

**ACTUARIAL VALUATION OF
CITY OF LAUDERHILL POLICE OFFICERS'
RETIREMENT SYSTEM
AS OF OCTOBER 1, 2020**

May, 2021

Determination of Contribution for the
Plan Year ending September 30, 2021
Contribution to be
Paid in Fiscal Year October 1, 2020
through September 30, 2021

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

D

TABLE OF CONTENTS

	Page
<i>Commentary</i>	1
TABLE I Summary of Retirement Plan Costs	5
TABLE II Comparison of Cost Data of Current and Prior Year Valuations	7
TABLE III Characteristics of Participant Data	8
TABLE IV Statement of Assets	9
TABLE V Reconciliation of Plan Assets	10
TABLE VI Development of Actuarial Value of Assets	11
TABLE VII History of Chapter 185 Contribution Usage	12
TABLE VIII Development of Actuarial Gains / (Losses) and Review of Cumulative Gains / (Losses)	13
TABLE IX Amortization of Unfunded Liability	15
TABLE X Accounting Disclosure Exhibit	16
TABLE XI Outline of Principal Provisions of the Plan	21
TABLE XII Actuarial Assumptions and Actuarial Cost Methods	25
TABLE XIII Distribution of Active Participants by Age and Service Groups	28
TABLE XIV Reconciliation of Participant Data	29
TABLE XV Statistics for Participants Entitled to or Receiving Plan Benefits	30
TABLE XVI Recent Investment, Salary Increase, and Turnover Experience	31
TABLE XVII State Required Exhibit	32

D

May 6, 2021

Board of Trustees
City of Lauderhill 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, 2020 Actuarial Valuation for the City of Lauderhill 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, 2020

This Actuarial Valuation develops the required minimum Retirement Plan payment for the fiscal year beginning October 1, 2020 and ending September 30, 2021 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 \$1,023,326 (10.0% of covered payroll).

The required funding amount for the plan/fiscal year ending September 30, 2021, to be met by the City and State contributions under Chapter 185 is **31.5%** of the covered payroll. The anticipated State (Chapter 185) contribution is \$488,659. The City and State required contribution, computed based on the October 1, 2020 covered payroll of \$10,233,255, is **\$3,222,009** or 31.5% of covered payroll, if the payment requirement is met by September 30, 2021. We have assumed that the State contribution available (limited by rules under Chapter 99-1) would be **\$488,659** (same as the amount the City was credited with for contribution purposes for the prior plan/fiscal year, and assumed to be 4.8% of covered payroll). Thus, the required City contribution would be **\$2,733,350** (26.7% of covered payroll). Under the rules of Chapter 99-1, any amount of the State contribution received above the assumed amount of \$488,659 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, the post retirement supplemental benefit for members was changed, as shown in the outline summary of plan provisions in Item 20, Table XI. There were no other changes in plan provisions.

There were no changes in the actuarial assumptions and methods utilized in this valuation from those of the October 1, 2019 valuation except the assumed administrative expenses were changed from \$147,624 to \$156,635 for the plan/fiscal year. Table XII contains an outline of the assumptions and methods used.

Comparison of Costs With Previous Valuation Year of 2019/2020

Table II of the report provides information of a comparative nature. Column I shows the results of the October 1, 2019 Actuarial Valuation while Column II shows the results as of October 1, 2020 prior to the change in plan provisions. A comparison of the two columns shows the effect of plan experience during the year. Covered payroll decreased by approximately 0.7% while the number of active participants decreased by about 4.6%. The unfunded liability decreased from \$13,899,211 to \$13,786,058 during the plan year. The City minimum funding requirement increased from 25.5% to 26.0% of the covered pension payroll and the City minimum funding requirement increased from \$2,631,724 to \$2,664,213.

Column III of the Table displays the results after the plan change. A comparison of Columns II and III indicates that the changes increased the unfunded actuarial accrued liability by \$486,535 from \$13,786,058 to \$14,272,593. The City minimum funding requirement increased from 26.0% to 26.7% of the covered pension payroll.

Plan Experience

Table XVI provides a summary of certain plan experience during the plan year. The actuarial value of assets return was 6.9% for the plan year ended September 30, 2020, which was lower than the assumption of 7.0%. The market value rate of return was 6.0%. Employee turnover was 25% higher than the expected turnover during the last plan year. The actual pensionable earnings increased by an average of 3.7% per active member as compared to the assumption of 6.0%. The actuarial value of assets return was a source of actuarial loss, but the salary experience, and turnover experience were 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.

D

Identification and Assessment of Risk

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an estimate of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table XII. If any of the assumptions are changed, then the cost shown in this report will change accordingly. Likewise, there is always a risk that, should these assumptions not be realized, the liabilities of the plan, the contributions required to fund the plan, and the funded status of the plan may be significantly different than the amounts shown in this report.

Although a thorough analysis of the risk of not meeting the assumptions is beyond the scope of this report, this discussion is intended to identify the significant risks faced by the plan. In some cases, a more detailed review of the risks, including numerical analysis, may be appropriate to help the plan sponsor and other interested parties assess the specific impact of not realizing certain assumptions. Note that this report is not intended to provide advice on the management or reduction of the identified risks nor is this report intended to provide investment advice.

The most significant risk faced by most defined benefit pension plans is investment risk, i.e. the risk that long-term investment returns will be less than assumed. Other related risks include a risk that, if the investments of the plan decline dramatically over a short period of time (such as occurred with many pension plans in 2008), the plan's assets may not have sufficient time to recover before benefits become due. Even if the assets of the plan grow in accordance with the assumed investment return over time, if benefit payments are expected to be large in the short-term, the plan's assets may not be sufficient to support such a high level of benefit payments.

Another source of risk is demographic experience. This is the risk that participants will retire, become disabled, or terminate their employment at a rate that is different than assumed, and that participants will live longer than assumed, just to cite a few examples of the demographic risk faced by the plan. Although for most pension plans, the demographic risk is not as significant as the investment risk, particularly in light of the fact that the mortality assumption includes a component for future life expectancy increases; the demographic risk can nevertheless be a significant contributing factor to liabilities and contribution rates that become higher than anticipated.

Finally, an actuarial funding method has been used to allocate the gap between projected liabilities and assets to each year in the future. The contribution rate under some funding methods is higher during the early years of the plan and then is lower during the later years of the plan. Other funding methods provide for lower contribution rates initially, with increasing contribution rate over time. The Trustees have adopted the entry age normal cost, level percent of pay funding method for this plan. Under this method, the contribution requirement is expected to remain relatively constant as a percentage of covered payroll over the next 10 to 20 years, absent investment or demographic experience.

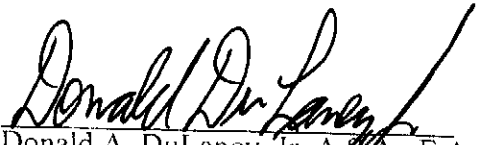
D

Participant Census and Financial Data

Census data for the fiscal year October 1, 2019 through September 30, 2020 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



Corinne Paull, A.S.A.
Actuary

DAD/CP
Attachments

D

Table I

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Summary of Retirement Plan Costs as of October 1, 2020

	<u>Cost Data</u>	<u>% of Payroll</u>
A. <u>Participant Data Summary (Table III)</u>		
1. Active employees		
a) Tier One	42	N/A
b) Tier Two	61	N/A
c) Total	103	N/A
2. Terminated vested	15	N/A
3. Receiving benefits	54	N/A
4. DROP participants	8	N/A
5. Annual payroll of active employees	\$ 10,233,255	100.0%
B. <u>Total Normal Costs</u>		
1. Age retirement benefits	\$ 2,155,000	21.1%
2. Deferred vesting benefits	341,705	3.3%
3. Death benefits	17,675	0.2%
4. Disability benefits	42,452	0.4%
5. Estimated expenses	156,635	1.5%
6. Total annual normal costs	\$ 2,713,467	26.5%
C. <u>Total Actuarial Accrued Liability</u>		
1. Age retirement benefits active employees	\$ 35,565,637	347.5%
2. Termination benefits active employees	1,659,971	16.2%
3. Death benefits active employees	125,012	1.2%
4. Disability benefits active employees	126,071	1.2%
5. Retired or terminated vested participants receiving benefits	41,689,515	407.4%
6. DROP participants	8,542,288	83.5%
7. Terminated vested participants entitled to future benefits	3,011,745	29.4%
8. Deceased participants whose beneficiaries are receiving benefits	1,197,679	11.7%
9. Disabled participants receiving benefits	513,498	5.0%
10. Total actuarial accrued liability	\$ 92,431,416	903.2%

D

Table I
(continued two)

	<u>Cost Data</u>	<u>% of Payroll</u>
D. <u>Actuarial Value of Assets (Table VI)</u>	\$ 78,158,823	763.8%
E. <u>Unfunded Actuarial Accrued Liability (C.-D.)</u>	\$ 14,272,593	139.5%
F. <u>Actuarial Gains / (Losses) (Table VIII)</u>	\$ (354,347)	(3.5%)
G. <u>Minimum Funding Requirements</u>		
1. Total normal cost	\$ 2,713,467	26.5%
2. Amortization of unfunded actuarial accrued liability	1,421,143	13.9%
3. Interest adjustment	<u>110,725</u>	<u>1.1%</u>
4. Total payment	\$ 4,245,335	41.5%
H. <u>Estimated Contribution Sources</u>		
1. City	\$ 2,733,350	26.7%
2. State	\$ 488,659	4.8%
3. Employees	\$ 1,023,326	10.0%
I. <u>Actuarial Present Value of Vested Accrued Benefits</u>		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits	\$ 43,400,692	424.1%
2. DROP participants	8,542,288	83.5%
3. Terminated vested participants entitled to future benefits	3,011,745	29.4%
4. Active participants entitled to future benefits	<u>25,929,403</u>	<u>253.4%</u>
5. Total actuarial present value of vested accrued benefits	\$ 80,884,128	790.4%
J. <u>Market Value of Assets (Table IV)</u>	\$ 74,796,717	730.9%
K. <u>Unfunded Actuarial Present Value of Vested Accrued Benefits (I. - J., not less than \$0)</u>	\$ 6,087,411	59.5%
L. <u>Vested Benefit Security Ratio (J. ÷ I.)</u>	92.5%	N/A

D

Table II

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Comparison of Cost Data of October 1, 2019 and October 1, 2020 Actuarial Valuations

	Column I		Column II		Column III	
	October 1, 2019	% of Annual Pay	Prior Plan October 1, 2020	% of Annual Pay	Current Plan October 1, 2020	% of Annual Pay
A. Participants						
1. Active employees						
- Tier One	46	N/A	42	N/A	42	N/A
- Tier Two	62	N/A	61	N/A	61	N/A
- Total	108	N/A	103	N/A	103	N/A
2. Terminated vested	14	N/A	15	N/A	15	N/A
3. Receiving benefits	51	N/A	54	N/A	54	N/A
4. DROP participants	8	N/A	8	N/A	8	N/A
5. Annual payroll of active employees	\$ 10,306,308	100.0%	\$ 10,233,255	100.0%	\$ 10,233,255	100.0%
B. Total Normal Costs	\$ 2,691,957	26.1%	\$ 2,689,626	26.3%	\$ 2,713,467	26.5%
C. Actuarial Accrued Liability	\$ 86,961,250	843.8%	\$ 91,944,881	898.5%	\$ 92,431,416	903.2%
D. Actuarial Value of Assets	\$ 73,062,039	708.9%	\$ 78,158,823	763.8%	\$ 78,158,823	763.8%
E. Unfunded Actuarial Accrued Liability	\$ 13,899,211	134.9%	\$ 13,786,058	134.7%	\$ 14,272,593	139.5%
F. Actuarial Gains / (Losses)	\$ (373,990)	(3.6%)	\$ (354,347)	(3.5%)	\$ (354,347)	(3.5%)
G. City Minimum Funding Requirement	\$ 2,631,724	25.5%	\$ 2,664,213	26.0%	\$ 2,733,350	26.7%
H. Unfunded Actuarial Present Value of Vested Accrued Benefits*	\$ 4,330,652	42.0%	\$ 5,683,245	55.5%	\$ 6,087,411	59.5%
I. Vested Benefit Security Ratio*	94.2%	N/A	92.9%	N/A	92.5%	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, 2020

A. Characteristic of Active Participants

1.	Active participants as of beginning of prior year	108
2.	New entrants during prior year	7
3.	Exits during prior year	(12)
4.	Active participants as of beginning of year	103
5.	Active participants fully vested	53
6.	Active participants partially vested	0
7.	Active participants non-vested	50
8.	Annual payroll of active participants	\$ 10,233,255
9.	Average pay	\$ 99,352
10.	Average attained age	37.8 years
11.	Percent female	12.6%

B. Characteristics of Inactive Participants

1.	Inactives as of beginning of prior year	73
2.	Newly inactive during prior year	4
3.	Exits during prior year	(0)
4.	Inactives as of beginning of year	77
5.	Age retirees	49
6.	Projected annual benefit for age retirees	\$ 3,420,487
7.	DROP participants	8
8.	Projected annual benefit for DROP participants	\$ 641,814
9.	Beneficiaries receiving benefits	2
10.	Projected annual benefits for beneficiaries receiving benefits	\$ 94,445
11.	Disabled participants receiving benefits	3
12.	Projected annual benefits for disabled participants	\$ 66,757
13.	Terminated vested due deferred benefits	15
14.	Projected annual benefits for terminated vested participants	\$ 464,938

D

Table IV

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Statement of Assets as of October 1, 2020¹

	<u>Market Value</u>
A. <u>Assets</u>	
1. Cash and Cash Equivalents	\$ 1,353,335
2. Common Stocks	3,255,320
3. Domestic Fixed Income Funds	9,944,856
4. Absolute Return Equity Funds	31,722,861
5. International Equity Funds	10,152,711
6. Accrued Interest & Dividends Receivable	49,883
7. Receivable City Contributions	0
8. Receivable Employee Contributions	0
9. Receivable Buyback Contributions	0
10. Note Receivable	2,000,000
11. Real Estate Fund	11,700,496
12. Other Assets	6,439,386
13. Assets Purchased with Receivable Buyback Contributions Paid	<u>240,741</u>
14. Total Assets	\$ 76,859,589
B. <u>Liabilities</u>	
1. Prepaid City Contributions	\$ 0
2. Overpayment of Contributions	75,359
3. Due to Broker	0
4. Unused Chapter 185 Funds	0
5. Deferred Retirement Option Plan Accounts Payable	1,916,255
6. Accounts Payable	<u>71,258</u>
7. Total Liabilities	\$ 2,062,872
C. <u>Grand Total (Item A.14. – Item B.7.)</u>	<u>\$ 74,796,717</u>

¹ At market value as reported by Plan's Auditors.

D

Table V

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Reconciliation of Plan Assets¹

A.	<u>Market Value of Assets as of October 1, 2019</u>		\$ 70,748,954
B.	<u>Receipts During Period</u>		
1.	Contributions		
a.	City	\$ 2,634,352	
b.	Employee	1,128,506	
c.	State (not limited by 99-1)	<u>488,659</u>	
d.	Total		\$ 4,251,517
2.	Investment income		
a.	Interest, dividends and miscellaneous income	\$ 1,417,536	
b.	Investment expenses	<u>(244,592)</u>	
c.	Net		\$ 1,172,944
3.	Net realized and unrealized appreciation		
a.	Realized appreciation	\$ 0	
b.	Unrealized appreciation	\$ <u>2,984,941</u>	
c.	Total		\$ 2,984,941
4.	Receivable buyback contributions paid		\$ 80,449
5.	Total receipts during period (1.d. + 2.c. + 3.c. + 4.)		\$ 8,489,851
C.	<u>Disbursements During Period</u>		
1.	Pension payments		\$ 3,493,875
2.	DROP payments		694,888
3.	Contribution refunds		42,587
4.	Administrative expenses		156,635
5.	Increase / (decrease) in Chapter 185 reserve		0
6.	Decrease in receivable buyback contributions		<u>54,153</u>
7.	Total disbursements during period		\$ 4,442,138
D.	<u>Market Value of Assets as of October 1, 2020 (A. + B.5. - C.7.)</u>		\$ <u>74,796,717</u>
E.	<u>Reconciliation of DROP Accounts Balance</u>		
1.	DROP accounts balance as of October 1, 2019		\$ 2,167,823
2.	Benefit payments into DROP accounts during year		694,888
3.	Disbursements from DROP accounts during year		(1,050,169)
4.	Expenses deducted from DROP accounts		(0)
5.	Investment gains/(losses) during year		<u>103,713</u>
6.	DROP accounts balance as of September 30, 2020		\$ 1,916,255

¹ As reported by Plan's Auditors.

D

Table VI

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Development of Actuarial Value of Assets

	10/1/2019 – 9/30/2020	10/1/2018 – 9/30/2019	10/1/2017 – 9/30/2018	10/1/2016 – 9/30/2017	10/1/2015 – 9/30/2016
A. Preliminary actuarial value of assets as of beginning of year	\$ 73,062,039	\$ 67,562,043	\$ 62,107,544	\$ 57,327,084	\$ 52,511,277
B. Contributions and miscellaneous income	4,251,517	4,081,496	3,892,913	3,632,754	3,646,397
C. Benefit payments and administrative expenses	4,231,350	3,972,147	3,537,096	3,733,603	3,088,518
D. Actual investment earnings net of investment expenses	4,130,078	1,665,799	4,853,187	8,119,339	5,081,761
E. Expected investment earnings (A. x .07 + (B.-C.) x .035)	5,115,049	4,902,212	4,609,123	4,295,749	3,959,266
F. Excess of actual over expected investment earnings (D.-E.)	(984,971)	(3,236,413)	244,064	3,823,590	1,122,495
G. Recognition of excess earnings over 4 years					
1. 25% from this plan year	(246,243)	(809,103)	61,016	955,898	280,624
2. 25% from last plan year	(809,103)	61,016	955,898	280,624	(807,979)
3. 25% from two plan years ago	61,016	955,898	280,624	(807,979)	157,017
4. 25% from three plan years ago	955,898	280,624	(807,979)	157,017	669,000
5. Total	(38,432)	488,435	489,559	585,560	298,662
H. Preliminary actuarial value of assets at end of year (A. + B. - C. + E. + G.5.)	\$ 78,158,823	\$ 73,062,039	\$ 67,562,043	\$ 62,107,544	\$ 57,327,084
I. Actuarial value of assets limitations					
1. Market value of assets prior to exclusion of Chapter 185 accumulated excess reserve	\$ 74,796,717	\$ 70,748,954	\$ 69,253,723	\$ 64,053,387	\$ 56,042,901
2. 80% of I.1.	59,837,374	56,599,163	55,402,978	51,242,710	44,834,321
3. 120% of I.1.	89,756,060	84,898,745	83,104,468	76,864,064	67,251,481
4. Actuarial value of assets (H., but not less than I.2. or more than I.3.)	\$ 78,158,823	\$ 73,062,039	\$ 67,562,043	\$ 62,107,544	\$ 57,327,084
J. Return on Actuarial Value	\$ 5,076,617	\$ 5,390,647	\$ 5,098,682	\$ 4,881,309	\$ 4,257,928
K. Net actuarial value of assets	\$ 78,158,823	\$ 73,062,039	\$ 67,562,043	\$ 62,107,544	\$ 57,327,084

D

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 ¹	\$ 249,479	\$ 0	\$ 0 ¹
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
2016/2017	\$ 504,799	\$ 0	\$ 504,799	\$ 408,853	\$ 0	\$ 0
2017/2018	\$ 504,799	\$ 0	\$ 504,799	\$ 438,599	\$ 0	\$ 0
2018/2019	\$ 504,799	\$ 0	\$ 504,799	\$ 491,287	\$ 0	\$ 0
2019/2020	\$ 504,799	\$ 0	\$ 504,799	\$ 488,659	\$ 0	\$ 0

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

¹ 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, 2020</u>	
1.	City and State normal cost previous valuation	\$ 1,661,326
2.	Unfunded actuarial accrued liability previous valuation	\$13,899,211
3.	City and State contributions previous year (limited by 99-1)	\$ 3,123,011
4.	Interest on:	
	(a) City normal costs	\$ 116,293
	(b) Unfunded actuarial accrued liability	972,945
	(c) City and State contributions	<u>95,053</u>
	(d) Net total: (a) + (b) - (c)	\$ 994,185
5.	Increase in unfunded actuarial accrued liability due to plan amendment	\$ 486,535
6.	Increase in unfunded actuarial accrued liability due to assumptions / methods change	\$ 0
7.	Expected unfunded actuarial accrued liability current year: 1. + 2. - 3. + 4. + 5. + 6.	\$13,918,246
8.	Actual unfunded actuarial accrued liability current year	\$14,272,593
9.	Actuarial gain / (loss): 7. - 8.	\$ (354,347)
B.	<u>Approximate Portion of Plan Year Gain / (Loss) Due to Investments</u>	
1.	Actuarial value of assets previous year	\$73,062,039
2.	Contributions during year	\$ 4,251,517
3.	Disbursements during year (expenses & benefits)	\$ 4,231,350
4.	Expected appreciation for period	<u>\$ 5,100,797</u>
5.	Expected actuarial value of assets current year 1. + 2. - 3. + 4.	\$78,183,003
6.	Actual actuarial value of assets current year	\$78,158,823
7.	Approximate gain / (loss): 6. - 5.	\$ (24,180)
C.	<u>Approximate Portion of Plan Year Gain / (Loss) Due to Liabilities: A. - B.</u>	
		\$ (330,167)

D

Table VIII
(continued two)

D. Review of Cumulative Actuarial Gains / (Losses) for Determination of 13th Checks to Retirees for the 2019/2020 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	734,341
2016 / 2017	(364,763)
2017 / 2018	1,964,205
2018 / 2019	(373,990)
2019 / 2020	<u>(354,347)</u>
Cumulative Total Gains / (Losses)	\$ (7,642,883)

Requirements for 13th 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)
- 13th check payable to Tier One members only

D

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>
10/01/2020	\$ 14,272,593	\$ 1,421,143
10/01/2021	\$ 13,751,052	\$ 1,421,143
10/01/2022	\$ 13,193,002	\$ 1,421,143
10/01/2023	\$ 12,595,889	\$ 1,421,143
10/01/2050	\$ 0	\$ 0

D

Table X

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Accounting Disclosure Exhibit

I. <u>Number of Plan Participants</u>	<u>10/01/2019</u>	<u>10/01/2020</u>
1. Retirees, disabled and beneficiaries receiving benefits	51	54
2. Terminated plan participants entitled to but not yet receiving benefits	14	15
3. DROP participants	8	8
4. Active plan participants	<u>108</u>	<u>103</u>
5. Total	181	180
II. <u>Financial Accounting Standards Board Allocations as of October 1, 2020</u>		
A. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 40,681,050	\$ 43,400,692
b. DROP participants	8,676,276	8,542,288
c. Participants due deferred vested benefits	2,341,870	3,011,745
d. Others	<u>23,380,410</u>	<u>25,929,403</u>
e. Total	\$ 75,079,606	\$ 80,884,128
2. Actuarial present value of accumulated non-vested plan benefits	<u>2,207,570</u>	<u>2,294,345</u>
3. Total actuarial present value of accumulated plan benefits	\$ 77,287,176	\$ 83,178,473
B. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated plan benefits as of October 1, 2019	\$ 77,287,176	
2. Increase (decrease) during year attributable to:		
a. Plan amendment	\$ 438,073	
b. Actuarial assumptions and method changes	0	
c. Benefits paid and contribution refunds	(4,074,715)	
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	<u>9,527,939</u>	
e. Net increase	\$ 5,891,297	
3. Actuarial present value of accumulated plan benefits as of October 1, 2020	\$ 83,178,473	

D

Table X
(continued two)

C. Significant Matters Affecting Calculations

1. Assumed rate of return used in determining actuarial present values
2. Plan amendments
3. Change in actuarial assumptions

7.00%

See Table XI, Item 20.

See Table XII, Item 12.

D

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)
October 1, 1998	\$ 1,435	\$ 1,033	\$ (402)	138.9%	\$ 3,106	(12.9%)
October 1, 1999	\$ 1,978	\$ 1,628	\$ (350)	121.5%	\$ 3,870	(9.0%)
October 1, 2000	\$ 2,605	\$ 2,959	\$ 354	88.0%	\$ 3,851	9.2%
October 1, 2001	\$ 3,161	\$ 3,343	\$ 182	94.6%	\$ 3,561	5.1%
October 1, 2002	\$ 3,899	\$ 4,934	\$ 1,035	79.0%	\$ 4,212	24.6%
October 1, 2003	\$ 4,990	\$ 6,124	\$ 1,136	81.5%	\$ 4,998	22.7%
October 1, 2004	\$ 6,462	\$ 8,816	\$ 2,354	73.3%	\$ 5,256	44.8%
October 1, 2005	\$ 8,661	\$ 12,331	\$ 3,670	70.2%	\$ 6,519	56.3%
October 1, 2006	\$ 11,940	\$ 17,767	\$ 5,827	67.2%	\$ 7,099	82.1%
October 1, 2007	\$ 16,348	\$ 21,747	\$ 5,399	75.2%	\$ 8,103	66.6%
October 1, 2008	\$ 19,775	\$ 25,153	\$ 5,377	78.6%	\$ 7,678	70.0%
October 1, 2009	\$ 23,088	\$ 30,634	\$ 7,546	75.4%	\$ 8,751	86.2%
October 1, 2010	\$ 27,137	\$ 35,483	\$ 8,346	76.5%	\$ 9,149	91.2%
October 1, 2011	\$ 29,530	\$ 42,473	\$ 12,943	69.5%	\$ 8,819	146.8%
October 1, 2012	\$ 34,645	\$ 48,670	\$ 14,025	71.2%	\$ 8,844	158.6%
October 1, 2013	\$ 40,583	\$ 55,039	\$ 14,456	73.7%	\$ 9,671	149.5%
October 1, 2014	\$ 46,824	\$ 61,626	\$ 14,802	76.0%	\$ 9,712	152.4%
October 1, 2015	\$ 52,511	\$ 67,003	\$ 14,492	78.4%	\$ 8,480	170.9%
October 1, 2016	\$ 57,327	\$ 71,572	\$ 14,245	80.1%	\$ 8,092	176.0%
October 1, 2017	\$ 62,108	\$ 77,768	\$ 15,661	79.9%	\$ 8,751	179.0%
October 1, 2018	\$ 67,562	\$ 82,327	\$ 14,765	82.1%	\$ 9,422	156.7%
October 1, 2019	\$ 73,062	\$ 86,961	\$ 13,899	84.0%	\$ 10,306	134.9%
October 1, 2020	\$ 78,159	\$ 92,431	\$ 14,273	84.6%	\$ 10,233	139.5%

Note: Dollar amounts in thousands



Table X
(continued four)

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

Plan Year	Annual Required Contribution ¹	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%
2016	2,720,045	100%
2017	2,938,028	100%
2018	2,990,419	100%
2019	3,123,011	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, 2020
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*	7.00%
Projected salary increases*	6.00%
Cost-of-living adjustments	Variable 13 th check, only if plan has cumulative net actuarial gain

* Includes inflation at 3.00%

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

D

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>	
2020	\$ 1,128,506	\$ 2,634,352	\$ 488,659	\$ 4,233,791	\$ 8,485,308
2019	\$ 1,091,077	\$ 2,499,132	\$ 491,287	\$ 1,786,676	\$ 5,868,172
2018	\$ 954,885	\$ 2,499,429	\$ 438,599	\$ 5,066,977	\$ 8,959,890
2017	\$ 911,939	\$ 2,311,962	\$ 408,853	\$ 6,998,269	\$10,631,023
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

<u>Plan Year</u>	<u>Expenses by Type</u>			<u>Total</u>
	<u>Benefits & DROP Payments</u>	<u>Expenses</u>	<u>Refunds</u>	
2020	\$ 4,032,128	\$ 401,227	\$ 42,587	\$ 4,475,942
2019	\$ 3,961,877	\$ 318,659	\$ 10,270	\$ 4,290,806
2018	\$ 3,537,096	\$ 355,111	\$ 10,095	\$ 3,902,302
2017	\$ 3,314,226	\$ 349,773	\$ 278,082	\$ 3,942,081
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

Contributions were made in accordance with actuarially determined contribution requirements.



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 200-10-145.

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, 2014.

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.

D

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, 13th 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 13th 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

In addition to the monthly retirement benefits provided by this plan, there is a supplemental payment of ten dollars (\$10.00) per month per year of service for all members employed by the city on or after April 25, 2011, and retired on or before September 28, 2016, provided such member has at least twenty (20) years of credited service with the city or provided such members left the city at age fifty-five (55) or older with more than five (5) years of credited service with the city. This benefit commences on the fifth anniversary date of termination of service and ceases upon the member reaching sixty-five (65) years of age.

For bargaining employees employed by the City on or after September 28, 2016, the supplemental payment is based on the following: ten dollars (\$10.00) per month per year of service up to a maximum of 20 years of service (\$200/month) and is provided to all members employed by the City on or after September 28, 2016, provided such member is eligible to begin drawing his/her normal retirement benefit immediately upon separation. This benefit ceases upon the member reaching sixty-five (65) years of age.

Effective 6/29/20, all members employed by the city as of 7/1/20 who retire after 6/29/20, the supplemental payment is based on the following: twenty-five dollars (\$25.00) per month for each year of service up to a maximum of \$600.00/month, provided such member is eligible to immediately begin drawing his/her normal retirement benefit immediately upon separation. This benefit will commence the first full month following his/her retirement from city service and will cease upon the retiree reaching 65 years of age.

21. Changes from Most Recent Valuation

The post retirement supplemental benefit was changed as stated in Item 20.

D

Table XII

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Actuarial Assumptions and Actuarial Cost Methods

1. Mortality:

Pre-Retirement:

Female Non-Disabled: PUB-2010 Headcount Weighted Safety Employee Female Table, set forward 1 year, Scale MP-2018

Male Non-Disabled: PUB-2010 Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year, scale MP-2018

Post-Retirement:

Female Non-Disabled: PUB-2010 Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year, Scale MP-2018

Male Non-Disabled: PUB-2010 Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year, Scale MP-2018

Pre-Retirement & Post-Retirement:

Female Disabled: 80% PUB-2010 Headcount Weighted General Disabled Retiree Female Table; 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Female Table, Scale MP-2018

Male Disabled: 80% PUB-2010 Headcount Weighted General Disabled Retiree Male Table; 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Male Table, Scale MP-2018

2. Interest to be Earned by Fund:

7.00%, 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	7.8
25	7.4
30	6.5
35	4.9
40	3.4
45	2.1
50	0.7
55 & over	0.0

D

Table XII
(continued two)

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.

6. Salary Increase Factors:

Current salaries are assumed to increase at a rate of 6.0% 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.

D

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:

- The assumed administrative expenses were changed from \$147,624 to \$156,635 for the plan/fiscal year.

D

Table XIII

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Distribution of Active Participants by Age and Service Groups
as of October 1, 2020

Years of Credited Service

Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Over	Total
Under 25	2	.	.	.	.	.	.	2
25 - 29	17	.	1	.	.	.	.	18
30 - 34	13	3	2	.	.	.	.	18
35 - 39	8	1	12	3	.	.	.	24
40 - 44	6	1	6	8	.	.	.	21
45 - 49	.	1	5	5	3	.	.	14
50 - 54	1	.	0	2	1	.	.	4
55 - 59	.	2	.	.	.	.	.	2
60 - 64	.	.	.	.	.	.	.	0
65 & Over	.	.	.	.	.	.	.	0
TOTAL	47	8	26	18	4	0	0	103

10/01/2019 10/01/2020

Average Attained Age 37.0 years 37.8 years
 Average Covered Pay \$95,429 \$99,352
 Percent Female 13.0% 12.6%



Table XIV

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Reconciliation of Participant Data

A. Active Participants

1. Active participants previous year	108
2. Retired during year	(0)
3. Entered DROP during year	(2)
4. Died during year	(1)
5. Disabled during year	0
6. Terminated vested during year	(1)
7. Terminated non-vested during period	(8)
8. New active participants	7
9. Rehired / Reinstated	0
10. Active participants current year	<u>103</u>

B. Participants Receiving Benefits

1. Participants receiving benefits previous year	51
2. New retired participants	0
3. New terminated vested receiving benefits	0
4. New disabled receiving benefits	0
5. New beneficiaries receiving benefits	1
6. DROP participants exited and retired	2
7. Died or ceased payment during year	0
8. Retired or terminated vested receiving benefits current year	<u>54</u>

C. Terminated Participants Entitled to Future Benefits

1. Terminated participants entitled to future benefits previous year	14
2. Died during year	0
3. Commenced receiving benefits during year	(0)
4. Rehired / Reinstated during year	(0)
5. New terminated participants	1
6. Terminated participants entitled to future benefits current year	<u>15</u>

D. DROP Participants

1. DROP participants previous year	8
2. New entrants during year	2
3. Died during year	0
4. Exited and retired during year	(2)
5. DROP participants current year	<u>8</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	\$ 195,282	\$ 39,057
40 - 44	4	144,290	36,072
45 - 49	2	19,452	9,726
50 - 54	4	105,914	26,478
55 - 59	0	0	0
60 - 64	0	0	0
65 & over	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	15	\$ 464,938	\$ 30,996

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	2	170,725	85,362
45 - 49	8	679,946	84,993
50 - 54	18	1,472,488	81,805
55 - 59	15	1,149,521	76,635
60 - 64	6	330,552	55,092
65 & over	<u>13</u>	<u>420,272</u>	<u>32,329</u>
TOTAL	62	\$ 4,223,503	\$ 68,121

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:

Year Ended	Rate of Return		Assumed
	Market Value	Actuarial Value	
09/30/2020	6.0%	6.9%	7.00%
09/30/2019	2.3%	8.0%	7.25%
09/30/2018	7.9%	8.2%	7.40%
09/30/2017	14.4%	8.5%	7.50%
09/30/2016	10.2%	8.1%	7.50%
Last 3 Yrs.	5.4%	7.7%	7.22%
Last 5 Yrs.	8.1%	7.9%	7.33%

B. Recent Salary Increase and Turnover Experience

Year Ended	Salary Increase		Ratio of Actual Turnover to Expected
	Actual	Assumed	
09/30/2020	3.7%	6.0%	1.25
09/30/2019	7.3%	5.5%	0.34
09/30/2018	4.8%	5.5%	3.18
09/30/2017	4.5%	5.5%	0.35
09/30/2016	5.9%	5.5%	2.27
Last 3 Yrs.	5.3%	5.7%	1.59
Last 5 Yrs.	5.2%	5.6%	1.48

D

Table XVII

CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

State Required Exhibit

	<u>10/01/2019</u>	<u>10/01/2020</u>
A. <u>Participant Data</u>		
1. Active participants	108	103
2. Retired participants and beneficiaries receiving benefits	48	51
3. DROP participants	8	8
4. Disabled participants receiving benefits	3	3
5. Terminated vested participants	14	15
6. Total participants	181	180
7. Annual payroll of active participants	\$ 10,306,308	\$ 10,233,255
8. Annual benefits payable to those currently receiving benefits	\$ 3,328,387	\$ 3,581,689
9. Annual benefits payable to terminated vested participants	\$ 404,422	\$ 464,938
10. Annual benefits payable to DROP participants	\$ 658,273	\$ 641,814
B. <u>Value of Assets</u>		
1. Actuarial value	\$ 73,062,039	\$ 78,158,823
2. Market value	\$ 70,748,954	\$ 74,796,717
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Age retirement benefits	\$ 49,287,642	\$ 51,156,595
b. Vesting benefits	4,243,465	4,102,819
c. Death benefits	258,860	257,055
d. Disability benefits	428,536	450,846
e. Total	\$ 54,218,503	\$ 55,967,315
2. Actuarial present value of future expected benefit payments terminated vested members	\$ 2,341,870	\$ 3,011,745
3. Actuarial present value of future expected benefit payments for those receiving benefits		
a. Service retired	\$ 39,967,963	\$ 41,689,515
b. DROP participants	8,676,276	8,542,288
c. Disability retired	524,174	513,498
d. Beneficiaries	188,913	1,197,679
e. Total	\$ 49,357,326	\$ 51,942,980

D

Table XVII
(continued two)

	<u>10/01/2019</u>	<u>10/01/2020</u>
4. Total actuarial present value of future expected benefit payments	\$ 105,917,699	\$ 110,922,040
5. Actuarial accrued liabilities	\$ 86,961,250	\$ 92,431,416
6. Unfunded actuarial accrued liabilities (see footnote 1/ for separation)	\$ 13,899,211	\$ 14,272,593
 D. <u>Statement of Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated vested plan benefits		
a. Participants currently receiving benefits	\$ 40,681,050	\$ 43,400,692
b. DROP participants	8,676,276	8,542,288
c. Participants due deferred benefits	2,341,870	3,011,745
d. Other participants	<u>23,380,410</u>	<u>25,929,403</u>
e. Total	\$ 75,079,606	\$ 80,884,128
2. Actuarial present value of accumulated non-vested plan benefits	<u>2,207,570</u>	<u>2,294,345</u>
3. Total actuarial present value of accumulated plan benefits	\$ 77,287,176	\$ 83,178,473
 E. <u>Statement of Change in Accumulated Plan Benefits</u>		
1. Actuarial present value of accumulated plan benefits as of October 1, 2019		\$ 77,287,176
2. Increase (decrease) during year attributable to:		
a. Plan amendment		\$ 438,073
b. Actuarial assumptions and methods changes		0
c. Benefits paid and contribution refunds		(4,074,715)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		<u>9,527,939</u>
e. Net increase (decrease)		\$ 5,891,297
3. Actuarial present value of accumulated plan benefits as of October 1, 2020		\$ 83,178,473

D

Table XVII
(continued three)

	<u>10/01/2019</u>	<u>10/01/2020</u>
F. <u>Pension Cost</u>		
1. Total normal cost including expenses	\$ 2,691,957	\$ 2,713,467
2. Expected member contribution	1,030,631	1,023,326
3. Item 2. as percentage of payroll	<u>10.0%</u>	<u>10.0%</u>
4. Net employer normal cost	\$ 1,661,326	\$ 1,690,141
5. Payment required to amortize unfunded liability	<u>1,351,018</u>	<u>1,421,143</u>
6. Total employer required contribution (including interest)	\$ 3,123,011	\$ 3,222,009
7. Item 6. as a percentage of payroll	30.3%	31.5%
8. Estimated State contributions	\$ 491,287	\$ 488,659
9. Item 8. as a percentage of payroll	4.8%	4.8%
10. Net amount payable by City	\$ 2,631,724	\$ 2,733,350
11. Item 10. as a percentage of payroll	25.5%	26.7%
G. <u>Past Contributions</u>		
1. Total contribution required	\$ 4,153,642	\$ 4,245,335
2. Actual contributions made:		
a. Employees	1,128,506	N/A
b. City	2,634,352	N/A
c. State	<u>488,659</u>	N/A
d. Total	4,251,517	N/A
H. <u>Net Actuarial Gain / (Loss)</u>	\$ (373,990)	\$ (354,347)
I. <u>Disclosure of Following Items:</u>		
1. Actuarial present value of future salaries - attained age	\$ 81,451,158	\$ 82,870,506
2. Actuarial present value of future employee contributions - attained age	\$ 8,145,116	\$ 8,287,051
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 7,015,776	\$ 7,482,896
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	

D

**Table XVII
(continued four)**

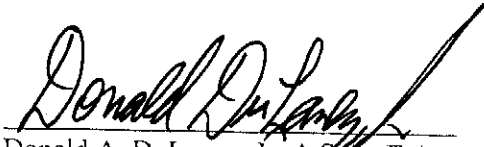
1/ Unfunded Actuarial Accrued Liabilities

Description and Amount of Original Liability	Remaining Amortization Period	Unamortized Amount as of Valuation Date	Amortization Payment
10/01/1999 New Method	9 years	\$ (188,361)	\$ (27,020)
10/01/2000 Actuarial Loss	10 years	228,552	30,412
10/01/2000 Plan Amendment	10 years	179,321	23,861
10/01/2001 Actuarial (Gain)	11 years	(102,168)	(12,733)
10/01/2002 Actuarial (Gain)	12 years	(246,158)	(28,964)
10/01/2002 Plan Amendment	12 years	701,421	82,533
10/01/2002 Plan Amendment	12 years	117,882	13,871
10/01/2003 Actuarial Loss	13 years	67,830	7,585
10/01/2004 Actuarial Loss	14 years	131,431	14,045
10/01/2004 Plan Amendment	14 years	767,528	82,021
10/01/2005 Actuarial Loss	15 years	995,347	102,134
10/01/2006 Actuarial Loss	16 years	1,001,633	99,094
10/01/2006 Assumption Change	16 years	698,695	69,124
10/01/2007 Actuarial (Gain)	17 years	(299,825)	(28,701)
10/01/2008 Actuarial Loss	18 years	29,281	2,720
10/01/2009 Actuarial Loss	19 years	1,876,797	169,706
10/01/2010 Actuarial Loss	20 years	764,184	67,415
10/01/2011 Actuarial Loss	21 years	2,058,514	177,550
10/01/2011 Plan Amendment	11 years	997,337	124,301
10/01/2011 Assumptions Change	16 years	821,170	81,240
10/01/2012 Actuarial Loss	22 years	1,156,713	97,732
10/01/2013 Actuarial Loss	23 years	586,590	48,634
10/01/2014 Actuarial Gain	24 years	(342,421)	(27,902)
10/01/2014 Plan Amendment	14 years	(576,869)	(61,647)
10/01/2014 Assumptions Change	14 years	1,362,651	145,619
10/01/2015 Actuarial Gain	25 years	(32,988)	(2,646)
10/01/2016 Actuarial Gain	26 years	(702,136)	(55,489)
10/01/2016 Assumptions Change	16 years	700,070	69,260
10/01/2017 Actuarial Loss	27 years	353,089	27,530
10/01/2017 Assumptions Change	17 years	1,273,404	121,896
10/01/2018 Actuarial Gain	28 years	(1,923,249)	(148,094)
10/01/2018 Assumptions Change	18 years	1,387,696	128,929
10/01/2019 Actuarial Loss	29 years	370,138	28,175
10/01/2019 Assumptions Change	19 years	(781,388)	(70,656)
10/01/2020 Actuarial Loss	30 years	354,347	26,687
10/01/2020 Plan Amendment	20 years	486,535	42,921
TOTAL		<u>\$ 14,272,593</u>	<u>\$ 1,421,143</u>

D

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

5/6/2021

Date

20-04191

Enrollment Number

D