# CITY OF PARKLAND POLICE OFFICERS RETIREMENT PLAN

ACTUARIAL VALUATION AS OF OCTOBER 1, 2016

DETERMINES THE CONTRIBUTION FOR THE 2016/17 FISCAL YEAR



## TABLE OF CONTENTS

		<u>Page</u>
Discussion		1
Funding Resu		
Table I-A	Minimum Required Contribution	I-1
Table I-B	Sensitivity Analysis	1-2
Table I-C	Gain and Loss Analysis	1-3
Table I-D	Present Value of Future Benefits	1-4
Table I-E	Present Value of Accrued Benefits	1-5
Table I-F	Present Value of Vested Benefits	1-6
Table I-G	Entry Age Normal Accrued Liability	1-7
Table I-H	Unfunded Liability Bases	1-8
Accounting Re		
GASB 67/68 St	upplement as of September 30, 2016	
Assets		
Table II-A	Actuarial Value of Assets	11-1
Table II-B	Market Value of Assets	11-2
Table II-C	Investment Return	11-3
Table II-D	Asset Reconciliation	11-4
Table II-E	Historical Trust Fund Detail	11-5
Table II-F	Other Reconciliations	11-6
Table II-G	Allowable Chapter 175/185 Contribution	11-7
Table II-H	Historical Chapter 175/185 Contributions	11-8
Data		
Table III-A	Summary of Participant Data	III-1
Table III-B	Data Reconciliation	111-2
Table III-C	Inactive Participant Data	111-3
Table III-D	Projected Benefit Payments	111-4
Methods & As	sumptions	
Table IV-A	Summary of Actuarial Methods and Assumptions	IV-1
Table IV-B	Changes in Actuarial Methods and Assumptions	IV-2



January 23, 2017

#### Introduction

This report presents the results of the October 1, 2016 actuarial valuation for the City of Parkland Police Officers Retirement Plan. The report is based on the participant data and asset information provided by the pension plan administrator and, except for a cursory review for reasonableness including a comparison to the data provided for the previous valuation, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2016 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2016/17 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

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 <u>estimate</u> 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 IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the normal cost rate.

### Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2016/17 plan year. The minimum required contribution is \$131,560, which represents a decrease of \$13,440 from the prior valuation.

Table I-C provides a breakdown of the sources of change in the minimum required contribution. Significantly, the minimum required contribution increased by \$231 due to investment losses, decreased by \$45,704 due to a change in the expected amortization payments, increased by another \$3,543 due to demographic experience, and increased by \$28,490 due to the assumption changes that are described below. The market value of assets earned 6.95% during the 2015/16 plan year, whereas a 7.00% annual investment return was required to maintain a stable contribution rate.



Chapter 112, Florida Statutes, sets forth the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the City must contribute an amount equal to the annual normal cost of the plan plus an adjustment as necessary to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the City's 2016/17 minimum required contribution will be equal to \$131,560 and reduced by the portion of the Chapter 175/185 contribution that is allowed to be recognized during the 2016/17 plan year. As of the date of this report, the allowable portion of the Chapter 175/185 contribution is \$69,006 per year. However, this amount is subject to change depending on the amount of the Chapter 175/185 contribution for the 2016/17 plan year.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$2,347,235 without regard to future administrative expenses. As illustrated in Table I-A, current assets are sufficient to cover \$2,054,583 of this amount and the employer's 2016/17 expected contribution will cover \$131,560 of this amount, leaving \$161,092 to be covered by future employer funding beyond the 2016/17 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

#### Contents of the Report

Tables I-D through I-H provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Tables III-A through III-D provide statistical information concerning the plan's participant population. In particular, Table III-D gives a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables IV-A and IV-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits as of October 1, 2016, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

### **Assumption Changes**

Pursuant to the requirements of State law, the mortality basis has been changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Combined Mortality Table. This change increased the minimum required contribution for the 2016/17 plan year by \$18,060.

In addition to the mortality change, the assumed administrative expenses were increased from \$25,000 per year to \$35,000 per year. This change increased the minimum required contribution for the 2016/17 plan year by \$10,430.

### Certification

This actuarial valuation was prepared 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 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 change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm,

Charles T. Carr

**Consulting Actuary** 

Southern Actuarial Services Company, Inc.

Enrolled Actuary No. 14-04927

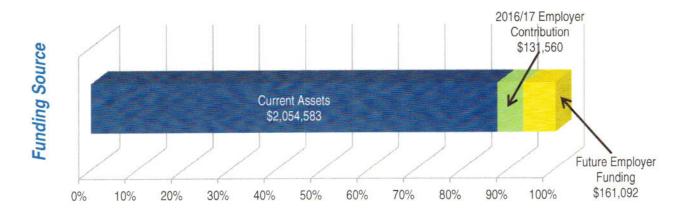
Charl J. C.

The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



## Minimum Required Contribution

### Table I-A



\* without the expense loading

### For the 2016/17 Plan Year

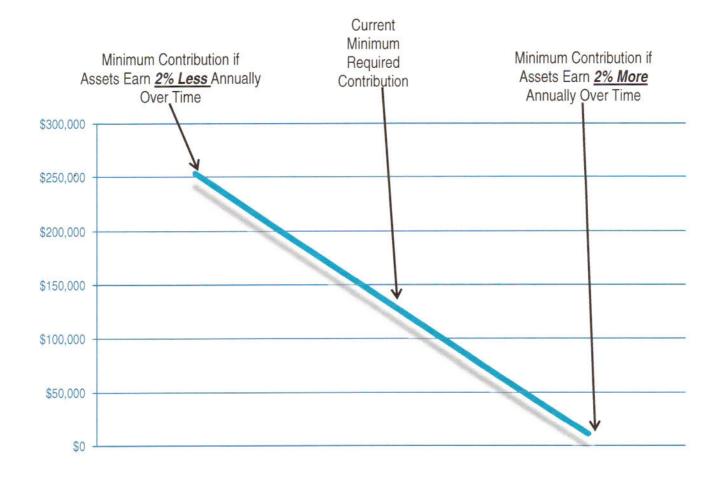
Entry Age Normal Cost	\$0
Unfunded Liability Amortization Payment	\$91,135
Expense Allowance	\$35,000
Expected Employee Contribution	\$0
-	
	\$126,135
Adjustment to Reflect End-of-Quarter Employer Contributions	\$5,425

Minimum Required Contribution \$131,560



## Sensitivity Analysis

Table I-B



The line above illustrates the sensitivity of the minimum required contribution to changes in the long-term investment return.



## Gain and Loss Analysis

Table I-C

Previous minimum required contribution	\$145,000
Increase (decrease) due to investment gains and losses ncrease (decrease) due to change in expected amortization pmts.  Increase (decrease) due to other experience	\$231 (\$45,704) \$3,543
Increase (decrease) due to plan amendments Increase (decrease) due to actuarial assumption changes Increase (decrease) due to actuarial method changes	\$0 \$28,490 \$0
Current minimum required contribution	\$131,560



## **Funding Results**

## Present Value of Future Benefits

Table I-D

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Deferred Vested Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants			
Service retirements	\$1,720,399	\$1,720,399	\$1,819,062
Disability retirements	\$496,710	\$496,710	\$528,173
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$2,217,109	\$2,217,109	\$2,347,235
Grand Total	\$2,217,109	\$2,217,109	\$2,347,235
Present Value of Eutura Payrall	\$0	\$0	\$0
Present Value of Future Payroll Present Value of Future Employee Contribs.	\$0	\$0 \$0	\$0
Present Value of Future Employer Contribs.	\$162,526	\$162,526	\$292,652
(without the expense loading)	Ψ102,020	ψ102,320	ΨΕΟΣ,ΟΟΣ



## Present Value of Accrued Benefits

Table I-E

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Deferred Vested Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants			
Service retirements	\$1,720,399	\$1,720,399	\$1,819,062
Disability retirements	\$496,710	\$496,710	\$528,173
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$2,217,109	\$2,217,109	\$2,347,235
Grand Total	\$2,217,109	\$2,217,109	\$2,347,235
Funded Percentage	92.67%	92.67%	87.53%



## Present Value of Vested Benefits

Table I-F

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Deferred Vested Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants			
Service retirements	\$1,720,399	\$1,720,399	\$1,819,062
Disability retirements	\$496,710	\$496,710	\$528,173
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$2,217,109	\$2,217,109	\$2,347,235
Grand Total	\$2,217,109	\$2,217,109	\$2,347,235



## Entry Age Normal Accrued Liability

Table I-G

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
,	P		
Actively Employed Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Deferred Vested Participants			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$0	\$0	\$0
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants			
Service retirements	\$1,720,399	\$1,720,399	\$1,819,062
Disability retirements	\$496,710	\$496,710	\$528,173
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$2,217,109	\$2,217,109	\$2,347,235
Grand Total	\$2,217,109	\$2,217,109	\$2,347,235
less Actuarial Value of Assets	(\$2,054,583)	(\$2,054,583)	(\$2,054,583)
Unfunded Accrued Liability	<u>\$162,526</u>	\$162,526	\$292,652



## Unfunded Liability Bases

## Table I-H

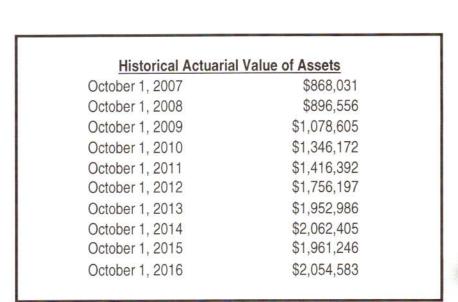
Description	Original <u>Amount</u>	Outstanding Balance	Amortization Payment	Years Rem.
	Total	\$292,652	\$91,135	
5/16/2007 Amendment	\$486,215	\$64,699	\$64,699	1
10/1/2007 Assumption Change	(\$93,549)	(\$12,446)	(\$12,446)	1
2006/07 Experience Loss	\$173,467	\$23,083	\$23,083	1
2007/08 Experience Loss	\$177,981	\$45,812	\$23,683	2
2008/09 Experience Loss	(\$37,260)	(\$13,920)	(\$4,958)	3
10/1/2009 Assumption Change	(\$161,252)	(\$60,248)	(\$21,457)	3
2011/12 Experience Gain	(\$162,950)	(\$37,143)	(\$37,143)	1
2012/13 Experience Gain	(\$23,235)	(\$10,246)	(\$5,296)	2
10/1/2013 Assumption Change	\$22,017	\$16,892	\$2,930	7
2013/14 Experience Loss	\$23,200	\$14,849	\$5,288	3
2014/15 Experience Loss	\$139,615	\$115,337	\$31,823	4
2015/16 Experience Loss	\$15,857	\$15,857	\$3,614	5
10/1/2016 Assumption Change	\$130,126	\$130,126	\$17,315	10



### Actuarial Value of Assets

### Table II-A

Actuarial Value of Ass	ets as of October 1, 2016	\$2,054,583
	apter 175/185 contributions	\$0
Minus adva	nce employer contributions	\$0
Market Value of As	sets as of October 1, 2016	\$2,054,583



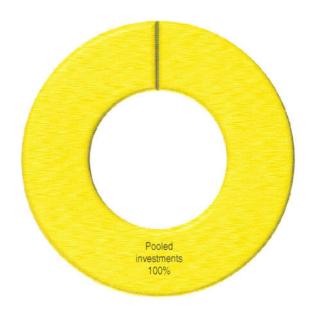


### Market Value of Assets

### Table II-B

### As of October 1, 2016

Market Value of Assets	<u>\$2,054,583</u>
Pooled investments	\$2,057,339
Accounts payable	(\$2,756)



#### **Historical Market Value of Assets** October 1, 2007 \$935,443 October 1, 2008 \$1,033,383 October 1, 2009 \$1,314,133 October 1, 2010 \$1,694,567 October 1, 2011 \$1,416,392 October 1, 2012 \$1,756,197 October 1, 2013 \$1,952,986 October 1, 2014 \$2,062,405 October 1, 2015 \$1,961,246 \$2,054,583 October 1, 2016



Table II-C Investment Return



4 1		101
Annual	Investmen	t Heturns

Plan	Market Value	Actuarial Value	Assumed
Year	Return	Return	Return
2006/07	9.86%	11.83%	6.50%
2007/08	-7.39%	-8.21%	7.00%
2008/09	5.65%	6.76%	7.00%
2009/10	8.06%	10.10%	7.00%
2010/11	3.34%	3.77%	7.00%
2011/12	14.54%	14.54%	7.00%
2012/13	9.17%	9.17%	7.00%
2013/14	7.66%	7.66%	7.00%
2014/15	0.01%	0.01%	7.00%
2015/16	6.95%	6.95%	7.00%
10yr. Avg.	5.62%	6.07%	6.95%



Assumed Return

Asset Reconciliation		Table II-D
	Market Value	<b>Actuarial Value</b>
As of October 1, 2015	\$1,961,246	\$1,961,246
Increases Due To:		
Employer Contributions Chapter 175/185 Contributions Employee Contributions	\$75,994 \$281,953 \$0	\$75,994 \$281,953 \$0
Total Contributions	\$357,947	\$357,947
Interest and Dividends Realized Gains (Losses) Unrealized Gains (Losses) Total Investment Income	\$0 \$0 \$134,955 \$134,955	(\$77,992)
Other Income	\$0	
Total Income	\$492,902	\$279,955
Decreases Due To:		
Monthly Benefit Payments Refund of Employee Contributions Transfer to Share Plan Total Benefit Payments	(\$150,987) \$0 (\$212,947) (\$363,934)	(\$150,987) \$0 (\$150,987)
Investment Expenses Administrative Expenses	\$0 (\$35,631)	(\$35,631)
Advance Employer Contribution Excess Chapter 175/185 Contribution		\$0 \$0
Total Expenses	(\$399,565)	(\$186,618)
As of October 1, 2016	\$2,054,583	\$2,054,583



### Historical Trust Fund Detail

\$75,994

\$281,953

Income

2015/16

Table II-E

					Realized	Unrealized	
Plan	Employer	Chapter	Employee	Interest /	Gains /	Gains /	Other
Year	Contribs.	Contribs.	Contribs.	<u>Dividends</u>	Losses	Losses	Income
2006/07	\$57,309	\$136,419	\$7,166	\$25,744	\$0	\$64,805	\$0
2007/08	\$165,177	\$138,420	\$3,775	\$0	\$0	-\$75,501	\$0

\$0 2008/09 \$181,139 \$167,707 \$3,777 \$0 \$0 \$64,540 \$0 \$116,539 2009/10 \$205,726 \$181,873 \$4,111 \$0 \$0 \$0 \$170,714 \$3,089 \$51,136 \$0 2010/11 \$94,376 \$0 \$0 \$0 \$0 \$0 \$214,966 \$0 2011/12 \$221,653 \$193,256 2012/13 \$144,592 \$216,205 \$0 \$0 \$0 \$162,590 \$0 \$233,777 \$0 \$0 \$0 \$148,145 \$0 2013/14 \$77,179 \$0 2014/15 \$9,187 \$254,476 \$0 \$0 \$293 \$0

\$0

\$0

\$134,955

\$0

\$0

Expenses		Other Actuarial Adjustments					<u>ustments</u>
	Monthly					Advance	Excess
Plan	Benefit	Contrib.	Admin.	Invest.	Transfer to	Employer	Chapter
Year	<b>Payments</b>	Refunds	Expenses	Expenses	Share Plan	Contribs.	Contribs.
2006/07	\$68,948	\$0	\$45,127	\$10,500	\$0	-\$8,276	-\$127,085
2007/08	\$91,484	\$0	\$42,447	\$0	\$0	\$0	\$69,414
2008/09	\$93,159	\$0	\$43,254	\$0	\$0	\$0	\$98,701
2009/10	\$95,023	\$0	\$32,792	\$0	\$0	\$0	\$112,867
2010/11	\$107,130	\$0	\$40,257	\$0	\$450,103	\$0	-\$348,395
2011/12	\$139,688	\$0	\$26,132	\$0	\$124,250	\$0	\$0
2012/13	\$142,278	\$0	\$37,121	\$0	\$147,199	\$0	\$0
2013/14	\$145,124	\$0	\$39,787	\$0	\$164,771	\$0	\$0
2014/15	\$148,026	\$0	\$31,619	\$0	\$185,470	\$0	\$0
2015/16	\$150,987	\$0	\$35,631	\$0	\$212,947	\$0	\$0

Note: Information was not available to separate the investment expenses from the investment income nor was information available to separate the investment income by source.



### Other Reconciliations

Table II-F

### Advance Employer Contribution

Advance Employer Contribution as of October 1, 2015	\$0
Additional Employer Contribution Minimum Required Contribution	\$145,000 (\$145,000)
Net Increase in Advance Employer Contribution	\$0
Advance Employer Contribution as of October 1, 2016	\$0
Excess Chapter 175/185 Contribution	
Excess Chapter 175/185 Contribution as of October 1, 2015	\$0
Additional Chapter 175/185 Contribution	\$281,953
Transfer to Share Plan	(\$212,947)
Allowable Chapter 175/185 Contribution	(\$69,006)
Net Increase in Excess Chapter 175/185 Contribution	\$0
Excess Chapter 175/185 Contribution as of October 1, 2016	\$0



## Allowable Chapter 175/185 Contribution

### Table II-G

### 1997 Base Amounts

Chapter 175 Regular Distribution	\$0
Chapter 175 Supplemental Distribution	\$0
Chapter 185 Distribution	\$0

### **Qualifying Benefit Improvements**

Ordinance 2006-45 \$69,006



## Historical Chapter 175/185 Contributions

## Table II-H

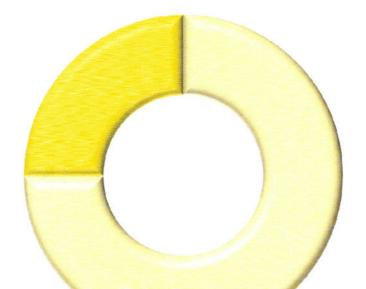
	Total Accumulated Excess Chapter 175/185 Contribution					
	Chapter 175 Regular Distribution	Chapter 175 Supplemental Distribution	Chapter 185 <u>Distribution</u>	Allowable Amount		
1998 Distribution 1999 Distribution 2000 Distribution 2001 Distribution 2002 Distribution 2003 Distribution 2004 Distribution 2005 Distribution 2006 Distribution 2007 Distribution 2008 Distribution 2009 Distribution 2010 Distribution 2011 Distribution 2012 Distribution 2013 Distribution 2014 Distribution 2015 Distribution	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$88,495 \$106,003 \$136,419 \$138,420 \$167,707 \$181,873 \$170,714 \$193,256 \$216,205 \$233,777 \$254,476 \$281,953	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 (\$263,504) (\$69,006) (\$69,006) (\$69,006) (\$69,006) (\$69,006) (\$69,006) (\$69,006) (\$69,006)		
Transfer to Share Plan	***			(\$1,284,740)		



### Summary of Participant Data

### Table III-A

As of October 1, 2016



Participant Distribution by Status

#### Actively Employed Participants Active Participants 0 **DROP** Participants 0 Inactive Participants Deferred Vested Participants 0 Due a Refund of Contributions 0 **Deferred Beneficiaries** 0 Participants Receiving a Benefit Service Retirements 3 Disability Retirements 1 Beneficiaries Receiving 0

**Total Participants** 

	8.		in Prior Va	idationo	
	Active	DROP	Inactive	Retired	Total
October 1, 2007	1	0	0	3	4
October 1, 2008	1	0	0	3	4
October 1, 2009	1	0	0	3	4
October 1, 2010	1	0	0	3	4
October 1, 2011	1	0	0	3	4
October 1, 2012	0	0	0	4	4
October 1, 2013	0	0	0	4	4
October 1, 2014	0	0	0	4	4
October 1, 2015	0	0	0	4	4
October 1, 2016	0	0	0	4	4



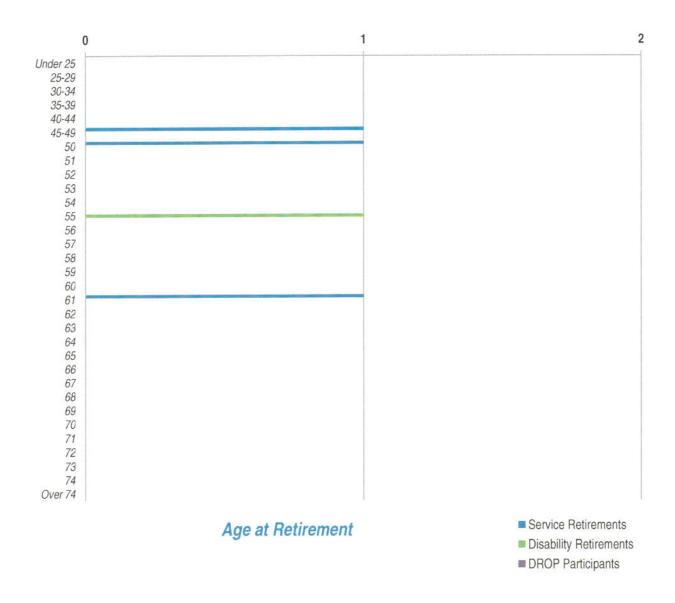
## Data Reconciliation Table III-B

	Active	DROP	<u>Vested</u>	Due a Refund	Def. Benef.	Service Retiree	Disabled Retiree	Benef. Rec'v.	<u>Total</u>
October 1, 2015	0	0	0	0	0	3	1	0	4
Change in Status Re-employed Terminated Retired									
Participation Ended Transferred Out Cashed Out Died									
Participation Began Newly Hired Transferred In New Beneficiary									
Other Adjustment									
October 1, 2016	0	0	0	0	0	3	1	0	4



## Inactive Participant Data

### Table III-C



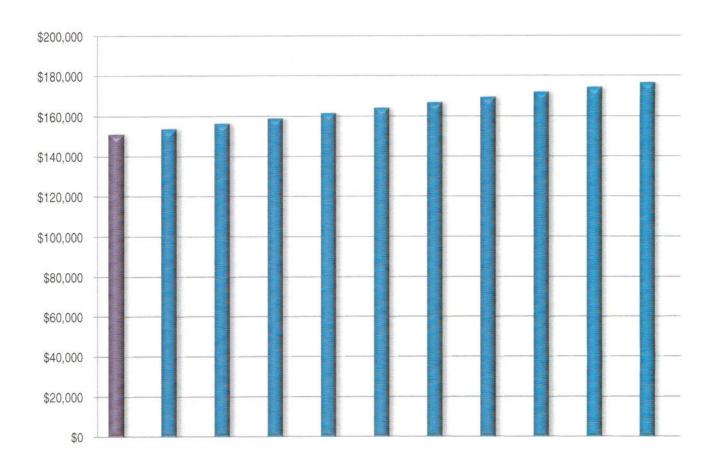
### Average Monthly Benefit

Service Retirements	\$3,316.87
Disability Retirements	\$2,883.24
Beneficiaries Receiving	Not applicable
DROP Participants	Not applicable
Deferred Vested Participants	Not applicable
Deferred Beneficiaries	Not applicable



## Projected Benefit Payments

### Table III-D



Actual For the period October 1, 2015 through September 30, 2016	\$150,987
Projected	
For the period October 1, 2016 through September 30, 2017	\$153,662
For the period October 1, 2017 through September 30, 2018	\$156,341
For the period October 1, 2018 through September 30, 2019	\$159,017
For the period October 1, 2019 through September 30, 2020	\$161,679
For the period October 1, 2020 through September 30, 2021	\$164,312
For the period October 1, 2021 through September 30, 2022	\$166,902
For the period October 1, 2022 through September 30, 2023	\$169,445
For the period October 1, 2023 through September 30, 2024	\$171,915
For the period October 1, 2024 through September 30, 2025	\$174,299
For the period October 1, 2025 through September 30, 2026	\$176,568



### Summary of Actuarial Methods and Assumptions

Table IV-A

NOTE: The following assumptions and methods have been selected and approved by the Board of Trustees based in part on the advice of the plan's enrolled actuary in accordance with the authority granted to the Board under the pension ordinances and State law.

#### 1. Actuarial Cost Method

Individual entry age normal cost method (nominally)

#### 2. Amortization Method

The unfunded accrued liability has been amortized as a level-dollar payment; experience gains and losses are amortized over a five-year period.

#### Asset Method

The actuarial value of assets is equal to the market value of assets.

#### 4. Interest (or Discount) Rate

7.00% per annum

#### Decrements

Post-retirement mortality:

Sex-distinct rates set forth in the RP-2000 Combined Mortality Table, with full generational improvements in mortality using Scale BB

#### Expenses

Administrative expenses payable from the plan have been assumed to be \$35,000 per year. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.



## Changes in Actuarial Methods and Assumptions

Table IV-B

Since the completion of the previous valuation, the mortality basis was changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Combined Mortality Table as required by State law and the assumed administrative expenses were increased from \$25,000 per year to \$35,000 per year.

