

April 24, 2018

Via Email

Bill Huddleston

Re: City of Hollywood Firefighters' Pension Fund Actuarial Impact Statement

Dear Bill:

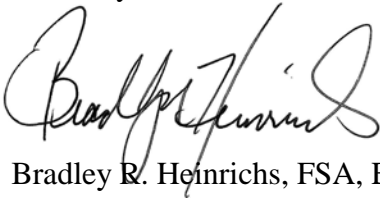
Enclosed is the following material, which has been prepared in support of the proposed changes to the Fund:

1. One copy of the required Actuarial Impact Statement, which outlines the costs associated with implementing the changes.
2. Draft of transmittal letters to the Bureau of Local Retirement Systems and the Bureau of Firefighters Retirement Trust Funds.

It will be necessary for you to sign the Actuarial Impact Statement as the Plan Administrator and forward the Impact Statement, along with a copy of the proposed Resolution, to the two Bureaus prior to final reading.

If you have any questions concerning the enclosed material, please let us know.

Sincerely,



Bradley R. Heinrichs, FSA, EA, MAAA
BRH/lke

Enclosures

cc: Darrell Thompson, Plan Administrator

CITY OF HOLLYWOOD
FIREFIGHTERS' PENSION FUND

ACTUARIAL IMPACT STATEMENT

April 24, 2018

Attached hereto is a comparison of the impact on the Total Required Contribution (per Chapter 112, Florida Statutes), and the Required City Contributions, resulting from the implementation of the following change:

Create a Reformed Planned Retirement Benefit (RPRB), with the following two options:

- 1.) The Member will contribute 8.0% of compensation while participating in the RPRB and the provisions would be exactly the same as the original Planned Retirement Benefit (PRB).
- 2.) The Member will contribute 0.5% of compensation while participating in the RPRB and will only have the option to receive a lump sum at termination of employment (the first option provided in Section 33.062(D) of the City's Code of Ordinances). The investment earnings credited to the RPRB will be the actual plan returns, net of investment related expenses (there will no longer be an adjustment if the return exceeds 4.0%). The Member will be allowed to leave the RPRB balance in the Fund at termination of employment. To value this provision, the assumed rate of investment earnings on the PRB balances was changed from 5.7% per year to 7.5% per year.

Members currently participating in the PRB will be given the opportunity to choose either of the above. If they choose the second option, they will be given a refund of 7.5% of Salary that they have contributed thus far while participating in the PRB.

* Please note that for the purpose of this impact statement, we have assumed that all current and future PRB members will choose the 2nd option and make reduced member contributions.

The cost impact, determined as of October 1, 2016, for the fiscal year ending September 30, 2018 is as follows:

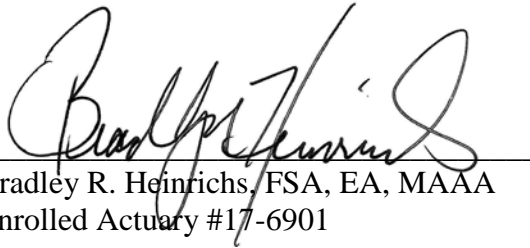
	<u>Current</u>	<u>Proposed</u>
Total Required Contribution	18,503,328	18,829,709
Expected Member Contributions	1,559,111	1,314,138
Required City & State Contributions	16,944,217	17,515,571
Estimated State Contribution	1,562,180	1,562,180
Balance from City	15,382,037	15,953,391

CITY OF HOLLYWOOD
FIREFIGHTERS' PENSION FUND

ACTUARIAL IMPACT STATEMENT

April 24, 2018
(Page 2)

The changes presented herein are in compliance with Part VII, Chapter 112, Florida Statutes and Section 14, Article X of the State Constitution. The undersigned is familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the opinions contained herein.



Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #17-6901

STATEMENT OF PLAN ADMINISTRATOR

The prepared information presented herein reflects the estimated cost of the proposed improvement.

Chairman, Board of Trustees

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	Reformed PRB <u>10/1/2016</u>	Current PRB <u>10/1/2016</u>
A. Participant Data		
Actives	202	202
Service Retirees	171	171
DROP Retirees	18	18
Beneficiaries	38	38
Disability Retirees	21	21
Terminated Vested	<u>11</u>	<u>11</u>
Total	461	461
Total Annual Payroll	\$17,908,623	\$17,908,623
Payroll Under Assumed Ret. Age	17,908,623	17,908,623
Annual Rate of Payments to:		
Service Retirees	12,389,371	12,389,371
DROP Retirees	1,308,957	1,308,957
Beneficiaries	837,516	837,516
Disability Retirees	1,043,205	1,043,205
Terminated Vested	190,530	190,530
B. Assets		
Actuarial Value (AVA) ¹	211,800,714	212,361,839
Market Value (MVA) ¹	211,127,870	211,688,995
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	123,870,762	119,949,857
Disability Benefits	6,243,888	6,243,888
Death Benefits	3,413,557	3,413,557
Vested Benefits	3,508,434	3,508,434
Refund of Contributions	323,826	323,826
Service Retirees	162,125,614	162,125,614
DROP Retirees ¹	104,288,981	104,288,981
Beneficiaries	9,081,309	9,081,309
Disability Retirees	13,096,108	13,096,108
Terminated Vested	2,492,923	2,492,923
Excess State Monies Reserve	11,040	11,040
Share Balance	<u>62,925</u>	<u>62,925</u>
Total	428,519,367	424,598,462

C. Liabilities - (Continued)	Reformed PRB <u>10/1/2016</u>	Current PRB <u>10/1/2016</u>
Present Value of Future Salaries	250,432,833	250,432,833
Present Value of Future Member Contributions	18,124,427	19,399,984
Normal Cost (Retirement)	3,978,852	3,861,937
Normal Cost (Disability)	384,561	384,561
Normal Cost (Death)	191,351	191,351
Normal Cost (Vesting)	216,259	216,259
Normal Cost (Refunds)	<u>49,609</u>	<u>49,609</u>
Total Normal Cost	4,820,632	4,703,717
Present Value of Future Normal Costs	60,922,174	59,486,897
Accrued Liability (Retirement)	72,439,042	69,953,414
Accrued Liability (Disability)	1,689,673	1,689,673
Accrued Liability (Death)	898,734	898,734
Accrued Liability (Vesting)	1,376,931	1,376,931
Accrued Liability (Refunds)	33,913	33,913
Accrued Liability (Inactives) ¹	291,084,935	291,084,935
Excess State Monies Reserve	11,040	11,040
Share Balance	<u>62,925</u>	<u>62,925</u>
Total Actuarial Accrued Liability (AL)	367,597,193	365,111,565
Unfunded Actuarial Accrued Liability (UAAL)	155,796,479	152,749,726
Funded Ratio (AVA / AL)	57.6%	58.2%

D. Actuarial Present Value of Accrued Benefits	Reformed PRB <u>10/1/2016</u>	Current PRB <u>10/1/2016</u>
Vested Accrued Benefits		
Inactives ¹	291,084,935	291,084,935
Share Balance	62,925	62,925
Actives	37,091,795	36,906,947
Member Contributions	<u>11,918,895</u>	<u>11,918,895</u>
Total	340,158,550	339,973,702
Non-vested Accrued Benefits	<u>12,948,772</u>	<u>12,948,762</u>
Total Present Value		
Accrued Benefits (PVAB)	353,107,322	352,922,464
Funded Ratio (MVA / PVAB)	59.8%	60.0%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Interpretation Change	0	
Assumption Changes	0	
Benefit Changes	184,858	
New Accrued Benefits	0	
Benefits Paid	0	
Interest	0	
Other	<u>0</u>	
Total	184,858	

	Reformed PRB	Current PRB
Valuation Date	10/1/2016	10/1/2016
Applicable to Fiscal Year Ending	<u>9/30/2018</u>	<u>9/30/2018</u>
E. Pension Cost		
Normal Cost ²	\$5,362,953	\$5,232,885
Administrative Expenses ²	695,722	695,722
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2016) ²	12,771,034	12,574,721
Total Required Contribution	18,829,709	18,503,328
Expected Member Contributions ²	1,314,138	1,559,111
Expected City and State Contribution	17,515,571	16,944,217

¹ The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2016.

² Contributions developed as of as of 10/1/2016 displayed above have been adjusted to account for 1.5 years of interest.

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rates

Healthy Lives

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

Mortality Notes

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality.

Interest Rate

7.50% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.

13th Check Load

An underlying interest rate of 7.20% is used (0.3% lower than the assumed rate) to account for the 13th check. Additionally, since the DROP Balances are included in the computation of the 13th check, the resulting load on the accrued liabilities is increased by 60% to account for this.

Termination Rates

See table below. These rates are based on the results of an actuarial experience study issued on April 25, 2016.

Retirement Rates

For Members with 10 or more years of service as of September 30, 2011:

Age	Years of Service						
	10	11 – 22	23	24-30	31	32	33
45	0.00%	0.00%	5.00%	2.50%	2.50%	2.50%	100.00%
46	0.00	0.00	5.00	2.50	2.50	2.50	100.00
47	0.00	0.00	5.00	2.50	2.50	2.50	100.00
48	0.00	0.00	5.00	2.50	2.50	2.50	100.00
49	0.00	0.00	5.00	2.50	2.50	2.50	100.00
50	5.00	5.00	5.00	2.50	2.50	2.50	100.00
51	5.00	2.50	2.50	2.50	2.50	2.50	100.00
52	5.00	2.50	2.50	2.50	2.50	2.50	100.00
53	5.00	2.50	2.50	2.50	2.50	2.50	100.00
54	5.00	2.50	2.50	2.50	2.50	2.50	100.00
55	10.00	2.50	2.50	2.50	15.00	30.00	100.00
56	10.00	2.50	2.50	2.50	15.00	30.00	100.00
57	10.00	2.50	2.50	2.50	15.00	30.00	100.00
58	15.00	15.00	15.00	15.00	15.00	30.00	100.00
59	15.00	15.00	15.00	15.00	15.00	30.00	100.00
60	100.00	100.00	100.00	100.00	100.00	100.00	100.00

For Members with less than 10 of service as of September 30, 2011:

Age	Years of Service					
	10	11 – 24	25-30	31	32	33
45	0.00%	0.00%	2.50%	2.50%	2.50%	100.00%
46	0.00	0.00	2.50	2.50	2.50	100.00
47	0.00	0.00	2.50	2.50	2.50	100.00
48	0.00	0.00	2.50	2.50	2.50	100.00
49	0.00	0.00	2.50	2.50	2.50	100.00
50	0.00	0.00	2.50	2.50	2.50	100.00
51	0.00	0.00	2.50	2.50	2.50	100.00
52	0.00	0.00	2.50	2.50	2.50	100.00
53	0.00	0.00	2.50	2.50	2.50	100.00
54	0.00	0.00	2.50	2.50	2.50	100.00
55	10.00	2.50	2.50	15.00	30.00	100.00
56	10.00	2.50	2.50	15.00	30.00	100.00
57	10.00	2.50	2.50	15.00	30.00	100.00
58	15.00	15.00	15.00	15.00	30.00	100.00
59	15.00	15.00	15.00	15.00	30.00	100.00
60	100.00	100.00	100.00	100.00	100.00	100.00

We feel these assumptions are reasonable given current Plan provisions.

Disability Rates

See table below. These rates are based on the results of an actuarial experience study issued on April 25, 2016.

Line of Duty Incidence

Death – 15% in the line of duty.
Disability – 45% in the line of duty.

Age	Termination Rate During the Year	Disability Rate During The Year
20	0.06	0.00077
25	0.05	0.00121
30	0.02	0.00176
35	0.01	0.00242
40	0.01	0.00352
45	0.01	0.00638
50	0.01	0.01089
55	0.01	0.01562

Salary Increases

Years of Service	Rate
0	25.00%
1	15.00
2	15.00
3	10.00
4	10.00
5	8.00
6+	6.00

These rates are based on the results of an actuarial experience study issued on April 25, 2016.

Payroll Growth

Up to 1.50% per year.

Administrative Expenses

Equivalent to those incurred in the prior year, \$625,368 for 2016.

Funding Method

Entry Age Normal Actuarial Cost Method.

Actuarial Asset Method

The Actuarial Value of Assets utilizes a five-year smoothing methodology. The annual difference between expected and actual investment earnings (Market Value, net of investment-related expenses), is phased-in over a five-year period.

SUMMARY OF PLAN PROVISIONS

(Through Ord. No. O-2015-09, including the Administrative Rule adopted May 23, 2016)

LATEST AMENDMENT	June 3, 2015.
ELIGIBILITY	Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.
CREDITED SERVICE	Total years and fractional parts of years of employment with the City as a Firefighter with Member contributions (computed in quarters with one to three months being one-quarter, more than three but not more than six months being one-half of a year, more than six but not more than nine months being three-quarters of a year, and more than nine but not more than twelve months being one years as a Firefighter).
TIER 1 MEMBER	Hired prior to July 16, 2009.
TIER 2 MEMBER	Hired on or after July 16, 2009.
COMPENSATION	<p><u>For Compensation earned prior to October 1, 2011:</u> Fixed remuneration for services rendered to the City as a Firefighter, including accrued sick leave compensation up to 2,200 hours. Compensation for Tier 1 Members shall include workers' compensation/supplemental compensation, expense allowances, cash conversion of holiday benefits, up to 300 hours of overtime, 70% of the cash payment accumulated, unused annual leave paid at the time of retirement or entry into DROP, expense allowances, and education incentive payment from the Insurance Commissioner's Trust Fund.</p> <p><u>For Compensation earned after October 1, 2011:</u> Fixed remuneration for services rendered to the City as a Firefighter, including only wages and education incentive payment from the Insurance Commissioner's Trust Fund and <u>excluding</u> overtime, workers compensation/supplemental compensation, expense allowances, cash conversion of holiday benefits, accrued leave payouts and cash conversion of blood time and compensatory time.</p>
AVERAGE FINAL COMPENSATION (AFC)	
Benefits accrued prior to October 1, 2011	
Tier 1 Members:	Average compensation of the three highest years of Credited Service.
Tier 2 Members:	Average compensation of the five highest years of Credited Service.

Benefits accrued on and after October 1, 2011

Average compensation of the 60 highest consecutive months of the last 120 months of Credited Service.

MEMBER CONTRIBUTIONS

Tier 1 Members: 8.00% of compensation. Once Member has accrued the maximum benefit of 86% of AFC, their contribution percentage reduces to 0.50% of compensation.

Tier 2 Members: 7.50% of compensation. Once Member has accrued the maximum benefit of 82.50% of AFC, their contribution percentage reduces to 0.50% of compensation.

Notwithstanding the above, all Members hired on or after October 1, 2011 will contribute 7.50% of compensation.

NORMAL RETIREMENT

Date

Tier 1 Members: Less than 10 years of Credited Service as of September 30, 2011:

Prior Benefit: Earlier of 1) Age 50 with 10 years of Credited Service, or 2) 23 Years of Credited Service, regardless of Age.

Future Benefit: Earlier of 1) Age 55 with 10 years of Credited Service, or 2) 25 years of Credited Service.

10 or more years of Credited Service as of September 30, 2011: Earlier of 1) Age 50 with 10 years of Credited Service, or 2) 23 Years of Credited Service, regardless of Age.

Tier 2 Members: Earlier of 1) Age 55 with 10 years of Credited Service, or 2) 25 years of Credited Service.

Benefit Amount

For benefits accrued prior to October 1, 2011 ("Prior service" piece):

Tier 1 Members: 3.30% of Average Final Compensation times Credited Service. Maximum benefit of 86% of Average Final Compensation.

Tier 2 Members: 3.20% of Average Final Compensation times Credited Service. Maximum benefit of 82.50% of Average Final Compensation.

For benefits accrued on and after October 1, 2011 (“Future service” piece):

Tier 1 Members:	3.00% of Average Final Compensation <u>times</u> Credited Service. Maximum benefit of 86% less 3.30% times the Credited Service accrued through September 30, 2011.
Tier 2 Members:	3.00% of Average Final Compensation <u>times</u> Credited Service. Maximum benefit of 73.60% of Average Final Compensation.
Form of Benefit	For unmarried Members, Ten Year Certain and Life Annuity. For married Members, 50% Joint and Survivor annuity with Ten Years Certain.

COST OF LIVING INCREASES

“Prior Service” Piece	Retirees receive a 2.00% per year cost-of-living adjustment commencing three years after retiree’s benefit payments have begun. Members hired after July 16, 2009 will not receive a COLA on the “Prior Service” Piece.
“Future Service” Piece	None.

DISABILITY

Eligibility

Service Incurred	Covered from Date of Employment.
Non-Service Incurred	5 years of Credited Service.

Benefit

Service Incurred	75% of compensation at the time of disability. The benefit will be offset by any worker’s compensation, pension, or similar benefit payable to the Member or to his dependents.
Non-Service Incurred	25% of earnings at the time of determination of disability. The benefit will be offset by any worker’s compensation, pension, or similar benefit payable to the Member or to his dependents. Upon attainment of normal retirement age, the benefit will be recomputed as a normal retirement benefit with service included for the period of time that the member was receiving a disability retirement benefit.

Form of Payment

10 Year Certain and Life annuity, with a 100% survivor annuity payable to the spouse until death or remarriage (in the case of a member who dies prior to age 50 while receiving a non-service connected disability) or with a 50% survivor annuity payable to the spouse until death or remarriage (for all other members).

VESTING

Schedule 100% after 10 years of Credited Service.

Benefit Amount

Tier 1 Members: Vested accrued benefit payable at age 50.

Tier 2 Members: Vested accrued benefit payable at age 55.

DEATH BENEFITS

Service Connected 50% of compensation at the date of death payable as a monthly life and 10 years certain benefit to the spouse until death or remarriage.

Non-service Connected For Members with five years of service, greater of accrued benefit or 25% of compensation at the date of death payable as a monthly life and 10 years certain benefit to the spouse until death or remarriage.

DEFERRED RETIREMENT OPTION PLAN

Eligibility Only those Members were eligible to retire as of September 30, 2011. There is no DROP for other Members.

Participation Not to exceed 96 months, but pre-DROP service plus DROP service cannot exceed 33 years.

Rate of Return 6.00% for Tier 1 employees.
4.00% for Tier 2 employees.

Form of Distribution Cash lump sum (options available) at termination of employment.

Mr. Stephen Bardin
Police Officers' and Firefighters' Retirement Trust Funds
Department of Management Services, Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

Re: Actuarial Impact Statement

Dear Mr. Bardin:

The City of Hollywood is considering the implementation of amended retirement benefits for its Firefighters. The changes are described in the enclosed material.

Pursuant to the provisions of Chapter 175, we are enclosing the required Actuarial Impact Statement along with a copy of the proposed Resolution for your review.

If you have any questions or if additional information is needed, please contact us.

Sincerely,

Mr. Keith Brinkman
Bureau of Local Retirement Systems
Division of Retirement
Post Office Box 9000
Tallahassee, FL 32315-9000

Re: Actuarial Impact Statement

Dear Mr. Brinkman:

The City of Hollywood is considering the implementation of amended retirement benefits for its Firefighters. The changes are described in the enclosed material.

Pursuant to Section 22d-1.04 of the Agency Rules, we are enclosing the required Actuarial Impact Statement (AIS) and a copy of the proposed Resolution for your review.

If you have any questions or if additional information is needed, please contact us.

Sincerely,