 funding requirements were adjusted to accrue for interest and salary increases at assumed salary scale and interest factors. A Credit Balance in the Minimum Funding Standard Account of $5,388 has been recognized in the amortization.

For the prior plan year:
Interest is based on 7.25%. The funding policy the City adopted is to use the 10/01/2017 valuation for the City's fiscal year period from 10/1/2018 to 09/30/2019. The 10/01/2017 funding requirements were adusuted to accrue for interest and salary increases at assumed salary scale and interest factors. A Credit Balance in the Minimum Funding Standard Account of $7,661 has been recognized in the amortization.

	10/01/2018 volatility assumption[1]
Base normal cost	$199,398
Administrative expenses	39,000
Total normal cost for the current plan year	239,398
Adjusted normal cost for the upcoming plan year	240,928
Payment to amortize unfunded liability(ies)	1,059,860
Interest to the end of the upcoing plan year	68,291
Expected plan sponsor contribution (including normal cost, amortization payment and interest, as applicable)	1,364,158
As % of payroll (full payroll)	401.30%
Amount to be contributed by members	25,242
As % of payroll	7.00%

[1]The volatility interest rate used is 5.25% which is 2.00% lower than the valuation interest rate as directed in the new Florida Statutes. All other assumptions are as shown in the Assumptions and methods section of this report.

Plan year beginning	10/01/2017	10/01/2016
Past contributions		
Required plan sponsor contribution	$725,270	$569,324
Required member contributions	38,172	45,278
Actual contributions made by		
Plan sponsor	725,270	569,324
Members	53,805	51,654
Other	0	0
Net actuarial gain(loss) (if applicable)	N/A	N/A

Other disclosures

Actuarial valuation prepared as of:	10/01/2018	10/01/2017
Present values of active members:		
Future salaries		
at attained age	$3,041,768	$3,318,857
at entry age	4,808,727	5,552,164
Future contributions		
at attained age	205,621	224,352
at entry age	325,066	375,321
Present value of future contributions from other sources	N/A	N/A
Present value of future expected benefit payments for active members at entry age	1,923,580	2,478,244

The numerical development of total normal cost for the current plan year is shown in the Development of normal cost section of this report.

Three year comparison of actual and assumed salary increases.

Plan year beginning	Actual increases	Assumed increases
10/01/2017	2.18%	6.71%
10/01/2016	7.53%	6.76%
10/01/2014	6.59%	6.96%

Actuarial value of assets under Flexible Pension Investment contract

	Grouped FPI
Balance as of 10/01/2017	$17,424,127
Additions	
Contributions	$779,075
Interest, dividends & fund earnings	1,151,969
Total additions	$1,931,044
Withdrawals	
Expenses charged	$38,933
Benefit payments	1,420,308
Total withdrawals	$1,459,241
Actuarial valuation market value spread adjustment	(46,700)
Balance as of 10/01/2018	$17,849,230

Schedule of active participant data

Years of credited service

Attained Age	Years of credited service																					
	Under 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	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	1	143,493	0	0	0	0	0	0	0	0	0	0	0	0	1	143,493
40 to 44	0	0	0	0	0	0	1	107,831	0	0	0	0	0	0	0	0	0	0	0	0	1	107,831
45 to 49	0	0	0	0	0	0	1	88,612	0	0	0	0	0	0	0	0	0	0	0	0	1	88,612
50 to 54	0	0	0	0	0	0	1	120,144	0	0	0	0	0	0	0	0	0	0	0	0	1	120,144
55 to 59	0	0	0	0	0	0	1	185,660	0	0	1	82,557	0	0	0	0	0	0	0	0	2	134,109
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	5	129,148	0	0	1	82,557	0	0	0	0	0	0	0	0	6	121,383

Insurance products and plan administrative services are provided by Principal Life Insurance Company, a member of the Principal Financial Group®, Des Moines, IA 50392.