

**ACTUARIAL VALUATION OF  
CITY OF LAUDERHILL POLICE OFFICERS'  
RETIREMENT SYSTEM  
AS OF OCTOBER 1, 2016**

**May, 2017**

Determination of Contribution for the  
Plan Year ending September 30, 2017  
Contribution to be  
Paid in Fiscal Year October 1, 2016  
through September 30, 2017

**DuLaney and Company, Inc.  
Actuarial Services**

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May 3, 2017

Board of Trustees  
City of Lauderdale Police Officers' Retirement System  
c/o Mr. Dave Williams  
Precision Pension Administration, Inc.  
13790 NW 4th Street, Suite 105  
Sunrise, FL 33325

Dear Board Members:

We are pleased to present the October 1, 2016 Actuarial Valuation for the City of Lauderdale Police Officers' Retirement System. The purpose of this report is to indicate appropriate contribution levels and to satisfy State requirements. The report is prepared for and at the request of the Board of Trustees.

This report consists of this commentary, detail Tables I through XVI and State Required Exhibit - Table XVII. The Tables contain basic Retirement Plan cost figures plus significant detail on the benefits, liabilities and experience of your Plan.

#### **Costs for Fiscal Year Beginning October 1, 2016**

This Actuarial Valuation develops the required minimum Retirement Plan payment for the fiscal year beginning October 1, 2016 and ending September 30, 2017 under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 185. The minimum payment consists of payment of annual normal cost plus amortization of the unfunded actuarial accrued liability over various periods, and interest, as prescribed by law. We anticipate that the member contributions will be \$809,170 (10.0% of covered payroll).

The required funding amount for the plan/fiscal year ending September 30, 2017, to be met by the City and State contributions under Chapter 185 is **33.6%** of the covered payroll. The anticipated State (Chapter 185) contribution is \$381,449. The City and State required contribution, computed based on the October 1, 2016 covered payroll of \$8,091,698, is **\$2,720,045** or 33.6% of covered payroll, if the payment requirement is met by September 30, 2017. We have assumed that the State contribution available (limited by rules under Chapter 99-1) would be **\$381,449** (same as the amount the City was credited with for contribution purposes for the prior plan/fiscal year, and assumed to be 4.7% of covered payroll). Thus, the required City contribution would be **\$2,338,596 (28.9%** of covered payroll). Under the rules of Chapter 99-1, any amount of the State contribution received above the assumed amount of \$381,449 up to the adjusted base amount of \$504,799 can be used to reduce the City's contribution requirement. If the actual State contribution is less than the assumed amount, the shortfall must be made up by the City.

Please note that Chapter 185 states that employer contributions must be made at least quarterly.

**Changes in Plan Provisions, Actuarial Methods or Assumptions Recognized in this Valuation**

In this valuation, there were no changes in plan provisions. The principal plan provisions are summarized in Table XI.

Certain actuarial assumptions and methods employed for this valuation have been revised. The changes included:

- The assumed administrative expenses were changed from \$154,489 to \$156,372 for the plan/fiscal year.
- The mortality table was changed from the RP-2000 Mortality Table with generational projection rates to the mortality tables used by the FRS, as described in Item 1. on page 24.

Table XII contains an outline of the assumptions and methods used.

**Comparison of Costs With Previous Valuation Year of 2015/2016**

Table II of the report provides information of a comparative nature. Column I shows the results of the October 1, 2015 Actuarial Valuation while Column II shows the results as of October 1, 2016 prior to the change in actuarial assumptions. A comparison of the two columns shows the effect of plan experience during the year. Covered payroll decreased by approximately 4.6% while the number of active participants decreased by about 6.6%. The unfunded liability decreased from \$14,492,346 to \$13,463,695, primarily due to the actuarial gain of \$734,341 during the plan year.

Column III of the Table displays the results after the assumption changes. A comparison of Columns II and III indicates that the changes increased the unfunded actuarial accrued liability by \$781,591 from \$13,463,695 to \$14,245,286. The City minimum funding requirement increased from \$2,237,810 to \$2,338,596.

**Plan Experience**

Table XVI provides a summary of certain plan experience during the plan year. The actuarial value of assets return was 8.1% for the plan year ended September 30, 2016, which was above the assumption of 7.50%. The market value rate of return was 10.2%. Employee turnover was 127% higher than the expected turnover during the last plan year. The actual pensionable earnings increased by an average of 5.9% per active member as compared to the assumption of 5.5%. The actuarial value of assets return (gain), salary experience (loss), and turnover experience

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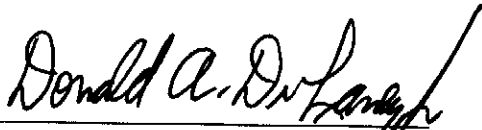
(gain) comprise the main sources of actuarial gain during the plan year. A more detailed analysis would be needed to determine the actual magnitude of gain or loss attributable to each of these elements.

**Participant Census and Financial Data**

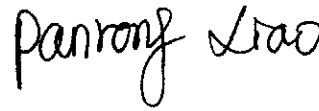
Census data for the fiscal year October 1, 2015 through September 30, 2016 was provided by the plan administrator, the plan auditor, and the City. The data was reviewed for consistency and is believed to be reliable.

Information on Plan assets was received from the Plan's auditors. We did not audit this information; however, we believe it to be reliable.

**DuLaney and Company**



Donald A. DuLaney, Jr. A.S.A., E.A.  
Senior Consulting Actuary



Panrong Xiao, M.A.A.A.  
Enrolled Actuary

DAD/PX  
Attachments

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Table I

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Summary of Retirement Plan Costs as of October 1, 2016**

	<u>Cost Data</u>	<u>% of Payroll</u>
A. <u>Participant Data Summary (Table III)</u>		
1. Active employees		
a) Tier One	59	N/A
b) Tier Two	26	N/A
c) Total	85	N/A
2. Terminated vested	12	N/A
3. Receiving benefits	34	N/A
4. DROP participants	15	N/A
5. Annual payroll of active employees	\$ 8,091,698	100.0%
B. <u>Total Normal Costs</u>		
1. Age retirement benefits	\$ 1,723,927	21.3%
2. Deferred vesting benefits	200,878	2.5%
3. Death benefits	17,254	0.2%
4. Disability benefits	26,464	0.3%
5. Estimated expenses	156,372	1.9%
6. Total annual normal costs	\$ 2,124,895	26.3%
C. <u>Total Actuarial Accrued Liability</u>		
1. Age retirement benefits active employees	\$ 31,036,893	383.6%
2. Termination benefits active employees	1,106,143	13.7%
3. Death benefits active employees	141,332	1.7%
4. Disability benefits active employees	101,066	1.2%
5. Retired or terminated vested participants receiving benefits	21,298,028	263.2%
6. DROP participants	16,128,006	199.3%
7. Terminated vested participants entitled to future benefits	1,038,604	12.8%
8. Deceased participants whose beneficiaries are receiving benefits	207,221	2.6%
9. Disabled participants receiving benefits	515,077	6.4%
10. Total actuarial accrued liability	\$ 71,572,370	884.5%

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**Table I**  
**(continued two)**

	<u>Cost Data</u>	<u>% of Payroll</u>
D. <u>Actuarial Value of Assets (Table VI)</u>	\$ 57,327,084	708.5%
E. <u>Unfunded Actuarial Accrued Liability (C.-D.)</u>	\$ 14,245,286	176.0%
F. <u>Actuarial Gains / (Losses) (Table VIII)</u>	\$ 734,341	9.1%
G. <u>Minimum Funding Requirements</u>		
1. Total normal cost	\$ 2,124,895	26.3%
2. Amortization of unfunded actuarial accrued liability	1,301,528	16.1%
3. Interest adjustment	<u>102,792</u>	<u>1.3%</u>
4. Total payment	\$ 3,529,215	43.6%
H. <u>Estimated Contribution Sources</u>		
1. City	\$ 2,338,596	28.9%
2. State	\$ 381,449	4.7%
3. Employees	\$ 809,170	10.0%
I. <u>Actuarial Present Value of Vested Accrued Benefits</u>		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits	\$ 22,020,326	272.1%
2. DROP participants	16,128,006	199.3%
3. Terminated vested participants entitled to future benefits	1,038,604	12.8%
4. Active participants entitled to future benefits	<u>23,391,608</u>	<u>289.1%</u>
5. Total actuarial present value of vested accrued benefits	\$ 62,578,544	773.4%
J. <u>Market Value of Assets (Table IV)</u>	\$ 56,042,901	692.6%
K. <u>Unfunded Actuarial Present Value of Vested Accrued Benefits (I. - J., not less than \$0)</u>	\$ 6,535,643	80.8%
L. <u>Vested Benefit Security Ratio (J. ÷ I.)</u>	89.6%	N/A

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Table II

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

Comparison of Cost Data of October 1, 2015 and October 1, 2016 Actuarial Valuations

	Column I		Column II		Column III	
	October 1, 2015	% of Annual Pay	Prior Assumptions October 1, 2016	% of Annual Pay	Current Assumptions October 1, 2016	% of Annual Pay
	Cost Data		Cost Data		Cost Data	
A. Participants						
1. Active employees						
- Tier One	67	N/A	59	N/A	59	N/A
- Tier Two	24	N/A	26	N/A	26	N/A
- Total	91	N/A	85	N/A	85	N/A
2. Terminated vested	10	N/A	12	N/A	12	N/A
3. Receiving benefits	33	N/A	34	N/A	34	N/A
4. DROP participants	10	N/A	15	N/A	15	N/A
5. Annual payroll of active employees	\$ 8,479,879	100.0%	\$ 8,091,698	100.0%	\$ 8,091,698	100.0%
B. Total Normal Costs	\$ 2,181,190	25.7%	\$ 2,098,839	25.9%	\$ 2,124,895	26.3%
C. Actuarial Accrued Liability	\$ 67,003,623	790.1%	\$ 70,790,779	874.9%	\$ 71,572,370	884.5%
D. Actuarial Value of Assets	\$ 52,511,277	619.2%	\$ 57,327,084	708.5%	\$ 57,327,084	708.5%
E. Unfunded Actuarial Accrued Liability	\$ 14,492,346	170.9%	\$ 13,463,695	166.4%	\$ 14,245,286	176.0%
F. Actuarial Gains / (Losses)	\$ 34,968	0.4%	\$ 734,341	9.1%	\$ 734,341	9.1%
G. City Minimum Funding Requirement	\$ 2,358,736	27.8%	\$ 2,237,810	27.7%	\$ 2,338,596	28.9%
H. Unfunded Actuarial Present Value of Vested Accrued Benefits*	\$ 8,000,265	94.3%	\$ 5,913,161	73.1%	\$ 6,535,643	80.8%
I. Vested Benefit Security Ratio*	86.3%	N/A	90.5%	N/A	89.6%	N/A

\*Computed based on market value of assets





Table III

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Characteristics of Participants in  
Actuarial Valuation as of October 1, 2016

A. Characteristic of Active Participants

1.	Active participants as of beginning of prior year	91
2.	New entrants during prior year	7
3.	Exits during prior year	(13)
4.	Active participants as of beginning of year	85
5.	Active participants fully vested	60
6.	Active participants partially vested	0
7.	Active participants non-vested	25
8.	Annual payroll of active participants	\$ 8,091,698
9.	Average pay	\$ 95,196
10.	Average attained age	38.7 years
11.	Percent female	5.9%

B. Characteristics of Inactive Participants

1.	Inactives as of beginning of prior year	53
2.	Newly inactive during prior year	8
3.	Exits during prior year	(0)
4.	Inactives as of beginning of year	61
5.	Age retirees	30
6.	Projected annual benefit for age retirees	\$ 1,720,916
7.	DROP participants	15
8.	Projected annual benefit for DROP participants	\$ 1,310,634
9.	Beneficiaries receiving benefits	1
10.	Projected annual benefits for beneficiaries receiving benefits	\$ 21,110
11.	Disabled participants receiving benefits	3
12.	Projected annual benefits for disabled participants	\$ 66,754
13.	Terminated vested due deferred benefits	12
14.	Projected annual benefits for terminated vested participants	\$ 196,856

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Table IV

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Statement of Assets as of October 1, 2016<sup>1</sup>**

	<u>Market Value</u>
A. <u>Assets</u>	
1. Cash and Cash Equivalents	\$ 1,303,869
2. Common Stocks	11,355,879
3. Domestic Fixed Income Funds	8,185,490
4. Absoulte Return Equity Funds	17,760,323
5. International Equity Funds	7,369,842
6. Accrued Interest & Dividends Receivable	250,215
7. Receivable City Contributions	0
8. Reccivable Employee Contributions	0
9. Receivable Buyback Contributions	0
10. Note Receivable	2,000,000
11. Real Estate Fund	9,804,788
12. Other Assets	0
13. Assets Purchased with Receivable Buyback Contributions Paid	<u>53,371</u>
14. Total Assets	\$ 58,083,777
B. <u>Liabilities</u>	
1. Prepaid City Contributions	\$ 0
2. Securities Purchased Payable	213,393
3. Benefits Payable	0
4. Unused Chapter 185 Funds	0
5. Deferred Retirement Option Plan Accounts Payable	1,794,218
6. Accounts Payable	<u>33,265</u>
7. Total Liabilities	\$ 2,040,876
C. <u>Grand Total (Item A.14. – Item B.7.)</u>	<u>\$ 56,042,901</u>

<sup>1</sup> At market value as reported by Plan's Auditors.

Table V

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Reconciliation of Plan Assets<sup>1</sup>**

A.	<u>Market Value of Assets as of October 1, 2015</u>		\$ 50,366,584
B.	<u>Receipts During Period</u>		
1.	Contributions		
a.	City	\$ 2,342,742	
b.	Employee	922,206	
c.	State (not limited by 99-1)	<u>381,449</u>	
d.	Total		\$ 3,646,397
2.	Investment income		
a.	Interest, dividends and miscellaneous income	\$ 1,310,514	
b.	Investment expenses	<u>(169,057)</u>	
c.	Net		\$ 1,141,457
3.	Net realized and unrealized appreciation		
a.	Realized appreciation	\$ 0	
b.	Unrealized appreciation	<u>\$ 3,984,373</u>	
c.	Total		\$ 3,984,373
4.	Receivable buyback contributions paid		\$ 53,371
5.	Total receipts during period (1.d. + 2.c. + 3.c. + 4.)		\$ 8,825,598
C.	<u>Disbursements During Period</u>		
1.	Pension payments		\$ 1,839,739
2.	DROP payments		895,005
3.	Contribution refunds		197,402
4.	Administrative expenses		156,372
5.	Increase / (decrease) in Chapter 185 reserve		0
6.	Decrease in receivable buyback contributions		<u>7,392</u>
7.	Total disbursements during period		\$ 3,095,910
D.	<u>Market Value of Assets as of October 1, 2016 (A. + B.5. - C.7.)</u>		<u>\$ 57,327,084</u>
E.	<u>Reconciliation of DROP Accounts Balance</u>		
1.	DROP accounts balance as of October 1, 2015		\$ 922,420
2.	Benefit payments into DROP accounts during year		895,005
3.	Disbursements from DROP accounts during year		(83,102)
4.	Expenses deducted from DROP accounts		(0)
5.	Investment gains/(losses) during year		<u>59,895</u>
6.	DROP accounts balance as of September 30, 2016		\$ 1,794,218

<sup>1</sup> As reported by Plan's Auditors.

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Table VI

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Development of Actuarial Value of Assets**

	10/1/2015 – 9/30/2016	10/1/2014 – 9/30/2015	10/1/2013 – 9/30/2014	10/1/2012 – 9/30/2013	10/1/2011 – 9/30/2012
A. Preliminary actuarial value of assets as of beginning of year	\$ 52,511,277	\$ 46,823,896	\$ 40,582,741	\$ 34,645,341	\$ 29,529,579
B. Contributions and miscellaneous income	3,646,397	3,846,296	3,943,548	3,819,920	4,377,410
C. Benefit payments and administrative expenses	3,088,518	2,326,407	1,500,141	1,165,613	1,169,231
D. Actual investment earnings net of investment expenses	5,081,761	336,872	3,867,913	5,463,866	4,735,524
E. Expected investment earnings (A x .0750 + (B-C.) x .0375)	3,959,266	3,568,788	3,239,846	2,787,868	2,412,859
F. Excess of actual over expected investment earnings (D-E.)	1,122,495	(3,231,916)	628,069	2,675,998	2,322,665
G. Recognition of excess earnings over 4 years					
1. 25% from this plan year	280,624	(807,979)	157,017	669,000	580,666
2. 25% from last plan year	(807,979)	157,017	669,000	580,666	(848,779)
3. 25% from two plan years ago	157,017	669,000	580,666	(848,779)	94,338
4. 25% from three plan years ago	669,000	580,666	(848,779)	94,338	(331,501)
5. Total	298,662	598,704	557,904	495,225	(505,276)
H. Preliminary actuarial value of assets at end of year (A + B - C + E + G.5.)	\$ 57,327,084	\$ 52,511,277	\$ 46,823,896	\$ 40,582,741	\$ 34,645,341
I. Actuarial value of assets limitations					
1. Market value of assets prior to exclusion of Chapter 185 accumulated excess reserve	\$ 56,042,901	\$ 50,366,584	\$ 48,641,964	\$ 42,296,060	\$ 34,269,838
2. 80% of I.1.	44,834,321	40,293,267	38,913,571	33,846,848	27,415,870
3. 120% of I.1.	67,251,481	60,439,901	58,370,357	50,755,272	41,123,806
4. Actuarial value of assets (H., but not less than I.2. or more than I.3.)	\$ 57,327,084	\$ 52,511,277	\$ 46,823,896	\$ 40,582,741	\$ 34,645,341
J. Return on Actuarial Value	\$ 4,257,928	\$ 4,167,492	\$ 3,797,748	\$ 3,283,093	\$ 1,907,583
K. Net actuarial value of assets	\$ 57,327,084	\$ 52,511,277	\$ 46,823,896	\$ 40,582,741	\$ 34,645,341



**Table VII**

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**History of Chapter 185 Contribution Usage**

Under the provisions of Florida Statutes Chapter 185, as amended by Chapter 99-1, increments in Chapter 185 contributions over the amount for 1997 must first be used to fund the cost of meeting minimum benefit requirements. After the minimum requirements are met, any additional Chapter 185 contributions received must be used to provide extra benefits. The following is an accounting of the contributions received and the amounts used for compliance.

A. Benefit improvements needed to meet Chapter 185 minimum benefits:

None.

B. History of Chapter 185 contribution usage\*

Received During Plan Year	<u>Adjusted Base Amount</u>			<u>Actual Amount Received</u>		
	Chapter 185 Contribution	Cost for New Benefits	Total Chapter 185 Contribution Used	Chapter 185 Contribution	Excess of Actual over Base Amount	Cumulative Excess of Actual over Base Amount without Interest
1999/2000	\$ 0	\$ 92,774	\$ 92,774	\$ 126,081	\$ 33,307	\$ 33,307
2000/2001	\$ 92,774	\$ 0	\$ 92,774	\$ 131,250	\$ 38,476	\$ 71,783
2001/2002	\$ 92,774	\$ 175,245	\$ 268,019	\$ 153,775	\$ 0	\$ 71,783
2002/2003	\$ 268,019	\$ 0	\$ 268,019	\$ 190,235	\$ 0	\$ 71,783
2003/2004	\$ 268,019	\$ 236,780	\$ 504,799 <sup>1</sup>	\$ 249,479	\$ 0	\$ 0 <sup>1</sup>
2004/2005	\$ 504,799	\$ 0	\$ 504,799	\$ 243,140	\$ 0	\$ 0
2005/2006	\$ 504,799	\$ 0	\$ 504,799	\$ 249,845	\$ 0	\$ 0
2006/2007	\$ 504,799	\$ 0	\$ 504,799	\$ 267,834	\$ 0	\$ 0
2007/2008	\$ 504,799	\$ 0	\$ 504,799	\$ 298,188	\$ 0	\$ 0
2008/2009	\$ 504,799	\$ 0	\$ 504,799	\$ 350,408	\$ 0	\$ 0
2009/2010	\$ 504,799	\$ 0	\$ 504,799	\$ 332,466	\$ 0	\$ 0
2010/2011	\$ 504,799	\$ 0	\$ 504,799	\$ 285,072	\$ 0	\$ 0
2011/2012	\$ 504,799	\$ 0	\$ 504,799	\$ 303,327	\$ 0	\$ 0
2012/2013	\$ 504,799	\$ 0	\$ 504,799	\$ 310,332	\$ 0	\$ 0
2013/2014	\$ 504,799	\$ 0	\$ 504,799	\$ 356,564	\$ 0	\$ 0
2014/2015	\$ 504,799	\$ 0	\$ 504,799	\$ 365,170	\$ 0	\$ 0
2015/2016	\$ 504,799	\$ 0	\$ 504,799	\$ 381,449	\$ 0	\$ 0

\* Figures prior to the 2006/2007 plan year were as reported by the plan's prior actuary.

<sup>1</sup> A one-time use in the amount of \$71,783 from the Cumulative Excess also occurred.



Table VIII

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Actuarial Gains / (Losses) for Current and Prior Plan Years**

A. <u>Derivation of Actuarial Gain / (Loss) for Plan Year Ended September 30, 2016</u>	
1. City and State normal cost previous valuation	\$ 1,333,202
2. Unfunded actuarial accrued liability previous valuation	\$14,492,346
3. City and State contributions previous year (limited by 99-1)	\$ 2,724,191
4. Interest on:	
(a) City normal costs	\$ 99,990
(b) Unfunded actuarial accrued liability	1,086,926
(c) City and State contributions	<u>90,237</u>
(d) Net total: (a) + (b) - (c)	\$ 1,096,679
5. Increase in unfunded actuarial accrued liability due to plan amendment	\$ 0
6. Increase in unfunded actuarial accrued liability due to assumptions / methods change	\$ 781,591
7. Expected unfunded actuarial accrued liability current year: 1. + 2. - 3. + 4. + 5. + 6.	\$14,979,627
8. Actual unfunded actuarial accrued liability current year	\$14,245,286
9. Actuarial gain / (loss): 7. - 8.	\$ 734,341
B. <u>Approximate Portion of Plan Year Gain / (Loss) Due to Investments</u>	
1. Actuarial value of assets previous year	\$52,511,277
2. Contributions during year	\$ 3,646,397
3. Disbursements during year (expenses & benefits)	\$ 3,088,518
4. Expected appreciation for period	<u>\$ 3,947,347</u>
5. Expected actuarial value of assets current year 1. + 2. - 3. + 4.	\$57,016,503
6. Actual actuarial value of assets current year	\$57,327,084
7. Approximate gain / (loss): 6. - 5.	\$ 310,581
C. <u>Approximate Portion of Plan Year Gain / (Loss) Due to Liabilities: A. - B.</u>	
	\$ 423,760

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**Table VIII**  
**(continued two)**

D. Review of Cumulative Actuarial Gains / (Losses) for Determination of 13<sup>th</sup> Checks to Retirees for the 2015/2016 Plan Year

<u>Plan Year</u>	<u>Actuarial Gains / (Losses)</u>
2004 / 2005	\$ (1,323,287)
2005 / 2006	(1,289,042)
2006 / 2007	374,572
2007 / 2008	(35,607)
2008 / 2009	(2,228,287)
2009 / 2010	(887,495)
2010 / 2011	(2,335,636)
2011 / 2012	(1,285,896)
2012 / 2013	(640,982)
2013 / 2014	368,363
2014 / 2015	34,968
2015 / 2016	<u>734,341</u>
Cumulative Total Gains / (Losses)	\$ (8,513,988)

Requirements for 13<sup>th</sup> Check to members Retired on or after 10/1/2004:

- There must be a net actuarial gain during the most recent plan year based on the experience of the plan from all sources
- There must be an investment gain during the most recent plan year
- There must be cumulative net actuarial gains from inception (requirement by the State)
- 13<sup>th</sup> check payable to Tier One members only

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Table IX

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Amortization of Unfunded Liability**

<u>Date</u>	<u>Total Unfunded Liability</u>	<u>Amortization Payment</u>
10/01/2016	\$ 14,245,286	\$ 1,301,528
10/01/2017	\$ 13,914,540	\$ 1,301,528
10/01/2018	\$ 13,558,988	\$ 1,301,528
10/01/2019	\$ 13,176,770	\$ 1,301,528
10/01/2046	\$ 0	\$ 0

**D**



**Table X**

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Accounting Disclosure Exhibit**

I. <u>Number of Plan Participants</u>	<u>10/01/2015</u>	<u>10/01/2016</u>
1. Retirees, disabled and beneficiaries receiving benefits	33	34
2. Terminated plan participants entitled to but not yet receiving benefits	10	12
3. DROP participants	10	15
4. Active plan participants	91	85
5. Total	144	146
II. <u>Financial Accounting Standards Board Allocations as of October 1, 2016</u>		
A. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 20,981,006	\$ 22,020,326
b. DROP participants	11,056,074	16,128,006
c. Participants due deferred vested benefits	807,374	1,038,604
d. Others	25,522,395	23,391,608
e. Total	\$ 58,366,849	\$ 62,578,544
2. Actuarial present value of accumulated non-vested plan benefits	813,081	1,210,483
3. Total actuarial present value of accumulated plan benefits	\$ 59,179,930	\$ 63,789,027
B. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated plan benefits as of October 1, 2015	\$ 59,179,930	
2. Increase (decrease) during year attributable to:		
a. Plan amendment	\$ 0	
b. Actuarial assumptions and method changes	654,249	
c. Benefits paid and contribution refunds	(2,932,146)	
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	6,886,994	
e. Net increase	\$ 4,609,097	
3. Actuarial present value of accumulated plan benefits as of October 1, 2016	\$ 63,789,027	

**D**

**Table X**  
**(continued two)**

C. Significant Matters Affecting Calculations

- |  |                         |
|--|-------------------------|
| 1. Assumed rate of return used in determining actuarial present values | 7.50%                   |
| 2. Plan amendments   | None.                   |
| 3. Change in actuarial assumptions                                     | See Table XII, Item 12. |

**Table X**  
**(continued three)**

III. Schedule of Funding Progress (As required by GASB #25)

(1) Valuation Date	(2) Actuarial Value of Assets (AVA)		(3) Actuarial Accrued Liability (AAL)		(4) Unfunded Actuarial Accrued Liability (UAAL)		(5) Funded Ratio (2) / (3)	(6) Annual Covered Payroll	(7) UAAL as % of Payroll (4) / (6)
	Assets (AVA)	Liability (AAL)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	(3) - (2)				
October 1, 1998	\$ 1,435	\$ 1,033	\$ 1,033	\$ (402)	\$ (402)	138.9%	\$ 3,106	(12.9%)	
October 1, 1999	\$ 1,978	\$ 1,628	\$ 1,628	\$ (350)	\$ (350)	121.5%	\$ 3,870	(9.0%)	
October 1, 2000	\$ 2,605	\$ 2,959	\$ 2,959	\$ 354	\$ 354	88.0%	\$ 3,851	9.2%	
October 1, 2001	\$ 3,161	\$ 3,343	\$ 3,343	\$ 182	\$ 182	94.6%	\$ 3,561	5.1%	
October 1, 2002	\$ 3,899	\$ 4,934	\$ 4,934	\$ 1,035	\$ 1,035	79.0%	\$ 4,212	24.6%	
October 1, 2003	\$ 4,990	\$ 6,124	\$ 6,124	\$ 1,136	\$ 1,136	81.5%	\$ 4,998	22.7%	
October 1, 2004	\$ 6,462	\$ 8,816	\$ 8,816	\$ 2,354	\$ 2,354	73.3%	\$ 5,256	44.8%	
October 1, 2005	\$ 8,661	\$ 12,331	\$ 12,331	\$ 3,670	\$ 3,670	70.2%	\$ 6,519	56.3%	
October 1, 2006	\$ 11,940	\$ 17,767	\$ 17,767	\$ 5,827	\$ 5,827	67.2%	\$ 7,099	82.1%	
October 1, 2007	\$ 16,348	\$ 21,747	\$ 21,747	\$ 5,399	\$ 5,399	75.2%	\$ 8,103	66.6%	
October 1, 2008	\$ 19,775	\$ 25,153	\$ 25,153	\$ 5,377	\$ 5,377	78.6%	\$ 7,678	70.0%	
October 1, 2009	\$ 23,088	\$ 30,634	\$ 30,634	\$ 7,546	\$ 7,546	75.4%	\$ 8,751	86.2%	
October 1, 2010	\$ 27,137	\$ 35,483	\$ 35,483	\$ 8,346	\$ 8,346	76.5%	\$ 9,149	91.2%	
October 1, 2011	\$ 29,530	\$ 42,473	\$ 42,473	\$ 12,943	\$ 12,943	69.5%	\$ 8,819	146.8%	
October 1, 2012	\$ 34,645	\$ 48,670	\$ 48,670	\$ 14,025	\$ 14,025	71.2%	\$ 8,844	158.6%	
October 1, 2013	\$ 40,583	\$ 55,039	\$ 55,039	\$ 14,456	\$ 14,456	73.7%	\$ 9,671	149.5%	
October 1, 2014	\$ 46,824	\$ 61,626	\$ 61,626	\$ 14,802	\$ 14,802	76.0%	\$ 9,712	152.4%	
October 1, 2015	\$ 52,511	\$ 67,003	\$ 67,003	\$ 14,492	\$ 14,492	78.4%	\$ 8,480	170.9%	
October 1, 2016	\$ 57,327	\$ 71,572	\$ 71,572	\$ 14,245	\$ 14,245	80.1%	\$ 8,092	176.0%	

Note: Dollar amounts in thousands



**Table X**  
**(continued four)**

IV. Schedule of Employer Contributions (As required by GASB #25)

Plan Year	Annual Required Contribution <sup>1</sup>	Percentage Contributed
(1)	(2)	(3)
1997	\$ 295,719	100%
1998	304,195	100%
1999	392,661	100%
2000	492,397	100%
2001	458,942	100%
2002	636,674	100%
2003	847,764	100%
2004	1,151,914	100%
2005	1,415,977	100%
2006	1,782,115	100%
2007	2,095,909	100%
2008	2,076,113	100%
2009	2,320,278	100%
2010	2,306,698	100%
2011	2,629,422	100%
2012	2,769,493	100%
2013	2,872,191	100%
2014	2,831,755	100%
2015	2,723,906	100%

V. Notes to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	October 1, 2016
Actuarial cost method	Entry Age Normal Level Percent
Amortization method	Layered amortization
Remaining amortization period	20 - 30 years
Asset valuation method	See Table XII., Item 8.
Actuarial assumptions:	
Investment rate of return*	7.50%
Projected salary increases*	5.50%
Cost-of-living adjustments	Variable 13 <sup>th</sup> check, only if plan has cumulative net actuarial gain

\* Includes inflation at 3.00%

<sup>1</sup> Sum of City and State contributions, determined by the prior plan year's actuarial valuation.

**Table X**  
**(continued five)**

Accounting Disclosure Exhibit

VI. Revenues by Source and Expenses by Type

<u>Plan Year</u>	<u>Revenues by Source</u>				<u>Total</u>
	<u>Employee Contributions</u>	<u>City Contributions</u>	<u>State Contributions</u>	<u>Investment Income</u>	
2016	\$ 922,206	\$ 2,342,742	\$ 381,449	\$ 5,125,830	\$ 8,772,227
2015	\$ 1,014,541	\$ 2,466,585	\$ 365,170	\$ 411,693	\$ 4,257,989
2014	\$ 1,071,357	\$ 2,515,627	\$ 356,564	\$ 3,969,647	\$ 7,913,195
2013	\$ 1,050,427	\$ 2,459,161	\$ 310,332	\$ 5,587,659	\$ 9,407,579
2012	\$ 1,727,565	\$ 2,346,518	\$ 303,327	\$ 4,735,524	\$ 9,112,934
2011	\$ 1,151,187	\$ 2,047,326	\$ 285,072	\$ (1,049,572)	\$ 2,434,013
2010	\$ 1,216,237	\$ 1,987,812	\$ 332,466	\$ 2,402,257	\$ 5,938,772
2009	\$ 1,016,638	\$ 1,725,705	\$ 350,408	\$ 426,617	\$ 3,519,368
2008	\$ 909,416	\$ 1,797,721	\$ 298,188	\$ (2,110,118)	\$ 895,207
2007	\$ 912,303	\$ 1,514,281	\$ 267,834	\$ 2,018,977	\$ 4,713,395

<u>Plan Year</u>	<u>Expenses by Type</u>			<u>Total</u>
	<u>Benefits &amp; DROP Payments</u>	<u>Expenses</u>	<u>Refunds</u>	
2016	\$ 2,734,744	\$ 325,429	\$ 197,402	\$ 3,257,575
2015	\$ 2,054,191	\$ 297,412	\$ 43,562	\$ 2,395,165
2014	\$ 1,299,498	\$ 263,851	\$ 73,108	\$ 1,636,457
2013	\$ 1,048,524	\$ 238,769	\$ 2,113	\$ 1,289,406
2012	\$ 856,954	\$ 240,899	\$ 181,798	\$ 1,279,651
2011	\$ 563,461	\$ 217,865	\$ 148,865	\$ 930,191
2010	\$ 337,823	\$ 196,024	\$ 84,274	\$ 618,121
2009	\$ 252,181	\$ 178,144	\$ 79,944	\$ 510,269
2008	\$ 146,620	\$ 159,146	\$ 80,045	\$ 385,811
2007	\$ 124,873	\$ 145,765	\$ 37,824	\$ 308,462

Contributions were made in accordance with actuarially determined contribution requirements.

**D**

**Table XI**

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Outline of Principal Provisions of the Plan**

1. Effective Date

July 25, 1994. The latest amendment reflected is Ordinance 14R-09-152.

2. Eligibility Requirements

Participation is mandatory for all full-time police officers employed by the City with the exception of the Police Chief. Members hired by the City on or after March 23, 2009 are classified as Tier Two members. All other members are Tier One members.

3. Credited Service

Service of a member from employment date through termination date measured in years and completed months. A member may buy back up to a total of five (5) years of prior military and sworn police service by paying the full actuarial cost of the increase service. Service purchased does not count for vesting or retirement eligibility.

4. Earnable Compensation

Tier One members: base pay, longevity pay, educational incentive pay, assignment pay and up to 300 hours of overtime pay per year, as well as payouts for accrued holiday/incentive, vacation and/or sick time earned prior to September 30, 2013 based on the member's rate of pay as of September 30, 2016.

Tier Two members: base pay, longevity pay, educational incentive pay, assignment pay and up to 300 hours of overtime pay per year.

5. Final Monthly Compensation (FMC)

Final Monthly Compensation is the average monthly rate of earnable compensation during the five (5) best years out of the last ten (10) years of employment.

6. Employee Contributions

10.0% of earnable compensation.

7. Normal Retirement Date

Tier One members: the first of the month coincident with or next following the earlier of (i) completion of 20 years of Credited Service or (ii) the attainment of age 55 with completion of five (5) years of Credited Service.

Tier Two members: the first of the month coincident with or next following the earlier of (i) completion of 25 years of Credited Service or (ii) the attainment of age 55 with completion of 10 years of Credited Service.

**Table XI**  
**(continued two)**

8. Amount of Normal Retirement Income

Tier One members: monthly retirement income is equal to 3.0% times FMC for Credited Service through September 30, 2001 plus 3.5% times FMC for Credited Service thereafter, payable under the normal form of payment under the plan. For members employed by the City as of April 25, 2011, monthly retirement income for years of Credited Service prior to October 1, 2001 is 3.5% times FMC. The maximum accrual is 100% of FMC.

Tier Two members: monthly retirement income is equal to 3.0% times FMC for all years of Credited Service, payable under the normal form of payment under the plan. The maximum accrual is 75% of FMC. However, members are allowed to purchase an increase in their multiplier up to 3.5% per year (from 3.0%) by paying the full actuarial costs. Any enhanced multiplier benefit purchased will not be subject to the 75% of FMC maximum, but the maximum accruals for members with such purchases will not exceed 100% of FMC.

9. Early Retirement Date

The attainment of age 50 and completion of 10 years of Credited Service.

10. Amount of Early Retirement Income

Benefit accrued to Early Retirement Date payable at Normal Retirement Date, with a 3.0% per year reduction for benefit commencement prior to Normal Retirement Date.

11. Delayed Retirement Date

A member may continue to work beyond his Normal Retirement Date and retire on any subsequent first day of the month.

12. Amount of Delayed Retirement Income

The benefit accrued on Delayed Retirement Date.

13. Benefits on Termination of Service

In the event of termination of service prior to Normal Retirement Date or Early Retirement Date, for reasons other than death, early retirement or disability, a monthly benefit will be payable commencing on Normal Retirement Date, equal to the benefit accrued up to the date of termination, or the refund of accumulated employee contributions made, if the terminated member has completed:

Tier One members: five (5) or more years of Credited Service

Tier Two members: seven (7) or more years of Credited Service

Otherwise, the member is entitled only to the refund of accumulated employee contributions made.

**D**

**Table XI**  
**(continued three)**

14. Disability Retirement Benefits

For a member totally and permanently disabled where the disability is service-connected, the monthly benefit shall be equal to the greater of 42% of such member's FMC at the time of disability or the member's accrued benefit under the plan.

In order to be eligible for non-service disability benefits, a member must have completed at least ten (10) years of Credited Service at the date of disability. The non-service disability benefit is equal to the greatest of: i) 2.0% of FMC times years of Credited Service; ii) 25.0% of FMC, and iii) accrued benefit at date of disability.

15. Death Benefits

For deaths prior to completion of five (5) years of Credited Service, the benefit would be the refund of the accumulated employee contributions. With the completion of five (5) or more years of Credited Service the death benefit payable would be the benefit otherwise payable at Early Retirement Date or Normal Retirement Date to the member.

16. Normal Form of Retirement Income

The normal form of payment is a ten year certain and life annuity.

17. Optional Forms of Retirement Income

The following optional forms of retirement income may be elected by a member without presenting evidence of good health, if elected at least one year prior to his date of retirement:

Option 1                    A single life annuity payable during the lifetime of the participant only.

Option 2                    A retirement annuity payable to the member during the joint lifetime of the member and a joint pensioner designated by the member, and following the death of either of them, 50%, 66-2/3%, 75%, or 100% depending on the retiree's election, of such smaller monthly amount payable to the survivor for the lifetime of the survivor.

18. Deferred Retirement Option Plan (DROP)

The DROP is available only if the member makes an irrevocable election to participate upon the eligibility of Normal or Early Retirement. The DROP has a five (5) year maximum participation period. Depending on when a member enters the DROP and the election that is made, the DROP account will be credited with the annual assumed investment return per year, or the actual rate of return, net of investment fees. There is a guarantee that upon exiting the DROP, a member's account will not be less than the sum of the monthly payments into the DROP account. If the member dies or becomes disabled during the DROP period, the member will have presumed to have retired on a normal retirement on the day prior to disability or death.

**D**



**Table XI**  
**(continued four)**

19. Variable Thirteenth Check

For Tier One members retiring on or after October 1, 2004, 13<sup>th</sup> checks may be paid based on annual investment and actuarial gains, but only if the plan has cumulative net actuarial gain beginning with the 2004/2005 plan year. The amount of the 13<sup>th</sup> checks shall be computed as a uniform percentage of the current monthly benefits of the applicable retirees, with the actual amounts limited to the current monthly benefits and prorated for those retired less than a year.

Tier Two members will not be eligible for the variable thirteenth checks.

20. Post Retirement Supplement

A supplemental payment of \$10 per month per year of Credited Service for all members employed by the City on or after April 25, 2011, provided that such members have at least 20 years of Credited Service with the City or provided such members left the City at age 55 or older with more than five (5) years of Credited Service with the City. The supplement shall commence on the fifth anniversary date of termination of service and shall cease upon the member reaching 65 years of age.

21. Changes from Most Recent Valuation

None.

**Table XII**

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Actuarial Assumptions and Actuarial Cost Methods**

1. Mortality:

Female Non-Disabled: RP2000 Generational, 100% Annuitant White Collar, Scale BB

Male Non-Disabled: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

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

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

2. Interest to be Earned by Fund:

7.50%, compounded annually, net of investment expenses.

3. Allowances for Administrative Expenses:

Actual administrative expenses paid during the prior plan year.

4. Employee Withdrawal Rates:

Withdrawal rates were used in accordance with a table per the following illustrative example:

<u>Age</u>	<u>Withdrawal Rates Per 100 Employees</u>
20	6.0
25	5.7
30	5.0
35	3.8
40	2.6
45	1.6
50	0.5
55 & over	0.0

5. Retirement Age Assumption:

Tier One members: the earlier of the completion of 20 years of Credited Service or the attainment of age 55 with completion of five (5) years of Credited Service.

Tier Two members: the earlier of the completion of 25 years of Credited Service or the attainment of age 55 with completion of 10 years of Credited Service.

**D**

**Table XII**  
**(continued two)**

6. Salary Increase Factors:

Current salaries are assumed to increase at a rate of 5.5% per year until retirement. In addition, accumulated sick and vacation leaves cash outs are added to the final pay.

7. Disability Rates:

Disability incidence rates were used in accordance with a table per the following illustrative example:

<u>Age</u>	<u>Disability Rates Per100 Employees</u>
20	0.03
25	0.03
30	0.04
35	0.05
40	0.07
45	0.10
50	0.18
55	0.36
60	0.90
65 & over	0.00

75% of disabilities assumed to be service incurred, 25% assumed to be non-service incurred.

8. Asset Valuation Method:

The actuarial value of assets is determined by smoothing the differences between actual investment earnings and assumed investment return over four (4) years. The resulting value would then be limited to between 80% and 120% of market value.

**Table XII**  
**(continued three)**

9. Actuarial Cost Method:

Normal Retirement, Termination, Disability and Pre-Retirement Death Benefits: Entry-Age-Actuarial Cost Method.

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his date of hire to his retirement age to fund his estimated benefits, assuming the plan had always been in effect. The normal cost for the plan is the sum of the individual normal costs for all active participants. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the actuarial value of assets of the plan.

The amortization bases would be funded by the excess of actual contributions over prior year's normal cost, adjusted with interest. For each existing base, the funding is done proportionally, determined based on the individual base's required amortization payment as a percentage of the overall total required total amortization payment for the prior year. New bases are then added to the total outstanding unfunded actuarial accrued liability as new layers.

10. Marriage Assumptions:

100% of active participants were assumed married, with husbands three (3) years older than wives.

11. Inflation Assumption:

3.0% per year.

12. Changes from Last Actuarial Valuation:

- 1) The assumed administrative expenses were changed from \$154,489 to \$156,372 for the plan/fiscal year.
- 2) The mortality table was changed from the RP2000 generational rates to FRS table.

Table XIII

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Distribution of Active Participants by Age and Service Groups  
as of October 1, 2016

Years of Credited Service

<u>Age</u>	<u>0 - 4</u>	<u>5 - 9</u>	<u>10 - 14</u>	<u>15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30 &amp; Over</u>	<u>Total</u>
Under 25	1	.	.	.	.	.	.	1
25 - 29	8	3	.	.	.	.	.	11
30 - 34	3	12	4	.	.	.	.	19
35 - 39	3	2	11	1	.	.	.	17
40 - 44	1	6	6	1	2	.	.	16
45 - 49	.	1	6	8	.	.	.	15
50 - 54	2	.	2	1	.	.	.	5
55 - 59	.	.	.	.	1	.	.	1
60 - 64	.	.	.	.	.	.	.	0
65 & Over	.	.	.	.	.	.	.	0
<b>TOTAL</b>	<b>18</b>	<b>24</b>	<b>29</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>85</b>

10/01/2015

10/01/2016

Average Attained Age  
Average Covered Pay  
Percent Female

38.6 years  
\$93,185  
6.6%

38.7 years  
\$95,196  
5.9%



**Table XIV**

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Reconciliation of Participant Data**

**A. Active Participants**

1. Active participants previous year	91
2. Retired during year	(0)
3. Entered DROP during year	(6)
4. Died during year	0
5. Disabled during year	0
6. Terminated vested during year	(2)
7. Terminated non-vested during period	(5)
8. New active participants	7
9. Rehired / Reinstated	0
10. Active participants current year	<u>85</u>

**B. Participants Receiving Benefits**

1. Participants receiving benefits previous year	33
2. New retired participants	0
3. New terminated vested receiving benefits	0
4. New disabled receiving benefits	0
5. New beneficiaries receiving benefits	0
6. DROP participants exited and retired	1
7. Died or ceased payment during year	0
8. Retired or terminated vested receiving benefits current year	<u>34</u>

**C. Terminated Participants Entitled to Future Benefits**

1. Terminated participants entitled to future benefits previous year	10
2. Died during year	0
3. Commenced receiving benefits during year	(0)
4. Rehired / Reinstated during year	0
5. New terminated participants	2
6. Terminated participants entitled to future benefits current year	<u>12</u>

**D. DROP Participants**

1. DROP participants previous year	10
2. New entrants during year	6
3. Died during year	0
4. Exited and retired during year	(1)
5. DROP participants current year	<u>15</u>

**D**

Table XV

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Statistics for Participants Entitled to Deferred Vested Benefits  
and Participants Receiving Payments

A. Entitled to Deferred Benefits

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 40	5	\$ 134,579	\$ 26,916
40 - 44	2	19,452	9,726
45 - 49	3	42,825	14,275
50 - 54	0	0	0
55 - 59	0	0	0
60 - 64	0	0	0
65 & over	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	10	\$ 196,856	\$ 19,686

B. Receiving Benefits & DROP Participants

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 40	0	\$ 0	\$ 0
40 - 44	1	77,078	77,078
45 - 49	18	1,475,359	81,965
50 - 54	9	626,362	69,596
55 - 59	7	495,915	70,845
60 - 64	6	283,495	47,249
65 & over	<u>8</u>	<u>161,205</u>	<u>20,151</u>
TOTAL	49	\$ 3,119,414	\$ 63,662

**D**

**Table XVI**

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

**Recent Investment, Salary Increase, and Turnover Experience**

A. Investment Return

Comparison of actual to assumed investment return for the last five years:

<u>Year Ended</u>	<u>Rate of Return</u>		<u>Assumed</u>
	<u>Market Value</u>	<u>Actuarial Value</u>	
09/30/2016	10.2%	8.1%	7.50%
09/30/2015	1.2%	8.8%	7.50%
09/30/2014	9.2%	9.1%	7.75%
09/30/2013	16.1%	9.1%	7.75%
09/30/2012	17.4%	6.1%	7.75%
Last 3 Yrs.	6.8%	8.7%	7.58%
Last 5 Yrs.	10.7%	8.2%	7.65%

B. Recent Salary Increase and Turnover Experience

<u>Year Ended</u>	<u>Salary Increase</u>		<u>Ratio of Actual Turnover to Expected</u>
	<u>Actual</u>	<u>Assumed</u>	
09/30/2016	5.9%	5.5%	2.27
09/30/2015	3.2%	5.5%	1.12
09/30/2014	5.2%	6.0%	2.17
09/30/2013	(6.9%)	6.0%	0.30
09/30/2012	26.6%	6.0%	1.51
Last 3 Yrs.	4.8%	5.7%	1.85
Last 5 Yrs.	6.3%	5.8%	1.47

**D**



Table XVII

**CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM**

State Required Exhibit

	<u>10/01/2015</u>	<u>10/01/2016</u>
<b>A. <u>Participant Data</u></b>		
1. Active participants	91	85
2. Retired participants and beneficiaries receiving benefits	30	31
3. DROP participants	10	15
4. Disabled participants receiving benefits	3	3
5. Terminated vested participants	10	12
6. Total participants	144	146
7. Annual payroll of active participants	\$ 8,479,879	\$ 8,091,698
8. Annual benefits payable to those currently receiving benefits	\$ 1,733,657	\$ 1,808,780
9. Annual benefits payable to terminated vested participants	\$ 196,856	\$ 196,856
10. Annual benefits payable to DROP participants	\$ 905,933	\$ 1,310,634
<b>B. <u>Value of Assets</u></b>		
1. Actuarial value	\$ 52,511,277	\$ 57,237,084
2. Market value	\$ 50,366,584	\$ 56,042,901
<b>C. <u>Liabilities</u></b>		
1. Actuarial present value of future expected benefit payments for active members		
a. Age retirement benefits	\$ 44,856,004	\$ 42,876,789
b. Vesting benefits	2,495,139	2,452,197
c. Death benefits	182,493	263,070
d. Disability benefits	<u>324,641</u>	<u>293,604</u>
e. Total	\$ 47,858,277	\$ 45,885,660
2. Actuarial present value of future expected benefit payments terminated vested members	\$ 807,374	\$ 1,038,604
3. Actuarial present value of future expected benefit payments for those receiving benefits		
a. Service retired	\$ 20,147,132	\$ 21,298,028
b. DROP participants	11,056,074	16,128,006
c. Disability retired	626,183	515,077
d. Beneficiaries	<u>207,691</u>	<u>207,221</u>
e. Total	\$ 32,037,080	\$ 38,148,332

**D**

**Table XVII**  
**(continued two)**

	<u>10/01/2015</u>	<u>10/01/2016</u>
4. Total actuarial present value of future expected benefit payments	\$ 80,702,731	\$ 85,072,596
5. Actuarial accrued liabilities	\$ 67,003,623	\$ 71,572,370
6. Unfunded actuarial accrued liabilities (see footnote 1/ for separation)	\$ 14,492,346	\$ 14,245,286
<b>D. <u>Statement of Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 20,981,006	\$ 22,020,326
b. DROP participants	11,056,074	16,128,006
c. Participants due deferred benefits	807,374	1,038,604
d. Other participants	<u>25,522,395</u>	<u>23,391,608</u>
e. Total	\$ 58,366,849	\$ 62,578,544
2. Actuarial present value of accumulated non-vested plan benefits	<u>813,081</u>	<u>1,210,483</u>
3. Total actuarial present value of accumulated plan benefits	\$ 59,179,930	\$ 63,789,027
<b>E. <u>Statement of Change in Accumulated Plan Benefits</u></b>		
1. Actuarial present value of accumulated plan benefits as of October 1, 2015		\$ 59,179,930
2. Increase (decrease) during year attributable to:		
a. Plan amendment		\$ 0
b. Actuarial assumptions and methods changes		654,249
c. Benefits paid and contribution refunds		(2,932,146)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		<u>6,886,994</u>
e. Net increase (decrease)		\$ 4,609,097
3. Actuarial present value of accumulated plan benefits as of October 1, 2016		\$ 63,789,027

**D**

**Table XVII**  
**(continued three)**

	<u>10/01/2015</u>	<u>10/01/2016</u>
<b>F. <u>Pension Cost</u></b>		
1. Total normal cost including expenses	\$ 2,181,190	\$ 2,124,895
2. Expected member contribution	847,988	809,170
3. Item 2. as percentage of payroll	<u>10.0%</u>	<u>10.0%</u>
4. Net employer normal cost	\$ 1,333,202	\$ 1,315,725
5. Payment required to amortize unfunded liability	<u>1,287,765</u>	<u>1,301,725</u>
6. Total employer required contribution (including interest)	\$ 2,723,906	\$ 2,720,045
7. Item 6. as a percentage of payroll	32.1%	33.6%
8. Estimated State contributions	\$ 365,170	\$ 381,449
9. Item 8. as a percentage of payroll	4.3%	4.7%
10. Net amount payable by City	\$ 2,358,736	\$ 2,338,596
11. Item 10. as a percentage of payroll	27.8%	28.9%
<b>G. <u>Past Contributions</u></b>		
1. Total contribution required	\$ 3,571,894	\$ 3,529,215
2. Actual contributions made:		
a. Employees	922,206	N/A
b. City	2,342,742	N/A
c. State	<u>381,449</u>	N/A
d. Total	3,646,397	N/A
<b>H. <u>Net Actuarial Gain / (Loss)</u></b>	\$ 34,968	\$ 734,341
<b>I. <u>Disclosure of Following Items:</u></b>		
1. Actuarial present value of future salaries - attained age	\$ 58,987,186	\$ 57,511,487
2. Actuarial present value of future employee contributions - attained age	\$ 5,898,719	\$ 5,751,149
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 6,631,029	\$ 6,346,868
5. Actuarial present value of future salaries and future benefits at entry age	Not provided by software	
6. Actuarial present value of future employee contributions at entry age	Not provided by software	

**Table XVII**  
**(continued four)**

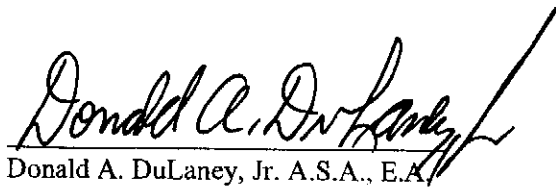
1/ Unfunded Actuarial Accrued Liabilities

Description and Amount of Original Liability	Remaining Amortization Period	Unamortized Amount as of Valuation Date	Amortization Payment
10/01/1999 New Method	13 years	\$ (240,244)	\$ (27,503)
10/01/2000 Actuarial Loss	14 years	283,018	31,013
10/01/2000 Plan Amendment	14 years	222,055	24,333
10/01/2001 Actuarial (Gain)	15 years	(123,434)	(13,008)
10/01/2002 Actuarial (Gain)	16 years	(291,270)	(29,639)
10/01/2002 Plan Amendment	16 years	829,971	84,457
10/01/2002 Plan Amendment	16 years	139,487	14,194
10/01/2003 Actuarial Loss	17 years	78,848	7,775
10/01/2004 Actuarial Loss	18 years	150,452	14,419
10/01/2004 Plan Amendment	18 years	878,601	84,206
10/01/2005 Actuarial Loss	19 years	1,124,298	105,016
10/01/2006 Actuarial Loss	20 years	1,118,271	102,041
10/01/2006 Assumption Change	20 years	780,056	71,179
10/01/2007 Actuarial (Gain)	21 years	(331,314)	(29,596)
10/01/2008 Actuarial Loss	22 years	32,063	2,809
10/01/2009 Actuarial Loss	23 years	2,038,549	175,477
10/01/2010 Actuarial Loss	24 years	824,062	69,796
10/01/2011 Actuarial Loss	25 years	2,205,463	184,050
10/01/2011 Plan Amendment	15 years	1,204,952	126,982
10/01/2011 Assumptions Change	20 years	916,792	83,656
10/01/2012 Actuarial Loss	26 years	1,232,065	101,430
10/01/2013 Actuarial Loss	27 years	621,529	50,533
10/01/2014 Actuarial Gain	28 years	(361,094)	(29,024)
10/01/2014 Plan Amendment	18 years	(660,353)	(63,289)
10/01/2014 Assumptions Change	18 years	1,559,850	149,497
10/01/2015 Actuarial Gain	29 years	(34,637)	(2,755)
10/01/2016 Actuarial Gain	30 years	(734,341)	(57,840)
10/01/2016 Assumptions Change	20 years	<u>781,591</u>	<u>71,319</u>
<b>TOTAL</b>		<b><u>\$ 14,245,286</u></b>	<b><u>\$ 1,301,528</u></b>

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**Table XVII**  
**(continued five)**

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



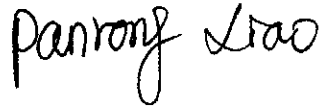
Donald A. DuLaney, Jr. A.S.A., E.A.  
Senior Consulting Actuary

4/28/2017

Date

14-04191

Enrollment Number



Panrong Xiao, E.A., M.A.A.A.  
Enrolled Actuary

4/28/2017

Date

14-07551

Enrollment Number

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