Rick Scott
Governor

Sgt. David Hennessy
City of Lauderhill Police Officers' Retirement System
13790 NW 4 Street
Suite 105
Sunrise, FL 33325

## RE: City of Lauderhill Police Officers' Retirement System State Acceptance - All reports through 10/1/2011

Dear Sgt. Hennessy:
Upon review of the revised 10/1/2011 valuation dated May 7, 2013, the above-referenced plan has been determined to be state-accepted pursuant to Part VII of Chapter 112, F.S. and Chapter 60T, F.A.C. By this determination, all prior actuarial reports and impact statements effective prior to the above date and received by the Division of Retirement may be considered to be state-accepted.

This review relied upon the actuarial costs and asset amounts as determined by the Plan actuary in the referenced actuarial reports. Although I reviewed the results of the reports for compliance, consistency and reasonableness, I did not audit the asset information or employee data information for accuracy. Accordingly, I express no opinion on the reasonableness of the estimates of the financial status of the plan. An audit may or may not uncover additional material issues in the actuarial work performed.

Should you have any questions, please do not hesitate to call us.
Sincerely,


Douglas E. Beckendorf, A.S.A., E.A.
Actuary
cc: Mr. Donald A. DuLaney, Jr., Plan Actuary
Mr. David Williams, Plan Administrator
Mr. Stuart A. Kaufman, Esq., Plan Attorney
Ms. Patricia Shoemaker, Division of Retirement

# ACTUARIAL VALUATION OF CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM AS OF OCTOBER 1, 2011 

May, 2013

## Revised

Determination of Contribution for the
Plan Year ending September 30, 2012
Contribution to be
Paid in Fiscal Year October 1, 2011
through September 30, 2012

DuLaney and Company, Inc.
Actuarial Services

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May 7, 2013

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, 2011 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, 2011

This Actuarial Valuation develops the required minimum Retirement Plan payment for the fiscal year beginning October 1, 2011 and ending September 30, 2012 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 $\$ 881,878$ ( $10.0 \%$ of covered payroll).

The Division of Retirement has mandated that minimum required contributions be determined as a percentage of actual emerging covered pension payroll basis, and not as a fixed dollar amount. The required funding amount for the plan/fiscal year ending September 30, 2012, to be met by the City and State contributions under Chapter 185 is $\mathbf{2 9 . 8 \%}$ of the actual emerging covered payroll for October 1, 2011 through September 30, 2012. The anticipated State (Chapter 185) contribution is $\$ 285,072$. The estimated City and State required contribution, computed based on the October 1, 2011 covered payroll of $\$ 8,818,777$, is $\mathbf{\$ 2 , 6 2 9 , 4 2 2}$ or $\mathbf{2 9 . 8 \%}$ of covered payroll, if the payment requirement is met by September 30, 2012. We have assumed that the State contribution available (limited by rules under Chapter 99-1) would be $\mathbf{\$ 2 8 5 , 0 7 2}$ (same as the amount the City was credited with for contribution purposes for the prior plan/fiscal year, and estimated to be $3.2 \%$ of covered payroll), the estimated required City contribution would be $\mathbf{\$ 2 , 3 4 4 , 3 5 0}$ ( $\mathbf{2 6 . 6 \%}$ of covered payroll). Under the rules of Chapter 99-1, any amount of the State contribution received above the assumed amount of $\$ 285,072$ 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, we recognized the benefit improvements mandated by Ordinance 110-09170. The improvements were to change the retirement benefit multiplier for years of Credited Service prior to October 1, 2001 from $3.0 \%$ per year to $3.5 \%$ per year for members employed by the City as of April 25, 2011. In addition, a monthly post retirement supplement of $\$ 10$ per month per year of Credited Service was created, to be paid to members employed by the City on or after April 25,2011 . The supplement would commence five (5) years after the member's separation from employment, subject to eligibility requirements, and would end upon the date the member reaches age 65. All other plan benefits recognized in this valuation is the same as that October 1, 2010 valuation. The plan provisions are outlined in Table XI.

For this Valuation, we reviewed the assumptions/methods used and made several changes. The assumed interest to be earned by the Fund was changed from $8.00 \%$ to $7.75 \%$ per annum, net of investment fees. The assumed annual salary increase was changed from $7.0 \%$ to $6.0 \%$ per year, and the assumed additional salary increase in the last year of employment due to cash outs of accumulated sick and vacation leaves was changed from $40 \%$ to $30 \%$. The assumed inflation was changed from $4.0 \%$ to $3.5 \%$ per year. The assumed mortality rates were updated to those of a more modern set of table rates (RP-2000) with generational improvements.

There were no other changes in the actuarial assumptions and methods utilized in this valuation from those of the October 1, 2010 valuation. Table XII contains an outline of the assumptions and methods used.

## Comparison of Costs With Previous Valuation Year of 2010/2011

Table II of the report provides information of a comparative nature. Column I shows the results of the October 1, 2010 Actuarial Valuation while Column II shows the results as of October 1,2011 prior to the change in actuarial assumptions and plan provisions. A comparison of the two columns shows the effect of plan experience during the year. Covered payroll decreased by approximately $3.6 \%$ while the number of active participants decreased by about $2.7 \%$. The unfunded liability increased from $\$ 8,345,786$ to $\$ 10,551,208$, primarily due to the actuarial loss of $\$ 2,335,636$ during the plan year.

Column III of the Table displays the results after the benefit improvements. A comparison of Columns II and III indicates that the changes increased the unfunded actuarial accrued liability by $\$ 1,390,232$, from $\$ 10,551,208$ to $\$ 11,941,440$. The estimated City minimum funding requirement increased from $24.2 \%$ to $26.1 \%$ of the emerging covered pension payroll.

The figures in Column IV of Table II are those after the benefit improvements and assumptions changes. The net effect was an increase in estimated City minimum funding requirement of $0.5 \%$ of the emerging covered pension payroll.

## GASB Disclosures

In November, 1994, the Government Account Standards Board (GASB) adopted Statement No. 25, changing the way in which government retirement systems must report financial information. Relevant information under GASB 25 is included in Table X.

## Plan Experience

Table XVI provides a summary of certain plan experience during the plan year. The actuarial value of assets return was $0.9 \%$ for the plan year ended September 30, 2011, which was below the assumption of $8.0 \%$. The market value rate of return was $-4.4 \%$. Employee turnover was $30 \%$ lower than the expected turnover during the last plan year. Average salary increase was $0.3 \%$, as compared to the assumption of $7.0 \%$. The actuarial value of assets return was the main source of the actuarial loss while salary experience was a source of offsetting 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, 2010 through September 30, 2011 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.
Senior Consulting Actuary
DAD
Attachments

## Table I

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Summary of Retirement Plan Costs as of October 1, 2011

| \% of |
| :---: |
| Cost Data |

A. Participant Data Summary (Table III)

1. Active employees
$\begin{array}{lll}\text { a) } & \text { Tier One } & 98 \\ \text { b) } & \text { Tier Two } & 12\end{array}$
8
c) Total
2. Terminated vested

110
3. Receiving benefits

7
4. DROP participants

15
5. Annual payroll of active employees
\$ 8,818,777
B. Total Normal Costs

1. Age retirement benefits
2. Deferred vesting benefits
\$ 1,940,235
3. Death benefits
4. Disability benefits
5. Estimated expenses
6. Total annual normal costs

217,487
12,439
27,749
$\begin{array}{r}108,733 \\ \hline 2306,643\end{array}$
N/A
N/A
N/A
N/A
N/A
N/A
$100.0 \%$
C. Total Actuarial Accrued Liability

1. Age retirement benefits active employees
\$ 32,463,873
368.1\%
2. Termination benefits active employees
3. Death benefits active employees

1,170,326
4. Disability benefits active employees

90,029
13.3\%
5. Retired or terminated vested participants receiving benefits

4,062,708
46.1\%
6. DROP participants
7. Terminated vested participants entitled to future benefits

3,300,370
37.4\%
8. Deceased participants whose beneficiaries
are receiving benefits

| 225,522 | $2.6 \%$ |
| ---: | ---: |
| 664,003 | $7.5 \%$ |
| $\$ 42,472,739$ |  |

9. Disabled participants receiving benefits

| 225,522 | $2.6 \%$ |
| ---: | ---: |
| 664,003 | $7.5 \%$ |
| $\$ 42,472,739$ |  |

10. Total actuarial accrued liability

| 225,522 | $2.6 \%$ |
| ---: | ---: |
| 664,003 | $7.5 \%$ |
| $\$ 42,472,739$ |  |

4.5\%

398,018

## Table I

(continued two)

|  |  | Cost Data | $\%$ of Payroll |
| :---: | :---: | :---: | :---: |
| D. | Actuarial Value of Assets (Table IV) | \$ 29,529,579 | 334.8\% |
| E. | Unfunded Actuarial Accrued Liability (C.-D.) | \$ 12,943,160 | 146.8\% |
| F. | Actuarial Gains / (Losses) | \$ (2,335,636) | (26.5\%) |
| G. | Minimum Funding Requirements |  |  |
|  | 1. Total normal cost | \$ 2,306,643 | 26.2\% |
|  | 2. Amortization of unfunded actuarial accrued liability | 1,102,215 | 12.5\% |
|  | 3. Interest adjustment | 195,841 | 2.2\% |
|  | 4. Total payment | \$ 3,511,300 | 39.8\% |
| H. | Estimated Contribution Sources |  |  |
|  | 1. City | \$ 2,344,350 | 26.6\% |
|  | 2. State | \$ 285,072 | 3.2\% |
|  | 3. Employees | \$ 881,878 | 10.0\% |
| I. | Actuarial Present Value of Vested Accrued Benefits |  |  |
|  | 1. Retired, terminated vested, beneficiaries and disabled receiving benefits | \$ 4,952,233 | 56.2\% |
|  | 2. DROP participants | 3,300,370 | 37.4\% |
|  | 3. Terminated vested participants entitled to future benefits | 398,018 | 4.5\% |
|  | 4. Active participants entitled to future benefits | 25,989,506 | 294.7\% |
|  | 5. Total actuarial present value of vested accrued benefits | \$ 34,640,127 | 392.8\% |
| J. | Market Value of Assets (Table IV) | \$ 26,880,688 | 304.8\% |
| K. | Unfunded Actuarial Present Value of |  |  |
|  | Vested Accrued Benefits (I. - J., not less than \$0) | \$ 7,759,439 | 88.0\% |
| L. | Vested Benefit Security Ratio (J. $\div$ I.) | 77.6\% | N/A |

Table II

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Comparison of Cost Data of October 1, 2010 and October 1, 2011 Actuarial Valuations
A. Participants

1. Active employees

- Tier One
- Tier Two
- Total

2. Terminated vested
3. Receiving benefits
4. DROP participants
5. Annual payroll of active employees
B. Total Normal Costs
C. Actuarial Accrued Liability
D. Actuarial Value of Assets
E. Unfunded Actuarial Accrued Liability
F. Actuarial Gains / (Losses)
G. City Minimum Funding Requirement
H. Unfunded Actuarial Present Value of Vested Accrued Benefits*
I. Vested Benefit Security Ratio*

| Column I |  | Column IIPrior PlanPrior AssumptionsOctober 1, 2011 |  | Column IIICurrent PlanPrior AssumptionsOctober 1, 2011 |  | Column IVCurrent PlanCurrent AssumptionsOctober 1, 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October 1, 2010 |  |  |  |  |  |  |  |
| Cost Data | $\begin{gathered} \text { \% of } \\ \text { Annual } \\ \text { Pay } \end{gathered}$ | Cost Data | $\begin{gathered} \text { \% of } \\ \text { Annual } \\ \text { Pay } \end{gathered}$ | Cost Data | \% of Annual Pay | Cost Data | $\begin{gathered} \text { \% of } \\ \text { Annual } \\ \text { Pay } \end{gathered}$ |
| 104 | N/A | 98 | N/A | 98 | N/A | 98 | N/A |
| 9 | N/A | 12 | N/A | 12 | N/A | 12 | N/A |
| 113 | N/A | 110 | N/A | 110 | N/A | 110 | N/A |
| 9 | N/A | 7 | N/A | 7 | N/A | 7 | N/A |
| 13 | N/A | 15 | N/A | 15 | N/A | 15 | N/A |
| 0 | N/A | 3 | N/A | 3 | N/A | 3 | N/A |
| \$ 9,149,345 | 100.0\% | \$ 8,818,777 | 100.0\% | \$ 8,818,777 | 100.0\% | \$ 8,818,777 | 100.0\% |
| \$ 2,413,375 | 26.4\% | \$ 2,300,929 | 26.1\% | \$ 2,347,769 | 26.6\% | \$ 2,306,643 | 26.2\% |
| \$ 35,483,016 | 387.8\% | \$ 40,080,787 | 454.5.7\% | \$ 41,471,019 | 470.3\% | \$ 42,472,739 | 481.6\% |
| \$ 27,137,230 | 296.6\% | \$ 29,529,579 | 334.8\% | \$ 29,529,579 | 334.8\% | \$ 29,529,579 | 334.8\% |
| \$ 8,345,786 | 91.2\% | \$ 10,551,208 | 113.5\% | \$ 11,941,440 | 135.4\% | \$ 12,943,160 | 140.6\% |
| \$ (887,495) | (9.7\%) | \$ $(2,335,636)$ | (26.5\%) | \$ $(2,335,636)$ | (26.5\%) | \$ $(2,335,636)$ | (26.5\%) |
| \$ 1,974,232 | 21.6\% | \$ 2,136,790 | 24.2\% | \$ 2,304,711 | 26.1\% | \$ 2,344,350 | 26.6\% |
| \$ 468,624 | 5.1\% | \$ 5,444,617 | 61.7\% | \$ 6,821,874 | 77.4\% | \$ 7,759,439 | 88.0\% |
| 98.2\% | N/A | 83.2\% | N/A | 79.8\% | N/A | 77.6\% | 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, 2011

A. Characteristic of Active Participants

1. Active participants as of beginning of prior year ..... 113
2. New entrants during prior year ..... 5
3. Exits during prior year ..... (8)
4. Active participants as of beginning of year ..... 110
5. Active participants fully vested ..... 79
6. Active participants partially vested ..... 0
7. Active participants non-vested ..... 31
8. Annual payroll of active participants ..... \$ 8,818,777
9. Average pay\$ 80,171
10. Average attained age ..... 37.9 years
11. Percent female ..... 10.9\%
B. Characteristics of Inactive Participants
12. Inactives as of beginning of prior year ..... 22
13. Newly inactive during prior year ..... 5
14. Exits during prior year ..... (2)
15. Inactives as of beginning of year ..... 25
16. Age retirees ..... 11
17. Projected annual benefit for age retirees ..... \$ 353,978
18. DROP participants ..... 3
19. Projected annual benefit for DROP participants ..... \$ 257,713
20. Beneficiaries receiving benefits ..... 1
21. Projected annual benefits for beneficiaries receiving benefits ..... \$ 21,110
22. Disabled participants receiving benefits ..... 3
23. Projected annual benefits for disabled participants ..... \$ 66,754
24. Terminated vested due deferred benefits ..... 7
25. Projected annual benefits for terminated vested participants ..... \$ 100,725

## Table IV

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Statement of Assets as of October 1, 2011 ${ }^{1}$

MarketValue
A. Assets

1. Cash and Cash Equivalents ..... \$ 829,624
2. Common Stocks ..... 9,872,732
3. Domestic Fixed Income Funds ..... 7,176,468
4. Domestic Equity Funds ..... 3,336,473
5. International Equity Funds ..... 3,987,562
6. Accrued Interest \& Dividends Receivable ..... 54,011
7. Receivable City Contributions ..... 23,910
8. Receivable Employee Contributions ..... 36,455
9. Receivable Buyback Contributions ..... 0
10. Note Receivable ..... 1,000,000
11. Due from Broker ..... 0
12. Assets Purchased with Receivable Buyback Contributions Paid ..... 797,486
13. Total Assets\$ 27,114,721
B. Liabilities
14. Prepaid City Contributions ..... \$ 0
15. Securities Purchased Payable ..... 54,091
16. Benefits Payable ..... 0
17. Unused Chapter 185 Funds ..... 0
18. Deferred Retirement Option Plan Accounts Payable ..... 145,701
19. Accounts Payable ..... 34,241
20. Total Liabilities ..... \$ 234,033
C. Grand Total (Item A.13. - Item B.7.) ..... \$ 26,880,688
[^0]
## Table V

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM <br> Reconciliation of Plan Assets ${ }^{1}$

A. Market Value of Assets as of October 1, 2010 ..... \$ 25,395,398
B. Receipts During Period

1. Contributions
a. City ..... \$ 2,047,326
b. Employee ..... 1,151,187
c. State (not limited by 99-1) ..... 285,072
d. Total ..... \$ 3,483,585
2. Investment income
a. Interest, dividends andmiscellaneous income\$ 1,379,187
b. Investment expenses $(109,132)$
c. Net\$ 1,270,055
3. Net realized and unrealized appreciation
a. Realized appreciation ..... \$ 751,208
b. Unrealized appreciation ..... $(3,179,967)$
c. Total\$ $(2,428,759)$
4. Receivable buyback contributions paid$\$ \quad 797,486$
5. Total receipts during period (1.e. +2 .c. +3. .c. +4 .) ..... \$ 3,122,367
C. Disbursements During Period
6. Pension payments ..... \$ 421,499
7. DROP payments ..... 141,962
8. Contribution refunds ..... 148,865
9. Administrative expenses ..... 108,733
10. Increase / (decrease) in Chapter 185 reserve ..... 0
11. Decrease in receivable buyback contributions ..... 816,018
12. Total disbursements during period ..... \$ 1,637,077
D. Market Value of Assets as of October 1, 2011 (A. + B.4. - C.7.) ..... \$ 26,880,688
E. Reconciliation of DROP Accounts Balance
13. DROP accounts balance as of October 1, 2010 ..... \$ 0
14. Benefit payments into DROP accounts during year ..... 141,961
15. Disbursements from DROP accounts during year ..... (0)
16. Expenses deducted from DROP accounts ..... (0)
17. Investment gains/(losses) during year ..... 3,739
18. DROP accounts balance as of September 30, 2011 ..... \$ 145,701
[^1]Table VI
CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM
Development of Actuarial Value of Assets
A. Preliminary actuarial value of assets as of beginning of year
B. Contributions and miscellaneous income
C. Benefit payments and administrative expenses
D. Actual investment earnings net of investment expenses
E. Expected investment earnings (A. x . $08+$ (B.-C.) x .04)
F. Excess of actual over expected investment earnings (D.-E.)
G. Recognition of excess earnings over 4 years

1. $25 \%$ from this plan year
2. $25 \%$ from last plan year
3. $25 \%$ from two plan years ago
4. $25 \%$ from three plan years ago
5. Total
H. Preliminary actuarial value of assets at end of year (A. + B. - C. + E. + G.5.)
I. Actuarial value of assets limitations
6. Market value of assets prior to exclusion of Chapter 185 accumulated excess reserve
7. $80 \%$ of I.1.
8. $120 \%$ of I. 1
9. Actuarial value of assets
(H., but not less than I.2. or more than I.3.)
J. Return on Actuarial Value
K. Net actuarial value of assets

| $10 / 1 / 2010-$ |
| :---: |
| $9 / 30 / 2011$ |

10/1/2009 -
$9 / 30 / 2010$
\$ 2
$26,633,168$
$3,483,585$
839,591
$(1,158,70$
\$ 22
$22,847,3$
$3,536,5$
777,0
777,080
2,315,516
$1,938,165$

| $(3,395,117)$ | 377,351 |
| :---: | :---: |
| $(848,779)$ | 94,338 |
| 94,338 | $(331,501)$ |
| $(331,501)$ | $(898,054)$ |
| $(898,054)$ |  |
| $(1,983,996)$ | 223,436 |
| $(911,781)$ |  |

(1,326,005)
(
$\$ 19,6$
3,0
5
3
$3,092,75$
549,781
348,585
$1,674,590$
)
\$ 29,529,579
\$
$26,633,16$
68 \$
\$
$22,847,3$
\$
\$ 26,880,688
21,504,550
32,256,826
\$
20,316,318
30,474,478
$29,529,579 \quad \$ \quad 26,633,168$
252,417 \$ 1,026,38
29,529,579 $\$ \quad \mathbf{2 6 , 6 3 3}, 168$

10/1/2007 9/30/2008

\$ 16,347,802
 425,673 $(2,181,206)$
$1,411,010$
$(3,592,216)$
893,743
223,436

| $(24,981)$ |
| :---: |
| 22,024 |
| $(2,854)$ |
| 46,270 |

\$
\$

\$ 1
7,030,446
3,624,357
20,436,535
9,556,858
14,335,288
11,939,547
831,221

## 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 | Adjusted Base Amount |  |  | Actual Amount Received |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chapter 185 Contribution | Cost for New Benefits | Total <br> Chapter 185 <br> Contribution <br> Used | Chapter 185 <br> 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 |

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

[^2]
## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

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

## A. Derivation of Actuarial Gain / (Loss) for Plan Year Ended September 30, 2011

1. City and State normal cost previous valuation \$ 1,498,440
2. Unfunded actuarial accrued liability previous valuation \$8,345,786
3. City and State contributions previous year (limited by 99-1) \$ 2,332,398
4. Interest on:
(a) City normal costs $\$ 119,875$
(b) Unfunded actuarial accrued liability
667,663
(c) City and State
contributions 83,794
(d) Net total: (a) + (b) - (c) \$ 703,744
5. Increase in unfunded actuarial accrued liability due to plan amendment
\$ 1,390,232
6. Increase in unfunded actuarial accrued liability
due to assumptions / methods change
7. Expected unfunded actuarial accrued liability current year: $1 .+2 .-3 .+4 .+5 .+6$. $\$ 10,607,524$
8. Actual unfunded actuarial accrued liability current year $\$ 12,943,160$
9. Actuarial gain / (loss): 7. - 8. $\$(2,335,636)$
B. Approximate Portion of Plan Year Gain / (Loss) Due to Investments
10. Actuarial value of assets previous year \$27,137,230
11. Contributions during year \$3,483,585
12. Disbursements during year (expenses \& benefits) \$ 930,191
13. Expected appreciation for period \$ 2,263,611
14. Expected actuarial value of assets current year
$1 .+2 .-3 .+4$. $\$ 31,954,235$
15. Actual actuarial value of assets current year $\$ 29,529,579$
16. Approximate gain / (loss): 6. -5. $\$(1,954,235)$
C. Approximate Portion of Plan Year

Gain / (Loss) Due to Liabilities: A. - B. \$ $(381,401)$

Table VIII
D. Review of Cumulative Actuarial Gains / (Losses) for Determination of $13^{\text {th }}$ Checks to Retirees for the 2010/2011 Plan Year

| Plan Year |  | Actuarial Gains / (Losses) |
| :---: | :---: | :---: |
| $2004 / 2005$ |  | $(1,323,287)$ |
| $2005 / 2006$ | $(1,289,042)$ |  |
| $2006 / 2007$ | 374,572 |  |
| $2007 / 2008$ | $(35,607)$ |  |
| $2008 / 2009$ | $(2,228,287)$ |  |
| $2009 / 2010$ | $(887,495)$ |  |
| $2010 / 2011$ | $(2,335,636)$ |  |
| Cumulative Total Gains / (Losses) | $\$(7,724,782)$ |  |

Requirements for $13^{\text {th }}$ 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)
- $13^{\text {th }}$ check payable to Tier One members only


## Table IX

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Amortization of Unfunded Liability

| Date | Total Unfunded Liability | Amortization <br> Payment |
| :---: | :---: | :--- |
| $10 / 01 / 2011$ | $\$ 12,943,160$ | $\$ 1,102,215$ |
| $10 / 01 / 2012$ | $\$ 12,758,618$ | $\$ 1,102,215$ |
| $10 / 01 / 2013$ | $\$ 12,559,774$ | $\$ 1,102,215$ |
| $10 / 01 / 2014$ | $\$ 12,345,520$ | $\$ 1,102,215$ |
| $10 / 01 / 2041$ | $\$$ | 0 |

Table X

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Accounting Disclosure Exhibit

I. Number of Plan Participants

1. Retirees, disabled and beneficiaries receiving benefits 13 15
2. Terminated plan participants entitled to but not yet receiving benefits 9
3. DROP participants 0
4. Active plan participants $\quad 113 \quad 110$
5. Total $\frac{135}{}$ 135
II. Financial Accounting Standards Board Allocations as of October 1, 2010

## A. Statement of Accumulated Plan Benefits

1. Actuarial present value of accumulated vested plan benefits
a. Participants currently receiving benefits

| $\$ 3,744,864$ | $\$$ | $4,952,233$ |
| ---: | ---: | ---: |
| 0 |  | $3,300,370$ |
| 625,758 |  | 398,018 |
| $21,493,400$ |  |  |
|  | $25,989,506$ |  |
| $25,864,022$ |  | $34,640,127$ |

2. Actuarial present value of accumulated non-vested plan benefits

1,175,701 809,675
3. Total actuarial present value of accumulated plan benefits
\$ 27,039,723 \$ 35,449,802
B. Statement of Change in Accumulated Plan Benefits

> 1. Actuarial present value of accumulated plan benefits as of October 1,2010 \$ 27,039,723
2. Increase (decrease) during year attributable to:
a. Plan amendment
\$ 1,388,826
b. Actuarial assumptions and method changes

961,974
c. Benefits paid and contribution refunds $(570,364)$
d. DROP benefits credited $(141,962)$
e. Other, including benefits accumulated and increase for interest due to decrease in the discount period
f. Net increase
$6,771,605$
$\$ 8,410,079$
3. Actuarial present value of accumulated plan benefits as of October 1, 2011

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
7.75\%

See Table XI, Item 21.
See Table XII, Item 12.

Table X
(continued three)
III. Schedule of Funding Progress (As required by GASB \#25)

| (1) Valuation Date | (2) <br> Actuarial Value of Assets (AVA) |  | (3) <br> Actuarial Accrued Liability (AAL) |  | (4) <br> Unfunded <br> Actuarial Accrued Liability (UAAL) (3) - (2) |  | (5) <br> Funded Ratio <br> (2) / (3) | (6) <br> Annual Covered Payroll |  | (7) UAAL as \% of Payroll (4) / (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| October 1, 1997 | \$ | 953 | \$ | 655 | \$ | (298) | 145.6\% | \$ | 3,015 | (9.9\%) |
| 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 | \$ | 30,071 | \$ | 42,473 | \$ | 12,402 | 70.8\% | \$ | 8,819 | 140.6\% |

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 |  | 2,332,398 | 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
Actuarial cost method
Amortization method
Remaining amortization period
Asset valuation method
Actuarial assumptions:
Investment rate of return*
Projected salary increases*
Cost-of-living adjustments

* Includes inflation at 3.5\%
7.75\%
6.00\%

October 1, 2011
Entry Age Normal Level Percent
Layered amortization
20-30 years
See Table XII., Item 8.

Variable $13^{\text {th }}$ check, only if plan has cumulative net actuarial gain

[^3]
# Table X <br> (continued five) 

## Accounting Disclosure Exhibit

## VI. Revenues by Source and Expenses by Type

Revenues by Source

| Plan <br> Year | Employee Contributions |  | City <br> Contributions |  | State <br> Contributions |  |  | nvestment Income | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2006 | \$ | 870,556 | \$ | 1,166,132 | \$ | 249,845 | \$ | 736,959 | \$ 3,460,091 |
| 2005 | \$ | 784,618 | \$ | 659,295 | \$ | 492,619 | \$ | 703,937 | \$ 2,640,469 |
| 2004 | \$ | 413,756 | \$ | 847,764 | \$ | 0 |  | 474,764 | \$ 1,736,284 |

Expenses by Type

| Plan <br> Year | Benefits \& DROP Payments |  | Expenses |  | Refunds |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2006 | \$ | 124,873 | \$ | 137,588 | \$ | 74,324 | \$ | 321,653 |
| 2005 | \$ | 73,081 | \$ | 142,037 | \$ | 74,397 | \$ | 289,515 |
| 2004 | \$ | 47,218 | \$ | 131,471 | \$ | 19,514 | \$ | 198,203 |

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 110-09-170.
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: total cash remuneration for services rendered.
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 <br> (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.

## 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. The DROP account shall be credited with the assumed fund investment return per year. 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.

## Table XI

(continued four)

## 19. Variable Thirteenth Check

For Tier One members retiring on or after October $1,2004,13^{\text {th }}$ 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 $13^{\text {th }}$ 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

The benefit multiplier was changed from $3.0 \%$ to $3.5 \%$ per year for Credited Service prior to October 1, 2001 for members employed by the City as of April 25, 2011.

Previously, there was no post retirement supplement described in Item 20. above.

Table XII

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Actuarial Assumptions and Actuarial Cost Methods

1. Mortality:

The RP-2000 Mortality Table with generational projection rates.
2. Interest to be Earned by Fund:
$7.75 \%$, 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:

| Age | Withdrawal Rates <br> Per 100 Employees |
| :---: | :---: |
| 20 |  |
| 25 | 6.0 |
| 30 | 5.7 |
| 35 | 5.0 |
| 40 | 3.8 |
|  | 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.

## Table XII (continued two)

## 6. Salary Increase Factors:

Current salaries are assumed to increase at a rate of $6.0 \%$ per year until retirement. In addition, cash outs of accumulated sick and vacation leaves are assumed to equal to $30 \%$ of earnings for the final year of employment.
7. Disability Rates:

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

| Age | Disability Rates <br> Per100 Employees |
| :---: | :---: |
| 20 |  |
| 25 | 0.03 |
| 30 | 0.03 |
| 35 | 0.04 |
| 40 | 0.05 |
|  | 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 <br> (continued three) 

## 9. Actuarial Cost Method:

Normal Retirement, Termination, Disability and Pre-Retirement Death Benefits: Entry-AgeActuarial 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:
$3.5 \%$ per year.
12. Changes from Last Actuarial Valuation:
a. The assumed mortality rates were changed from those of the 1994 Group Annuity Mortality Table for males and females with sex distinct rates to those of the RP-2000 Mortality Table with generational projection rates.
b. The assumed interest to be earned by the Fund was changed from $8.0 \%$ to $7.75 \%$, compounded annually, net of investment expenses.
c. Current salaries previously were assumed to increase at a rate of $7.0 \%$ per year until retirement with cash outs of accumulated sick and vacation leaves are assumed to equal $40 \%$ of earnings for the final year of employment, to $6.0 \%$ per year until retirement with cash outs of accumulated sick and vacation leaves are assumed to equal $30 \%$ of earnings for the final year of employment.
d. The inflation assumption was changed from $4.0 \%$ to $3.5 \%$ per year.

Table XIII

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

Distribution of Active Participants by Age and Service Groups
as of October 1, 2011
Years of Credited Service

| Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 25 | 4 | . | . | . | . | . | . | 4 |
| 25-29 | 15 | 4 | . | . | . | . | . | 19 |
| 30-34 | 4 | 14 | 3 | . | . | . | . | 21 |
| 35-39 | 6 | 6 | 1 | 3 | . | . |  | 16 |
| 40-44 | 1 | 7 | 8 | 12 | 4 | . | . | 32 |
| 45-49 | 1 | 4 | 1 | 1 | 2 | . | . | 9 |
| 50-54 |  | . | 1 | 6 | . | . | . | 7 |
| 55-59 |  | . | . | 2 | . | . | . | 2 |
| 60-64 |  |  | . | . | . | . | . | 0 |
| 65 \& Over |  |  |  |  |  |  |  | 0 |
| TOTAL | 31 | 35 | 14 | 24 | 6 | 0 | 0 | 110 |
|  |  |  | 10/01/2010 |  | $\underline{10 / 01 / 2011}$ |  |  |  |
|  |  | ned Age | 36.94 years |  | 37.86 years |  |  |  |
|  |  | ered Pay | \$80,968 |  | \$80,171 |  |  |  |
|  |  |  | 11.5\% |  | 10.9\% |  |  |  |

Table XIV

## CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

## Reconciliation of Participant Data

A. Active Participants

1. Active participants previous year ..... 113
2. Retired during year ..... (1)
3. Entered DROP during year ..... (3)
4. Died during year ..... (1)
5. Disabled during year ..... 0
6. Terminated vested during year ..... (2)
7. Terminated non-vested during period ..... (1)
8. New active participants ..... 3
9 Rehired / Reinstated ..... 2
9. Active participants current year ..... 110
B. Participants Receiving Benefits
10. Participants receiving benefits previous year ..... 13
11. New retired participants ..... 1
12. New terminated vested receiving benefits ..... 1
13. New disabled receiving benefits ..... 0
14. New beneficiaries receiving benefits ..... 0
15. DROP participants exited and retired ..... 0
16. Died or ceased payment during year ..... 0
17. Retired or terminated vested receiving benefits current year ..... 15
C. Terminated Participants Entitled to Future Benefits
18. Terminated participants entitled to future benefits previous year ..... 9
19. Died during year ..... 0
20. Commenced receiving benefits during year ..... (1)
21. Rehired / Reinstated during year ..... (2)
22. New terminated participants ..... 1
23. Terminated participants entitled to future benefits current year ..... 7
D. DROP Participants
24. DROP participants previous year ..... 0
25. New entrants during year ..... 3
26. Died during year ..... 0
27. Exited and retired during year ..... 0
28. DROP participants current year ..... 3

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

| Current Age $\qquad$ | Count | Total Annual Benefit | Average <br> Annual <br> Benefit |
| :---: | :---: | :---: | :---: |
| Less than 40 | 2 | \$ 44,292 | \$ 22,146 |
| 40-44 | 3 | 32,610 | 10,870 |
| 45-49 | 1 | 13,792 | 13,792 |
| 50-54 | 1 | 10,032 | 10,032 |
| 55-59 | 0 | 0 | 0 |
| 60-64 | 0 | 0 | 0 |
| 65 \& over | $\underline{0}$ | 0 | 0 |
| TOTAL | 7 | \$ 100,725 | \$ 14,389 |

B. Receiving Benefits \& DROP Participants

| Current Age Group | Count | Total <br> Annual <br> Benefit |  | Average Annual Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 40 | 0 | \$ | 0 | \$ | 0 |
| 40-44 | 2 |  | 170,789 |  | 85,395 |
| 45-49 | 4 |  | 252,161 |  | 63,040 |
| 50-54 | 0 |  | 0 |  | 0 |
| 55-59 | 4 |  | 115,404 |  | 28,851 |
| 60-64 | 5 |  | 109,141 |  | 21,828 |
| 65 \& over | 3 |  | 52,059 |  | 17,353 |
| TOTAL | 18 | \$ | 699,555 |  | 38,864 |

## 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 |  |  |
| :---: | :---: | :---: | :---: |
|  | Market <br> Value | Actuarial Value | Assumed |
| 09/30/2011 | (4.4\%) | 0.9\% | 8.0\% |
| 09/30/2010 | 9.5\% | 4.2\% | 8.0\% |
| 09/30/2009 | 1.2\% | 3.1\% | 8.0\% |
| 09/30/2008 | (11.9\%) | 4.2\% | 8.0\% |
| 09/30/2007 | 14.6\% | 9.6\% | 8.0\% |


| Last 3 Yrs. | $1.9 \%$ | $2.7 \%$ | $8.0 \%$ |
| :--- | :--- | :--- | :--- |
| Last 5 Yrs. | $1.4 \%$ | $4.4 \%$ | $8.0 \%$ |

B. Recent Salary Increase and Turnover Experience*

| Year Ended | Salary Increase |  | Ratio of Actual Turnover to Expected |
| :---: | :---: | :---: | :---: |
|  | Actual | Assumed |  |
| 09/30/2011 | 0.3\% | 7.0\% | 0.70 |
| 09/30/2010 | (0.5\%) | 7.0\% | 1.89 |
| 09/30/2009 | 23.4\% | 7.0\% | 1.13 |
| 09/30/2008 | (0.2\%) | 7.0\% | 2.07 |
| 09/30/2007 | 33.1\% | 7.0\% | 1.24 |
| Last 3 Yrs. | 7.2\% | 7.0\% | 1.24 |
| Last 5 Yrs. | 10.3\% | 7.0\% | 1.41 |

[^4] No ratios of actual turnover to expected turnover were available.

## Table XVII <br> CITY OF LAUDERHILL POLICE OFFICERS' RETIREMENT SYSTEM

State Required Exhibit
A. Participant Data

1. Active participants
2. Retired participants and beneficiaries receiving benefits
3. DROP participants
4. Disabled participants receiving benefits
5. Terminated vested participants
6. Total participants
7. Annual payroll of active participants
8. Annual benefits payable to those currently receiving benefits
9. Annual benefits payable to terminated vested participants
10. Annual benefits payable to DROP participants
B. Value of Assets
11. Actuarial value
12. Market value
\$ 27,137,230
\$ 25,395,398

113

|  | Prior Plan |
| :---: | :---: |
| Prior |  |
|  | Assumptions |
| $10 / 01 / 2010$ | $10 / 01 / 2011$ |

110
$10 \quad 12$


3
9
\$ 9,149,345
\$ 348,951
\$ 143,789
\$ 0
\$ 29,529,579
\$ 29,529,579
\$ 29,529,579

| Current Plan |
| :---: |
| Prior |
| Assumptions |
| $10 / 01 / 2011$ |

Current Plan Current Assumptions
$\qquad$

110
12 37

135
\$ 8,818,777
\$ 441,842
\$ 100,725
\$ 257,713
\$ 26,880,688
C. Liabilities

1. Actuarial present value of future expected benefit payments for active members
a. Age retirement benefits
b. Vesting benefits
c. Death benefits
d. Disability benefits
e. Total
2. Actuarial present value of future expected benefit payments terminated vested members
3. Actuarial present value of future expected benefit payments for those receiving benefits
a. Service retired
b. DROP participants
c. Disability retired
d. Beneficiaries
e. Total

\$ 48,277,701
\$ 49,688,491
\$ 46,413,571
2,960,679 183,437
307,952
\$ 49,865,639
\$ 625,758 $\$ \quad 374,423 \quad \$ \quad 374,423 \quad \$ \quad 398,018$

| $\$$ | $45,829,315$ |  | $\$ 46,413,571$ |
| ---: | ---: | ---: | ---: |
| $3,326,476$ | $2,960,679$ |  |  |
| 238,674 |  | 183,437 |  |
|  | 294,026 |  | 307,952 |
|  |  |  |  |
|  | $49,688,491$ |  | $\$ 49,865,639$ |

398,018

Table XVII
(continued two)

|  |  | 0/01/2010 |  | Prior Plan <br> Prior Assumptions 10/01/2011 |  | Current Plan Prior Assumptions 10/01/20011 |  | Current Plan Current Assumptions 10/01/2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. Total actuarial present value of future expected benefit payments | \$ | 52,930,502 | \$ | 56,404,957 | \$ | 58,008,509 |  | 58,516,260 |
| 5. Actuarial accrued liabilities | \$ | 35,483,016 | \$ | 40,080,787 | \$ | 41,471,019 |  | 42,472,739 |
| 6. Unfunded actuarial accrued liabilities (see footnote 1/ for separation) | \$ | 8,345,786 | \$ | 10,551,208 | \$ | 11,941,440 |  | 12,943,160 |

D. Statement of Accumulated Plan Benefits

1. Actuarial present value of accumulated vested plan benefits
a. Participants currently receiving benefits
b. DROP participants
c. Participants due deferred benefits
\$ 3,744,864
d. Other participants
e. Total
$\begin{array}{r}21,493,400 \\ \hline 25,864,022\end{array}$
2. Actuarial present value of accumulated non-vested plan benefits
3. Total actuarial present value of accumulated plan benefits
$\qquad$
$\qquad$ 785,266
```
\$ 4,952,233
3,300,370
398,018
\(\begin{array}{r}25,989,506 \\ \hline \$ 34,640,127\end{array}\)
\$ 34,640,127
```

\$ 27,039,723
\$ 33,099,002
\$ 34,487,828
\$ 35,449,802
E. Statement of Change in Accumulated Plan Benefits

1. Actuarial present value of accumulated plan benefits as of October 1, 2010
\$ 27,039,723
2. Increase (decrease) during year attributable to:
a. Plan amendment
\$ 1,388,826
b. Actuarial assumptions and methods changes

961,974
c. Benefits paid and contribution refunds
$(570,364)$
d. DROP benefits credited
$(141,962)$
e. Other, including benefits accumulated and increase for interest due to decrease in the discount period
f. Net increase (decrease)

| $6,771,605$ |
| :--- |
| $\$ \quad 8,410,079$ |

3. Actuarial present value of accumulated plan benefits as of October 1, 2011
\$ 35,449,802

Table XVII
(continued three)

## F. Pension Cost

1. Total normal cost including expenses

| $10 / 01 / 2010$ |
| :--- |

2. Expected member contribution
\$ 2,413,375

| Prior Plan | Current Plan |
| :---: | :---: |
| Prior | Prior |
| Assumptions | Assumptions |
| $10 / 01 / 2011$ |  |

Current Plan<br>Current<br>Assumptions<br>10/01/2011

3. Item 2. as percentage of payroll
4. Net employer normal cost
$\begin{array}{r}10.0 \% \\ \hline \$ \quad 1,498,440\end{array}$
$\$ 2,300,929$
\$ 2,347,769
\$ 2,306,643
5. Payment required to amortize unfunded liability 715,705
6. Total employer required contribution (including interest)
$\$ 2,306,698$
7. Item 6. as a percentage of payroll
8. Estimated State contributions
\$ $\quad 25.2 \%$
9. Item 8. as a percentage of payroll
10. Net amount payable by City
\$ 332,466
3.6\%
\$ 1,974,232
$\begin{array}{r}881,878 \\ 10.0 \% \\ \hline \$ \quad 1,419,051\end{array}$
$\begin{array}{r}881,878 \\ 10.0 \% \\ \hline \$ \quad 1,465,891\end{array}$
$\begin{array}{r}881,878 \\ 10.0 \% \\ \hline \$ \quad 1,424,765\end{array}$
11. Item 10. as a percentage of payroll
21.6\%

905,638
$1,019,981$
$1,102,215$
G. Past Contributions

1. Total contribution required
\$ 3,221,633 \$ 3,303,740 \$ 3,471,661 \$ 3,511,300
2. Actual contributions made:
a. Employees

| $1,151,187$ |
| ---: |
| $2,047,326$ |
| 285,072 |
| $\$ 3,483,585$ |

N/A
N/A
b. City
c. State
d. Total
$\$(887,495)$
$\$(2,335,636)$

| $\$$ | $2,589,783$ | $\$$ | $2,629,422$ |
| :--- | ---: | :--- | ---: |
|  | $30.4 \%$ |  | $30.9 \%$ |
| $\$$ | 285,072 | $\$$ | 285,072 |
|  | $3.2 \%$ |  | $3.2 \%$ |
| $\$$ | $2,304,711$ | $\$$ | $2,344,350$ |
|  | $26.1 \%$ |  | $26.6 \%$ |

H. Net Actuarial Gain / (Loss)

| $\$$ | $67,471,165$ | $\$$ | $63,721,629$ | $\$$ | $63,721,629$ | $\$$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $61,676,518$ |  |  |  |  |  |
| \$ | $6,747,117$ | $\$$ | $6,372,163$ | $\$$ | $6,372,163$ | $\$$ |
| N/A | N/A | N/A 167,652 |  |  |  |  |
|  |  | N/A |  |  |  |  |

contributions from other sources
N/A
N/A
N/A
N/A
4. Amount of active members' accumulated contributions
\$ 5,408,700
\$
5,608,268
\$
\$
5,608,268
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

## Table XVII (continued four)

1/ Unfunded Actuarial Accrued Liabilities

| Description and Amount of Original Liability | $\begin{gathered} \text { Remaining } \\ \text { Amortization } \\ \text { Period } \\ \hline \end{gathered}$ | Unamortized <br> Amount as of Valuation Date | Amortization Payment |
| :---: | :---: | :---: | :---: |
| 10/01/1999 New Method | 18 years | \$ (286,648) | \$ $(27,896)$ |
| 10/01/2000 Actuarial Loss | 19 years | 331,675 | 31,478 |
| 10/01/2000 Plan Amendment | 19 years | 260,232 | 24,698 |
| 10/01/2001 Actuarial (Gain) | 20 years | $(142,413)$ | $(13,212)$ |
| 10/01/2002 Actuarial (Gain) | 21 years | $(331,489)$ | $(30,126)$ |
| 10/01/2002 Plan Amendment | 21 years | 944,572 | 85,843 |
| 10/01/2002 Plan Amendment | 21 years | 158,748 | 14,427 |
| 10/01/2003 Actuarial Loss | 22 years | 88,660 | 7,908 |
| 10/01/2004 Actuarial Loss | 23 years | 167,374 | 14,675 |
| 10/01/2004 Plan Amendment | 23 years | 977,427 | 85,697 |
| 10/01/2005 Actuarial Loss | 24 years | 1,238,926 | 106,940 |
| 10/01/2006 Actuarial Loss | 25 years | 1,221,866 | 103,971 |
| 10/01/2006 Assumption Change | 25 years | 852,317 | 72,525 |
| 10/01/2007 Actuarial (Gain) | 26 years | $(359,263)$ | $(30,173)$ |
| 10/01/2008 Actuarial Loss | 27 years | 34,530 | 2,865 |
| 10/01/2009 Actuarial Loss | 28 years | 2,181,938 | 179,088 |
| 10/01/2010 Actuarial Loss | 29 years | 877,120 | 71,268 |
| 10/01/2011 Actuarial Loss | 30 years | 2,335,636 | 188,023 |
| 10/01/2011 Plan Amendment | 20 years | 1,390,232 | 128,978 |
| 10/01/2011 Assumptions Change | 25 years | 1,001,720 | 85,238 |
| TOTAL |  | \$ 12,943,160 | \$1,102,215 |

## 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 VI, 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


Enrollment Number


5/7/2013
Date
11-07551
Enrollment Number


[^0]:    ${ }^{1}$ At market value as reported by Plan's Auditors.

[^1]:    ${ }^{1}$ As reported by Plan's Auditors.

[^2]:    ${ }^{1}$ A one-time use in the amount of $\$ 71,783$ from the Cumulative Excess also occurred.

[^3]:    ${ }^{1}$ Sum of City and State contributions, determined by the prior plan year's actuarial valuation.

[^4]:    * Information for plan years ending 09/30/2006 and earlier were shown as reported by the plan's former actuary.

