



**CITY COUNCIL WORK SESSION MEETING NOTICE**

**CITY HALL COUNCIL CHAMBERS**

**109 E. OLIVE, BLOOMINGTON, IL 61701**

**MONDAY, October 26 2015, 5:00 PM**

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PUBLIC COMMENT**
4. Employee Health Insurance Updates (*Nicole Albertson, Human Resource Director, Presentation 10 minutes, Council discussion 20 minutes*)
5. Presentation and discussion regarding the Proposed 2015 Library Estimated Tax Levy (*Georgia Bouda, Library Director, Presentation 5 minutes, Council discussion 10 minutes*)
6. Presentation and discussion regarding the Proposed 2015 Estimated Tax Levy (*Patti-Lynn Silva, Finance Director, Presentation 5 minutes, Council discussion 10 minutes*)
7. Police and Fire Pension Fund Contribution for FY 2016 (*Patti-Lynn Silva, Finance Director, Todd Schroeder, Actuary, Lauderbach & Amen, LLP, Presentation 10 minutes, Council Discussion 15 minutes*).
8. **ADJOURN** (*estimated time 6:15p.m.*)

 **CITY OF**  
*Bloomington* **ILLINOIS**  
**REGULAR AGENDA ITEM NO. 4**

FOR COUNCIL: October 26, 2015

**SUBJECT:** Employee Health Insurance Update

**RECOMMENDATION/MOTION:** Information Only

**STRATEGIC PLAN LINK:** Financially sound City providing quality basic services.

**STRATEGIC PLAN SIGNIFICANCE:** Budget with adequate resources to support defined services and level of services.

**BACKGROUND:** The City of Bloomington has engaged AJ Gallagher as its employee health insurance consultant and Gallagher, along with input from staff, has made recommendations for cost saving changes to the City's group health programs which would be implemented in the 2017 plan year. These recommendations are yet to be refined and staff is looking for general guidance from Council on making changes to employee health insurance offerings.

**COMMUNITY GROUPS/INTERESTED PERSONS CONTACTED:** None

**FINANCIAL IMPACT:** None – this is an informational council memo only.

**FUTURE OPERATIONAL COST ASSOCIATED WITH NEW FACILITY CONSTRUCTION**

Respectfully submitted for Council consideration.

Prepared by: Laurie Wollrab, MBA, PHR, Compensation and Benefit Manager

Reviewed by: Nicole Albertson, MBA, SPHR, Human Resource Director

Financial & budgetary review by: Carla A. Murillo, Budget Manager

Legal review by: Jeffery R. Jurgens, Corporation Counsel

Recommended by:



David A. Hales, City Manager

**Attachments:**

- Gallagher Insurance Company benefit informational sheet

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Motion: Informational only

Motion: \_\_\_\_\_ Seconded by: \_\_\_\_\_

	Aye	Nay	Other		Aye	Nay	Other
Alderman Black				Alderman Mwilambwe			
Alderman Buragas				Alderman Painter			
Alderman Fruin				Alderman Sage			
Alderman Hauman				Alderman Schmidt			
Alderman Lower							
				Mayor Renner			

## **Employee Benefit Progress and Long Term Planning Overview**

*The below outlines our progress in reviewing and making changes to employee benefits including long-term plans for the next 3 years. This work has been accomplished with the consulting assistance of AJ Gallagher, hired by the City in September 2014. Gallagher has held six (6) strategy meetings as well as conference calls to identify opportunities, gaps and to best understand the City's 2015/2016 goals and objectives. Please note that any changes to employee benefits will need to be negotiated with the City's collective bargaining units.*

### **2014**

- 2015 Financial Outlook Tool
- Benchmarking
- Forecast, Reserve Estimate
- Affordable Care Act (ACA) Cadillac plan tax projections
- Began negotiating language with collective bargaining units to address the Cadillac tax implications
- Revised premium equivalent rates to include Rx
- Reduced dental cost by removing commission paid to previous broker
- C2MB website demo & wallet cards

### **2015**

- Implemented the Benistar health plan for Medicare eligible employees which is projected to save the City \$100,000 in the first twelve months
- Employee Benefit/Wellness committee formed to improve communication in these areas
- Participating in a reverse auction platform for obtaining stop loss for PPO plan
- No plan changes for 1/1/16
- Increased focus on education at open enrollment for 1/1/16
  - Flexible Spending Accounts
  - Upcoming Dependent Eligibility Audit (DEA)
  - Upcoming ACA issues

### **2016**

- DEA and voluntary benefits March 2017
- Employee Health Insurance PPO and HMO plan changes for 1/1/17
- Addition of a new, lower cost plan (HSA) for 1/1/17
- Single-source wellness vendor for biometric screenings
- Voluntary benefits enrollment for 1/1/18
- Potential dental marketing

### **2017**

- Total compensation statements
- March 2017 - Compensation study?
- Rx marketing?

### **2018**

- Plan changes – overall cost savings and to address ACA Cadillac plan tax issue.



**AGENDA ITEM NO. 5**

FOR COUNCIL: October 26, 2015

**SUBJECT:** Presentation and discussion regarding the Proposed Library Board Recommended Property Tax Levy

**RECOMMENDATION/MOTION:** Discussion and Council Direction

**STRATEGIC PLAN LINK:** Goal 1. Financially Sound City Providing Quality Basis Services.

**STRATEGIC PLAN SIGNIFICANCE:** Objective 1a. Budget with adequate resources to support defined services and level of services.

**BACKGROUND:** The unaudited fund balance for the Library & Library Capital Assets at the close of fiscal year 2015 is \$4,345,716.92. This number may change once the audit is completed.

The Library's total Operating and Maintenance Budget is increasing by \$42,400 because of increased revenue from the Golden Prairie Public Library contract for service with the Bloomington Public Library and additional anticipated donations, fines and fees.

**FINANCIAL IMPACT:** The Library is requesting the same levy amount of \$4,546,710 for FY 2017 (Tax Levy Year 2015) under account number 23103100-50110 (Library Maintenance & Operations-Property Taxes) as last year.

Respectfully submitted for Council consideration.

Prepared by: Georgia Bouda, Library Director

Financial & budgetary review by: Chris Tomerlin, Budget Analyst  
Carla, Murillo Budget Manager

Legal review by: Jeffery R. Jurgens, Corporation Counsel

Recommended by: Carol Koos, Library Board President

**Attachments:**

- Library Budget Narrative
- Budget Sheets

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Motion: Discussion and Council Direction

Motion: \_\_\_\_\_

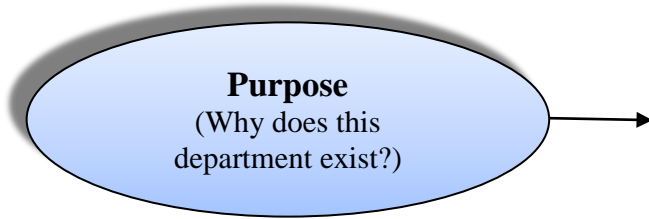
Seconded by: \_\_\_\_\_

	Aye	Nay	Other		Aye	Nay	Other
Alderman Black				Alderman Mwilambwe			
Alderman Buragas				Alderman Painter			
Alderman Fruin				Alderman Sage			
Alderman Hauman				Alderman Schmidt			
Alderman Lower							
				Mayor Renner			

# Library



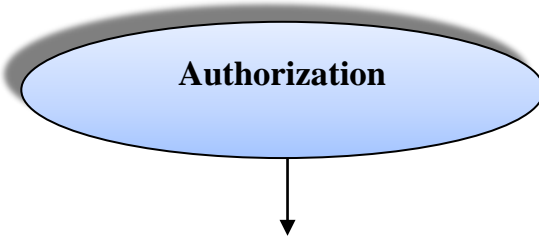
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The mission of the Bloomington Public Library is to provide our diverse community with a helpful and welcoming place that offers equal access to the world of ideas and information and supports lifelong learning. The Bloomington Public Library serves the residents of Bloomington and the Golden Prairie Public Library District. It is governed by a nine-member Board of Trustees appointed by the Mayor. The Library Board appoints the Library Director, sets the policies for the Library, and approves the budget and all expenditures for the Library. The Library is a community asset that the Library Board holds in trust for the public.

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The Illinois Local Library Act (75 ILCS 5/4) summarizes the powers and responsibilities of Library boards of trustees.

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**FY 2017  
Budget & Program  
Highlights**

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- The Library revenue amount from the City property tax levy requested is \$4,546,710, the same amount requested last year. Except for the increase of \$33,233 in FY15, the Library property tax levy has been flat for the past 6 years.
  - The Library will continue to explore new technology to meet the needs of the community. Use of eBooks from several platforms, downloadable music from Freegal, and downloadable magazines from Zinio continue to increase. Uses of these digital resources has grown 4% from 54,124 downloads in FY14 to 56,404 in FY15. Classes on the use of e-Readers and how to download free eBooks from the Library continue to be very popular. A digital media lab was opened in May 2013 and is used regularly. The Library regularly gives programs using its 3D printer, raspberry pi, OZObots, and other resources.
  - Proceeds from our successful Book Shoppe of about \$20,000 annually are used to supplement the Library's program budget.
  - Utility bills have been coming down because the boiler and controls system were upgraded in the spring of 2014. The air handler and air distribution system will likely be phase two in FY 2015.
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**Vision Statement**

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Bloomington Public Library is a vital community resource. The Library is passionate about what it is and what it does. The Library provides outstanding collections and the latest technologies in relaxed and inviting atmospheres. In addition, the Library offers relevant services and inspiring programs to meet diverse individual needs. Through the friendly and knowledgeable staff, the Library provides exceptional service to all of our citizens.

The Library and staff take an involved role in the community by partnering with organizations to enrich the quality of life. The Library uses technology to build upon traditional Library and civic values to create an enduring sense of place. To meet our community's expectations, the Library embraces its responsibility to thrive and grow. Mirroring the exponential development of the community, the Library will expand its locations, services, collections, and programs. The main Library, located downtown, provides the full range of services and will be enhanced by branches and other access points, both physical and virtual. The Bloomington Public Library provides a quiet space in a hectic world for interaction, communication, study, and reflection. The Library is a destination that cannot be visited often enough.

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**Funding Source**





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Property Taxes 85.5%, Golden Prairie Library District 7.4%, Grants, Fees, Fines and Other 4.7%, Replacement Tax 2.5%

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**What we  
accomplished  
in FY 2016**



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- The Library continues to be very busy. Total circulation for FY 2015 was 1,430,682 down 59,026 items loaned or 4% from last fiscal year's circulation of 1,489,708. Bloomington Public Library loaned 18.6 items per capita, exceeding the national average of 13.54 items per capita for communities with population of 50,000 to 99,999.
  - There were 367,216 visitors to the main Library and the Bookmobile in the past fiscal year which is an average of 30,000 visitors per month, a significant decrease from the 452,313 visitors the previous year.
  - During FY 2015, 48,332 individuals logged onto a public access computer compared to 60,399 the previous year.
  - 93,356 holds placed by customers were filled with items from the collection compared to 95,215 holds filled in FY 2014.
  - 34,709 residents of Bloomington, or about 45%, have Library cards, down slightly from 37,714 library cardholders in FY 2014.
  - Of the total circulation of 1,430,682, there were 697,030 adult books loaned, 39,263 teen books, 637,985 children's books, 44,322 eBooks loaned, 7,429 Freegal music downloads, and 4,653 magazines borrowed from Zinio.
  - The new bookmobile was delivered in February, 2015.
  - Space and parking continue to be issues.

These statistics demonstrate that staff are delivering friendly, helpful service to our customers and offering the materials they want in an inviting environment.

Our performance indicators over the past few years have shown tremendous growth in the usage of the Library. This year's numbers illustrate that the Library has hit its threshold for the size of its collection and space available. Without additional space and parking, use of the Library should not be expected to continue to grow at the rapid pace of the last ten years.

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## Revenue & Expenditures

Library	FY 2015 Actual	FY 2016 Adopted Budget	FY 2016 Projected	FY 2017 Proposed Budget
<b>Library Maintenance &amp; Operations</b>				
<b>Expenditures</b>				
Salaries	\$2,359,931	\$2,505,519	\$2,505,519	\$2,600,774
Benefits	\$818,158	\$912,255	\$912,255	\$963,480
Contractual	\$401,094	\$542,000	\$542,000	\$498,500
Commodities	\$1,069,868	\$1,105,800	\$1,105,800	\$1,083,720
Capital	\$0	\$0	\$0	\$0
Other	\$9,352	\$19,000	\$19,000	\$15,000
Transfer Out	\$231,732	\$193,336	\$193,336	\$158,836
<b>Department Total</b>	<b>\$4,890,134</b>	<b>\$5,277,910</b>	<b>\$5,277,910</b>	<b>\$5,320,310</b>
<b>Revenues</b>	<b>\$5,283,084</b>	<b>\$5,277,910</b>	<b>\$5,277,910</b>	<b>\$5,320,310</b>
<b>Next Generation Library Grant</b>				
<b>Expenditures</b>				
Salaries	\$9,000	\$9,000	\$9,000	\$7,000
Benefits	\$1,000	\$1,000	\$1,000	\$800
Contractual	\$0	\$50	\$50	\$0
Commodities	\$5,000	\$4,950	\$4,950	\$4,700
<b>Department Total</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$12,500</b>
<b>Revenues</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$12,500</b>
<b>Library Fixed Asset Replacement</b>				
<b>Expenditures</b>				
Capital Expenditures	\$329,029	\$72,721	\$72,721	\$162,100
Transfer Out	\$0	\$0	\$0	\$0
<b>Department Total</b>	<b>\$329,029</b>	<b>\$72,721</b>	<b>\$72,721</b>	<b>\$162,100</b>
<b>Revenues</b>	<b>\$282,344</b>	<b>\$156,804</b>	<b>\$156,804</b>	<b>\$122,304</b>
<b>Personnel</b>				
Full Time	44.00	45.00	45.00	45.00
Part-Time	19.17	17.99	18.17	17.06
Seasonal	1.53	1.71	1.61	2.10
<b>Department Total</b>	<b>64.70</b>	<b>64.70</b>	<b>64.78</b>	<b>64.16</b>

**Performance  
Measurements**



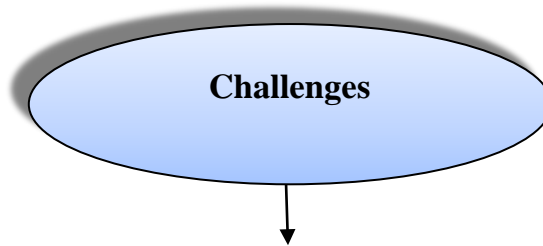
<b>Library</b>	<b>FY 2015 Actual</b>	<b>FY 2016 Approved Budget</b>	<b>FY 2016 Projected</b>	<b>FY 2017 Proposed Budget</b>
<b><i>Inputs:</i></b>				
Number of Full Time Employees	44	45	45	45
Department Expenditures	<b>\$5,283,084</b>	<b>\$5,277,910</b>	<b>\$5,277,910</b>	<b>\$5,320,310</b>
<b><i>Outputs:</i></b>				
Visitors to the Library	354,786	400,000	350,000	350,000
Visitors to the Bookmobile	12,430	13,000	12,500	12,500
Items Circulated	1,430,682	1,400,000	1,400,000	1,400,000
Cardholders	34,709	35,000	35,000	35,000
Total Items in Collection	307,261	300,000	300,000	300,000
Questions Answered	54,849	50,000	40,000	40,000
Library Programs	521	450	525	525
Attendance	15,322	10,000	15,000	15,000
Summer Reading Program (SRP) Registered	7815	7,500	7,500	7,500
Completed	4270	4,000	4,000	4,000
Contacts with Community Groups(attendance)	13,777	14,000	13,000	13,000
Events	201	150	200	200
Computer use	48,332	55,000	45,000	45,000
Website Hits	23,280	10,000	25,000	25,000
Online Resource (databases) uses	64,023	45,000	50,000	50,000
Training Hours	1,265	1,000	1,000	1,000
Volunteer Hours	1,381	1,500	1,200	1,200



Library	FY 2015 (audited)	FY 2016 (projected)	FY 2017 (projected)
Fund Balance *			

\*Fund balance includes fund 2310 and 2320.

\*A portion of the Library fund balance is restricted for capital improvement and fixed asset replacement.



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- Existing Service Level Issues and Concerns** - The focus of the Library’s goals and efforts to accomplish them in the future revolve around the ability to continue to offer our customers the same level of materials and services that they have come to expect. Circulation has more than doubled from 665,573 in FY 2005 when the Library building renovation began, to 1,570,410 in FY 2013. The Library is now consistently lending over 100,000 items every month. To manage this growth, the Library has turned to technology, such as the self-check system, print management and pc reservation software, and RFID tags, plus managing workflow more efficiently. The Library has run out of space for additional materials, computers, office space, seating for customers, programming space and parking space. The concern now is how to continue to meet the community’s demands for resources and services.
  - Future Service Level Issues and Concerns** - Additional parking, shelf space, meeting space, and seating are needed. Rapidly changing technology such as eBooks and other downloadable software continue to challenge the Library’s ability to provide needed services and resources. The Library Board has engaged the Farnsworth Group to study the library’s future needs and possibilities for expansion in its current location.
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## Library Funds

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In FY 2011, the Board of Trustees passed a resolution establishing two special revenue funds (Capital Reserve Fund and Fixed Asset Fund) and a policy regarding the Maintenance & Operating Fund. Following is a synopsis of the three funds:

- **The Maintenance and Operating Fund** is used to hold the monies needed for operation of the Library and a target of 25% of the annual operating budget is set aside as working cash and to cover unanticipated emergencies.
  - **The Fixed Asset Fund** is restricted for fixed asset items such as replacement of computers, the Bookmobile, shelving, and furniture.
  - **The Capital Reserve Fund** also is restricted for the purchase of land or construction of a building to expand access to the services the Library provides to the community.
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**LIBRARY  
FIXED ASSET BUDGET  
FISCAL YEAR 2016 - 2017**

<b>ACCOUNT NUMBER</b>	<b>ACCOUNT NAME</b>	<b>2010-2011 ACTUAL</b>	<b>2011-2012 ACTUAL</b>	<b>2012-2013 ACTUAL</b>	<b>2013-2014 ACTUAL</b>	<b>2014-2015 ACTUAL</b>
<b>REVENUES</b>						
56010	INTEREST ON INVESTMENTS	\$ -	\$ 300	\$ 557	\$ 300	\$ 144
57310	DONATIONS	\$ -	\$ -	\$ -	\$ -	\$ 50,000
57350	OTHER PRIVATE GRANTS	\$ -	\$ -	\$ -	\$ -	\$ 37,200
81160	FROM LIBRARY M & O FUND	\$ 140,174	\$ 115,301	\$ 181,199	\$ 170,768	\$ 195,000
	<b>TOTAL REVENUE</b>	<b>\$ 140,174</b>	<b>\$ 115,601</b>	<b>\$ 181,756</b>	<b>\$ 171,068</b>	<b>\$ 282,344</b>
<b>EXPENSES</b>						
72110	OFFICE FURNITURE	\$ -	\$ -	\$ -	\$ -	\$ -
72120	OFFICE & COMPUTER	\$ 140,174	\$ 140,000	\$ 9,328	\$ 9,085	\$ 47,867
72130	LICENSED VEHICLES	\$ -	\$ -	\$ -	\$ -	\$ 209,648
72140	CAPITAL OUTLAY-NON OFFICE	\$ -	\$ -	\$ -	\$ -	\$ 33,944
72520	BUILDINGS	\$ -	\$ -	\$ -	\$ -	\$ 26,208
72620	OTHER CAPITAL IMPROVEMENTS	\$ -	\$ -	\$ -	\$ -	\$ 11,362
	TO LIB M & O FUND	\$ -	\$ 50,000	\$ 80,000	\$ -	\$ -
	<b>TOTAL EXPENSE</b>	<b>\$ 140,174</b>	<b>\$ 190,000</b>	<b>\$ 89,328</b>	<b>\$ 9,085</b>	<b>\$ 329,029</b>
	<b>NET REVENUE/(EXPENSE)</b>	<b>\$ -</b>	<b>\$ (74,399)</b>	<b>\$ 92,428</b>	<b>\$ 161,983</b>	<b>\$ (46,685)</b>
	<b>% OF REVENUE TO EXPENSE</b>	<b>100.00%</b>	<b>60.84%</b>	<b>203.47%</b>	<b>1882.97%</b>	<b>85.81%</b>

LIBRARY												
MAINTENANCE & OPERATING BUDGET												
FISCAL YEAR 2016-2017												
Account Number	Account Title	FY 11 Actual	FY 12 Actual	FY 13 Actual	FY 14 Actual	FY 15 Actual	FY 16 Budget	FY 17 Proposed	FY 18 Proposed	FY 19 Proposed	FY 20 Proposed	FY 21 Proposed
50110	Property Taxes	4,513,080	4,518,200	4,512,535	4,508,035	4,541,270	4,546,710	4,546,710	4,683,111	4,823,604	4,968,312	5,117,361
53020	Replacement Tax	130,400	130,400	130,400	130,400	130,400	130,400	130,400	130,400	130,400	130,400	130,400
53120	State Grants	76,724	78,564		78,728	95,763	95,000	95,000	95,000	95,000	95,000	95,000
53370	From Golden Prairie PL Dist	363,051	363,270	364,808	363,928	362,116	370,000	392,000	400,000	403,000	405,000	407,000
54490	Library Fees & Rentals	65,245	79,967	76,564	84,468	81,412	80,000	83,000	85,000	87,000	89,000	90,000
54720	Copies	6,800	3,323	4,202	4,008	3,321	3,800	3,200	3,000	3,000	3,000	3,000
56010	Interest from Investments	4,568	2,339	4,011	665	590	1,000	1,000	1,000	1,000	1,000	1,000
	Interst From Taxes			65	52	29	-	-	-	-	-	-
57110	Sale of Property	2,489	2,045	1,670	842	3,237	1,000	1,000	1,000	1,000	1,000	1,000
57310	Donations	19,703	29,554	18,196	20,880	21,958	20,000	28,000	20,000	20,000	22,000	22,000
57350	Other Private Grants	11,648	79	821	-	484	-	-	-	-	-	-
57610	Cash Over/Short	5	(133)	(116)	449	(36)	-	-	-	-	-	-
57990	Other Misc Income	13,097	14,731	33,305	41,258	42,542	30,000	40,000	41,200	42,400	43,600	44,900
	Fr Library Fund Balance	200,000	160,000	-	-	-	-	-	-	-	-	-
	Fr Library Fixed Asset Fund	-	50,000	80,000	-	-	-	-	-	-	-	-
	<b>Total Revenues</b>	<b>5,406,810</b>	<b>5,432,339</b>	<b>5,226,461</b>	<b>5,233,715</b>	<b>5,283,084</b>	<b>5,277,910</b>	<b>5,320,310</b>	<b>5,459,711</b>	<b>5,606,404</b>	<b>5,758,312</b>	<b>5,911,661</b>
61100	Full Time Salaries	1,741,659	1,659,040	1,768,936	1,860,952	1,954,170	2,015,233	2,149,887	2,214,384	2,280,816	2,349,240	2,419,717
61110	Part Time Salaries	303,297	329,778	373,618	366,810	366,067	453,600	402,086	414,149	426,573	439,370	452,551
61130	Seasonal Salaries	34,380	33,424	36,974	35,564	39,693	35,586	47,701	49,132	50,606	52,124	53,688
61150	Overtime Salaries	-	-	-	-	-	1,100	1,100	1,100	1,100	1,100	1,100
61190	Other Salaries	-	-	31,982	8,200	-	-	-	-	-	-	-
62101	Dental Insurance	9,932	9,816	10,156	9,919	9,430	11,273	12,400	12,700	13,000	13,400	13,800
62102	Vision Insurance	2,262	2,166	2,336	2,371	2,360	2,894	3,050	3,142	3,236	3,333	3,433
62104	Health Insurance PPO BC/BS	203,249	202,223	208,525	203,402	198,989	210,104	294,901	303,748	312,860	322,246	331,913
62106	Health Insurance HAMP HMC	54,672	65,079	76,470	96,093	89,859	118,062	100,429	103,442	106,545	109,741	113,033
62110	Life Insurance	3,016	1,928	3,070	2,832	2,824	3,097	3,100	3,193	3,289	3,388	3,490
62120	IMRF	210,333	229,823	277,820	295,178	291,804	299,867	310,000	319,300	328,879	338,745	348,907
62130	FICA	152,938	145,796	126,772	136,156	139,859	162,368	163,000	167,890	172,927	178,115	183,458
62140	Medicare	-	2,257	29,742	32,011	32,826	36,315	39,000	40,170	41,375	42,616	43,894
62150	Unemployment Compensation	-	-	-	1,323	10,143	-	-	-	-	-	-
62160	Worker's Comp	6,853	17,701	20,522	8,991	14,102	37,675	17,000	17,510	18,035	18,576	19,133
62190	Staff Uniforms	145	600	461	194	910	600	600	700	700	800	800
62210	Tuition Reimbursement	-	1,110	-	7,512	20,292	30,000	-	20,000	20,000	20,000	20,000
62990	Other Benefits	12,177	11,760	-	-	4,760	-	20,000	20,000	20,000	20,000	20,000
70095	Credit Card Fees	582	-	-	-	-	-	-	-	-	-	-
70420	Equipment Rental	10,751	16,971	17,984	18,849	21,287	22,000	22,000	22,660	22,660	23,340	23,340
70510	Building Maintenance	163,816	87,168	78,580	77,629	73,866	135,000	120,000	123,600	127,308	131,127	135,061
70520	Vehicle Maintenance	7,048	8,104	3,953	3,959	5,968	5,000	5,000	5,150	5,305	5,464	5,628
70530	Office/Equipment Maintenance	147,637	138,087	104,397	146,407	123,667	165,000	165,000	169,950	175,049	180,300	185,709
70590	Other Property Maintenance	3,118	3,688	23,193	1,728	1,959	25,000	-	-	-	-	-
70610	Advertising	6,360	13,089	12,067	22,075	27,037	19,000	25,000	25,750	26,522	27,318	28,138
70611	Printing/Binding	16,777	16,928	22,303	14,678	16,968	19,000	19,000	19,570	20,157	20,762	21,385
70630	Travel	5,277	10,920	4,143	4,958	3,730	6,000	1,000	1,030	1,061	1,093	1,126
70631	Membership Dues	8,137	4,749	4,524	4,951	3,584	5,000	5,000	5,150	5,305	5,464	5,628

70632	Professional Development	2,371	2,693	5,617	5,773	5,489	8,000	13,000	13,390	13,792	14,206	14,632
70690	Other Purchased Services	87,830	82,316	82,584	75,656	89,209	100,000	90,000	92,700	95,481	98,345	101,295
70714	Property Insurance	12,857	21,031	22,462	19,352	19,699	23,000	24,000	24,720	25,462	26,226	27,013
70715	Vehicle Insurance	1,993	5,189	5,471	1,639	3,563	5,000	4,000	4,120	4,244	4,371	4,502
70790	Other Insurance	3,386	3,386	4,289	4,889	5,067	5,000	5,500	5,665	5,835	6,010	6,190
71010	Office Supplies	86,212	46,095	16,884	19,287	14,266	20,000	12,000	12,360	12,731	13,113	13,506
71013	Computer Supplies	-	85,551	53,698	74,894	99,724	85,000	80,000	82,400	84,872	87,418	90,041
71015	Copier Supplies	6,109	4,865	3,899	2,299	3,867	3,300	3,400	3,500	3,600	3,700	3,800
71017	Postage	12,030	27,734	19,324	10,815	15,058	12,000	12,000	12,360	12,731	13,113	13,506
71020	Library Supplies	94,021	79,635	52,940	68,689	74,089	72,000	75,000	77,250	79,568	81,955	84,414
71024	Janitorial Supplies	7,372	13,725	13,300	14,916	10,880	16,000	16,000	16,480	16,974	17,483	18,007
71070	Fuel	5,402	6,562	6,770	7,681	5,625	8,000	8,000	8,240	8,487	8,742	9,004
71080	Bldg & Maint Supplies	16,606	8,645	6,708	12,879	10,149	10,000	10,000	10,300	10,609	10,927	11,255
71310	Natural Gas	38,811	34,337	31,691	42,444	31,063	35,000	32,000	32,960	33,949	34,967	36,016
71320	Electricity	112,747	98,049	115,863	80,730	75,300	95,000	80,000	82,400	84,872	87,418	90,040
71330	Water	5,172	6,817	9,000	8,490	6,957	8,500	8,000	8,240	8,487	8,742	9,004
71340	Telecommunications	26,971	24,510	24,900	25,599	31,988	26,000	26,780	27,583	28,410	29,262	30,140
71410	Professional Collection	5,478	6,646	4,186	3,978	670	7,000	3,500	3,500	400	400	4,500
71420	Periodicals	30,949	33,948	35,023	35,662	35,602	35,000	36,050	37,132	38,246	39,393	40,575
71430	Adult Books	161,996	173,977	204,452	162,753	163,189	170,000	175,000	180,250	185,658	191,228	196,965
71440	Children's Books	118,661	135,753	115,928	118,133	121,879	125,000	128,750	132,613	136,591	140,689	144,910
71450	Outreach Books	46,039	6,241	-	-	-	-	-	-	-	-	-
71470	A/V Materials	191,513	166,178	177,431	168,576	162,814	168,000	173,040	178,231	183,578	189,085	194,758
71480	Public Access Software	175,532	108,031	125,199	134,349	145,447	140,000	144,200	148,526	152,982	157,571	162,298
71490	Ebooks	-	-	-	51,300	61,300	70,000	60,000	70,000	80,000	90,000	95,000
73990	Other Int Expense	35,817	22,403	-	-	-	-	-	-	-	-	-
79120	Employee Relations	2,776	4,359	5,242	3,765	2,138	6,000	6,000	6,180	6,365	6,556	6,753
79150	Bad Debt	-	270	-	-	-	-	-	-	-	-	-
79990	Other Misc. Expenses	6,687	2,641	6,698	4,604	7,213	13,000	9,000	9,270	9,548	9,834	10,129
85711	From Working Cash	(126,679)	-	-	-	-	-	-	-	-	-	-
89112	To ERI Reimbursement	-	42,617	42,617	36,732	36,732	36,732	36,732	-	-	-	-
89237	To Library Equip Replacemen	140,174	115,301	181,199	370,768	195,000	156,604	122,104	115,921	99,624	79,896	58,476
89409	Lib Expansion Project Fund	564,183	550,585	-	-	-	-	-	-	-	-	-
	To Capital Fund	694,996	204,505	259,224	81,332	-	-	-	-	-	-	-
	Total Expenses	5,672,425	5,136,800	4,871,130	5,010,728	4,890,134	5,277,910	5,320,310	5,459,711	5,606,404	5,758,312	5,911,661
	Total Revenues	5,406,810	5,432,339	5,226,461	5,233,715	5,283,084	5,277,910	5,320,310	5,459,711	5,606,404	5,758,312	5,911,661
	Rev Over Exp (Surplus)	(265,615)	295,539	355,331	222,987	392,950	-	-	-	-	-	-



LIBRARY						
PROJECT NEXT GENERATION BUDGET						
FISCAL YEAR 2016 - 2017						
ACCOUNT NUMBER	ACCOUNT NAME	2010-2011 ACTUAL	2011-2012 ACTUAL	2012-2013 ACTUAL	2013-2014 ACTUAL	2014-2015 ACTUAL
<b>REVENUES</b>						
53120	STATE GRANTS	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 15,000
57990	OTHER MISC. INCOME	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>TOTAL REVENUE</b>	<b>\$ 12,500</b>	<b>\$ 12,500</b>	<b>\$ 12,500</b>	<b>\$ 12,500</b>	<b>\$ 15,000</b>
<b>EXPENSES</b>						
61100	SALARIES-FULL TIME	\$ 4,270	\$ 4,877	\$ 4,000	\$ 4,000	\$ 6,000
61110	SALARIES-PART TIME	\$ 4,343	\$ 4,380	\$ 3,000	\$ 3,000	\$ 3,000
61130	SALARIES-SEASONAL	\$ -	\$ -	\$ -	\$ -	\$ -
62101	DENTAL INSURANCE	\$ 16	\$ -	\$ -	\$ -	\$ -
62102	VISION INSURANCE	\$ 4	\$ -	\$ -	\$ -	\$ -
62103	HEALTH INS - OSF HMO	\$ -	\$ -	\$ -	\$ -	\$ -
62106	HEALTH INS - PPO	\$ 394	\$ -	\$ -	\$ -	\$ -
62120	IMRF	\$ 385	\$ -	\$ 400	\$ -	\$ 500
62130	FICA	\$ 493	\$ 708	\$ 400	\$ 716	\$ 500
62160	WORKERS COMP	\$ -	\$ 79	\$ -	\$ 84	\$ -
70530	REP MTC OFFIC EQUIP	\$ -	\$ -	\$ -	\$ -	\$ -
70740	PRINTING/BINDING	\$ -	\$ -	\$ -	\$ -	\$ -
70770	TRAVEL	\$ -	\$ -	\$ -	\$ 51	\$ -
70780	REG. & MEMB. DUES	\$ -	\$ -	\$ -	\$ -	\$ -
70990	OTHER PURCHASED SRV	\$ -	\$ 2,456	\$ 356	\$ 30	\$ -
71010	OFFICE SUPPLIES	\$ 2,595	\$ -	\$ -	\$ -	\$ -
71013	COMPUTER SUPLIES	\$ -	\$ -	\$ 1,289	\$ 7,673	\$ 5,000
71020	LIBRARY SUPPLIES	\$ -	\$ -	\$ -	\$ -	\$ -
71030	POSTAGE	\$ -	\$ -	\$ -	\$ -	\$ -
72120	COMPUTER EQUIPMENT	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>TOTAL EXPENSE</b>	<b>\$ 12,500</b>	<b>\$ 12,500</b>	<b>\$ 9,446</b>	<b>\$ 15,554</b>	<b>\$ 15,000</b>
	<b>NET REVENUE/(EXPENSE)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,054</b>	<b>\$ (3,054)</b>	<b>\$ -</b>
	<b>% OF REVENUE TO EXPENSE</b>	<b>100.00%</b>	<b>100.00%</b>	<b>132.34%</b>	<b>80.37%</b>	<b>100.00%</b>



**AGENDA ITEM NO. 6**

FOR COUNCIL: October 26, 2015

**SUBJECT:** Presentation and discussion regarding the Proposed 2015 Estimated Tax Levy

**RECOMMENDATION/MOTION:** Discussion and direction by the Council.

**STRATEGIC PLAN LINK:** Goal 1. Financially Sound City Providing Quality Basic Services.

**STRATEGIC PLAN SIGNIFICANCE:** Objective 1c. Engaged residents that are well informed and involved in an open governance process.

**BACKGROUND:** According to the Illinois Property Tax Code Division 2 Truth in Taxation (35ILCS 200/18-60), the City must formally adopt an *estimated* tax levy not less than 20 days prior to the adoption of the final tax levy.

35ILCS 200/18-85 requires said estimate be compared to the prior year aggregate levy and if a 5% increase exists then a public hearing in addition to a public notice must occur.

In addition, the tax levy ordinance must be passed by a vote of the Council and a certified copy, thereof, filed with the County Clerk on or before the last working Tuesday in December which is December 30<sup>th</sup>. Therefore, the adoption of the 2015 Tax Levy Ordinance is recommended to be placed on the Council's December 14, 2015 meeting agenda leaving one back up date. In addition, it is our goal to abate any taxes at this same meeting. In order to keep the 2015 levy flat, the City can abate debt service payments needed to keep the bond and interest portion of the levy flat. By bond covenant any debt service payments abated are guaranteed from other revenues sources.

There are three components of the property tax formula that affect an increase or decrease in real property taxes. The dollar amount requested by the City or any of the other overlapping tax districts, the amount of the final equalized assessed value (EAV) which is one third of the properties assessed value, and the tax rate which is generated by dividing the levy by the EAV:

Tax formula: 
$$\frac{\text{Dollar Amount Requested}}{\text{Final EAV}} = \text{Tax Rate}$$

The City adopts its *estimated* tax levy based on a preliminary EAV number provided by the Bloomington Township which is subject to the tax appeals process. The Final EAV is completed by January 1<sup>st</sup>, 2016. The tax rate generated is later applied to individual property owner's tax bills on April 1<sup>st</sup>, 2016 and bills are sent out on May 1<sup>st</sup> due in June and September.

This year the City Manager is proposing no increase in the dollar amount requested. Keeping the \$23,719,066 this includes the Library levy which also remains flat. Depending on what happens

to the City's Final EAV, real property owners could receive a slight decrease in property taxes levied by the City of Bloomington.

$$\begin{array}{l} \text{2015 Tax formula Estimate} \\ \text{(Preliminary EAV):} \end{array} \quad \frac{\$ 23,719,066}{\$1,824,013,085} = 1.3004\%$$

Expenditures related to the property tax levy are primarily related to pension funding and operating costs for public safety and the Bloomington Library.

**COUNCIL COMMITTEE BACKGROUND:**

**FINANCIAL IMPACT/ANALYSIS:** The Council adopted the tax levy last year with only a slight increase for the Public Safety pensions that increased the final levy of \$23,719,066 by \$500,000. The City Manager and Finance Director recommend the Council adopt the tax levy estimate of \$23,719,066 which keeps the overall levy flat.

Finance has created the attached two exhibits to facilitate Council's decision making process over the next four weeks. The Exhibit 1 depicts the recommendations and allocation for the 2015 Tax Levy. Exhibit 2 is the estimated impact to the taxpayer.

Respectfully submitted for Council consideration.

Prepared by: Carla Murillo, Budget Manager

Reviewed by: Patti – Lynn Silva, Director of Finance

Legal review: Jeffrey R. Jurgens, Corporation Counsel

Recommended by:



David A. Hales  
City Manager

**Attachments**

- Exhibit 1 - Estimated Tax Levy Proposal
- Exhibit 2 – Estimated Impact to Homeowners

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Motion: Discussion and direction by the Council.

Motion: \_\_\_\_\_ Seconded by: \_\_\_\_\_

	Aye	Nay	Other		Aye	Nay	Other
Alderman Black				Alderman Mwilambwe			
Alderman Buragas				Alderman Painter			
Alderman Fruin				Alderman Sage			
Alderman Hauman				Alderman Schmidt			
Alderman Lower							
				Mayor Renner			

## Exhibit 2: 2015 Tax Levy Impact to the Taxpayer

Information Table	
Prior Year Tax Levy	\$23,719,066
Prior Year Tax Rate	1.3211%
Avg Home Value	\$165,000
**2015 Preliminary EAV	\$1,824,013,085

\*\*2015 Preliminary EAV      \$1,824,013,085      **\*\* The preliminary EAV is subject to change through the tax appeals process.**

Proposed Levy Increase	Revised Levy	New Rate	Avg Home Value	Old Bill	New Bill	Increase/(Decrease)
\$0	\$23,719,066	1.3004%	\$165,000	\$727	\$715	(\$11.37)
\$50,000	\$23,769,066	1.3031%	\$165,000	\$727	\$717	(\$9.86)
\$100,000	\$23,819,066	1.3059%	\$165,000	\$727	\$718	(\$8.35)
\$500,000	\$24,219,066	1.3278%	\$165,000	\$727	\$730	\$3.71
\$1,000,000	\$24,719,066	1.3552%	\$165,000	\$727	\$745	\$18.78
\$2,000,000	\$25,719,066	1.4100%	\$165,000	\$727	\$776	\$48.94

## Exhibit 1: 2015 Proposed & Historical Tax Levy

<i>Levy Type</i>	<i>2015 Proposed Tax Levy</i>	<i>2014 Adjusted Tax Levy</i>	<i>2013 Adjusted Levy Amount</i>	<i>2012 Adjusted Levy Amount</i>	<i>2011 Adjusted Levy Amount</i>	<i>2010 Adjusted Levy Amount</i>
BONDS & INTEREST	\$ 2,180,143	\$ 2,180,143	\$ 2,180,143	\$ 2,180,143	\$ 2,179,980	\$ 2,179,867
FIRE PENSION	\$ 4,196,000	\$ 4,196,000	\$ 3,946,000	\$ 2,908,472	\$ 3,111,552	\$ 3,407,498
FIRE PROTECTION	\$ 1,183,228	\$ 1,183,228	\$ 1,183,228	\$ 1,183,228	\$ 1,183,182	\$ 1,183,182
GENERAL CORPORATE	\$ 1,287,233	\$ 1,287,233	\$ 1,287,233	\$ 2,901,180	\$ 2,979,867	\$ 1,927,000
IMRF	\$ 2,502,907	\$ 2,502,907	\$ 2,502,907	\$ 2,502,907	\$ 2,502,956	\$ 2,502,956
LIABILITY INSURANCE	-	-	\$ -	\$ -	\$ -	\$ -
POLICE PENSION	\$ 4,008,000	\$ 4,008,000	\$ 3,758,000	\$ 3,181,581	\$ 3,306,933	\$ 4,057,967
POLICE PROTECTION	\$ 1,354,421	\$ 1,354,421	\$ 1,354,421	\$ 1,354,421	\$ 1,354,332	\$ 1,354,332
PUBLIC BENEFIT	-	-	\$ -	\$ -	\$ -	\$ -
PUBLIC PARKS	\$ 1,001,415	\$ 1,001,415	\$ 1,001,415	\$ 1,001,415	\$ 1,001,487	\$ 1,001,487
ROAD AND BRIDGE	-	-	\$ -	\$ -	\$ -	\$ -
SOCIAL SECURITY	\$ 1,459,009	\$ 1,459,009	\$ 1,459,009	\$ 1,459,009	\$ 1,459,097	\$ 1,459,097
LIBRARY	\$ 4,546,710	\$ 4,546,710	\$ 4,546,710	\$ 4,513,477	\$ 4,513,519	\$ 4,513,519
<b>TOTALS</b>	<b>\$ 23,719,066</b>	<b>\$ 23,719,066</b>	<b>\$ 23,219,066</b>	<b>\$ 23,185,833</b>	<b>\$ 23,592,905</b>	<b>\$ 23,586,905</b>
Dollar Increase/(Decrease)	\$ -	\$ 500,000	\$ 33,233	\$ (407,072)	\$ 6,000	\$ 80,230
Percent Increase/(Decrease)	0.00%	2.15%	0.14%	-1.73%	0.03%	0.34%
Tax Rate	1.3004	1.3211	1.3181	1.3161	1.3103	1.3110



**Regular Agenda Item No. 7**

Police and Fire Pension Fund Contribution for FY 2016 (Patti-Lynn Silva, Finance Director, Todd Schroeder, Actuary, Lauderbach & Amen LLP, Presentation 10 minutes, Council Discussion 15 minutes)

Lauterbach & Amen, LLP  
27W457 Warrenville Road  
Warrenville, IL 60555-3902

Actuarial Valuation  
as of May 1, 2015



BLOOMINGTON  
FIREFIGHTERS'  
PENSION FUND

GASB 67/68 Reporting

***LAUTERBACH & AMEN, LLP***



# Actuarial GASB Disclosures Statements 67 and 68

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Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

## GASB 67: BLOOMINGTON FIREFIGHTERS' PENSION FUND

**Fiscal Year Ending: April 30, 2015**

Actuarial Valuation Date: May 1, 2015

Measurement Date: April 30, 2015

## GASB 68: CITY OF BLOOMINGTON

**Fiscal Year Ending: April 30, 2015**

Actuarial Valuation Date: May 1, 2015

Measurement Date: April 30, 2015

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### Submitted by:

Lauterbach & Amen, LLP  
630.393.1483 Phone  
[www.lauterbachamen.com](http://www.lauterbachamen.com)

### Contact:

Todd A. Schroeder  
October 2, 2015

***LAUTERBACH & AMEN, LLP***



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## ACTUARIAL CERTIFICATION

This certification provides supplemental information as required by the Governmental Accounting Standards Board. The enclosed schedules were prepared by the undersigned to provide general information to assist in the preparation of the Annual Financial Report. The assumptions and methods used in the preparation of this disclosure meet the parameters set for the disclosures presented in the financial section as required by the Governmental Accounting Standards Board. Additional information is also provided solely to assist the auditors in preparation of the required footnote disclosures.

The results in this report are based on information and data submitted by the Bloomington Firefighters' Pension Fund. We did not prepare the actuarial valuations for the years prior to May 1, 2014. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness as appropriate based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized involve actuarial calculations that require assumptions about future events. The City of Bloomington selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in the valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned consultant of Lauterbach & Amen, LLP with actuarial credentials meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Certification. There is no relationship between the City of Bloomington and Lauterbach & Amen, LLP that impairs our objectivity.

Respectfully Submitted,  
LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA



## PENSION FUND NET POSITION

Statement of Net Position  
Statement of Changes in Net Position

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**STATEMENT OF FIDUCIARY NET POSITION**

	<u>2015</u>	<u>2014</u>
<b>Assets</b>		
Cash and Cash Equivalents	\$ 4,111,106	\$ 4,708,740
Total cash	<u>4,111,106</u>	<u>4,708,740</u>
Receivables:		
Due from Treasury	11,105	38,590
Investment Income - Accrued Interest	<u>38</u>	<u>414</u>
Total Receivables	<u>11,143</u>	<u>39,004</u>
Investments:		
Fixed Income	5,737	7,036
Insurance Contracts	<u>46,468,494</u>	<u>42,581,648</u>
Total Investments	<u>46,474,231</u>	<u>42,588,684</u>
Total Assets	<u>50,596,480</u>	<u>47,336,428</u>
<b>Liabilities</b>		
Payables:		
Expenses Due/Unpaid	<u>1,769</u>	<u>432</u>
Total Liabilities	<u>1,769</u>	<u>432</u>
<b>Net Position Restricted for Pensions</b>	<u>\$ 50,594,711</u>	<u>\$ 47,335,996</u>

The Fiduciary Net Position of the Fund shown above is intended to be in accordance with GAAP and Government Accounting Standards Board rules. The Fair Market Value of Investments has been provided by the reporting entity, and the results are being audited by an independent auditor. The level of the assets has been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the fair market value of the investments. The assets for 2015 are based on draft audit only and are preliminary & tentative – subject to change as of the preparation of this report.



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**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

	<u>2015</u>
<b>Additions</b>	
Contributions	
Employer	\$ 3,941,587
Other	5,075
Member	<u>803,647</u>
Total Contributions	<u>4,750,309</u>
Investment Income	
Net Appreciation in Fair Value of Investments	2,886,672
Interest and Dividends	4,617
Less Investment Expense	<u>-</u>
Net Investment Income	<u>2,891,289</u>
Total Additions	<u>7,641,597</u>
<b>Deductions</b>	
Benefit payments and Refunds of Member Contributions	4,320,164
Administrative Expense	<u>62,718</u>
Total Deductions	<u>4,382,882</u>
Net Increase in Net Position	<u>3,258,715</u>
Net Position Restricted for Pensions	
<b>Beginning of Year</b>	<u>47,335,996</u>
End of Year	<u>\$ 50,594,711</u>

The Changes in Fiduciary Net Position of the Fund shown above is intended to be in accordance with GAAP and Government Accounting Standards Board rules. The changes have been provided by the reporting entity, and the results are being audited by an independent auditor. The changes have been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the fair market value of the investments. The assets for 2015 are based on draft audit only and are preliminary & tentative – subject to change as of the preparation of this report.



## ACTUARIAL PENSION LIABILITY INFORMATION

Statement of Total Pension Liability  
Statement of Changes in Total Pension Liability  
Statement of Changes in Net Pension Liability  
Deferred Outflows and Inflows of Resources

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**STATEMENT OF TOTAL PENSION LIABILITY**

	<u>2015</u>	<u>2014</u>
Active Employees	\$ 45,694,195	
Inactive Employees		
Terminated Employees - Vested	5,774	
Retired Employees	44,730,530	
Disabled Employees	7,557,892	
Other Beneficiaries	<u>4,318,962</u>	
Total Inactive Employees	<u>56,613,158</u>	
Total Pension Liability	<u>\$ 102,307,353</u>	<u>\$ 97,613,111</u>

The Total Pension Liability (TPL) has been determined for GASB 67/68 reporting purposes only. The resulting TPL is intended to be used in the financial statement reporting of the fund and/or the Employer. The resulting liability is not intended to be a representation of the fund liability for other purposes, including but not limited to determination of cash funding requirements and recommendations. The TPL is based on data as of the Data Date shown in this report. The TPL has been determined as of the Actuarial Valuation Date and based on the assumptions shown in this report.

This is the first year of implementation for GASB 67. The TPL for the prior fiscal year has been estimated based on the current Actuarial Valuation Date and assumptions as of the current Actuarial Valuation Date. The TPL was adjusted back to the prior fiscal year-end for purposes of providing an opening balance for the current implementation.



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**STATEMENT OF CHANGES IN TOTAL PENSION LIABILITY**

	<u>2015</u>
<b>Changes in Total Pension Liability</b>	
Service Cost	\$ 2,332,694
Interest	6,681,712
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes in Assumptions	-
Benefit Payments and Refunds	(4,320,164)
Net Change in Total Pension Liability	\$ 4,694,242
Total Pension Liability - Beginning	97,613,111
Total Pension Liability - Ending (a)	<u>\$ 102,307,353</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 50,594,711</u>
<b>Employer's Net Pension Liability - Ending (a) - (b)</b>	<u>\$ 51,712,642</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	49%
Covered-Employee Payroll	\$ 8,617,171
Employer's Net Pension Liability as a Percentage of Employee Payroll	600%

This is the first year of implementation of GASB 67/68. There are no changes in Net Pension Liability for changes in benefit terms, assumptions or actuarial experience. The plan fiduciary net position was detailed in the prior section of this report. The employer's Net Pension Liability is the excess of the Total Pension Liability over the plan fiduciary net position.

Covered employee payroll is based on total pensionable pay for the fund members during the fiscal year and is not necessarily representative of pay used to determine pension contributions or benefits.



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## STATEMENT OF CHANGES IN NET PENSION LIABILITY

The table below illustrates the change in the Net Pension Liability (NPL) from the prior Measurement Date to the current Measurement Date. Under Statement 68, the difference between the NPL from the prior measurement date to the current measurement date should be recognized as an expense, unless permitted to be recognized as a deferred outflow or inflow of resources.

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances Beginning at 05/01/14</b>	<u>97,613,111</u>	<u>47,335,996</u>	<u>50,277,115</u>
<b>Changes for the year:</b>			
Service Cost	\$ 2,332,694	\$ -	\$ 2,332,694
Interest	6,681,712	-	6,681,712
Actuarial Experience	-	-	-
Contributions - Employer	-	3,941,587	(3,941,587)
Contributions - Employee	-	803,647	(803,647)
Contributions - Other	-	5,075	(5,075)
Net Investment Income	-	2,891,289	(2,891,289)
Benefit payments, including refunds	(4,320,164)	(4,320,164)	-
Administrative Expense	-	(62,718)	62,718
Other Changes	-	-	-
<b>Net Changes</b>	<u>4,694,242</u>	<u>3,258,715</u>	<u>1,435,527</u>
<b>Balances Beginning at 04/30/15</b>	<u>\$ 102,307,353</u>	<u>\$ 50,594,711</u>	<u>\$ 51,712,642</u>

The changes in total pension liability above are described on the prior page. The plan fiduciary net position was detailed in the prior section of this report. The employer's Net Pension Liability is the excess of the Total Pension Liability over the plan fiduciary net position.



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## DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The table below shows the cumulative amounts to be shown as deferred outflows and inflows of resources. Changes in total pension liability related to the difference in actual and expected experience, or changes in assumptions regarding future events, are recognized in pension expense over the expected remaining service life of all employees (active and retired) in the pension fund. Differences in projected and actual earnings over the measurement period are recognized over a 5 year period. Amounts not yet recognized are summarized below:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences Between Expected and Actual Experience	\$ -	\$ -
Changes of Assumptions	-	-
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	317,393	-
Contributions Subsequent to the Measurement Date*	-	-
Total	<u>\$ 317,393</u>	<u>\$ -</u>

\* Contributions subsequent to the measurement date may be recognized as a reduction to the NPL. The amount is not known as of the date of this report. Subsequent to the measurement date, the following amounts will be recognized in pension expense in the upcoming years:

### Year ended April, 30:

2015	\$ (79,348)
2016	(79,348)
2017	(79,348)
2018	(79,349)
2019	-
Thereafter	-



## ACTUARIAL ASSUMPTION INFORMATION

Statement of Significant Actuarial Assumptions  
Notes on Actuarial Assumptions  
Development of the Discount Rate  
Sensitivity of the Discount Rate

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## STATEMENT OF SIGNIFICANT ACTUARIAL ASSUMPTIONS

### Actuarial Assumptions (Economic)

Discount Rate used for the Total Pension Liability	7.00%
Long-Term Expected Rate of Return on Plan Assets	7.00%
High Quality 20 Year Tax-Exempt G.O. Bond Rate	3.62%
Projected Individual Salary Increases	4.00% - 15.25%
Projected Increase in Total Payroll	4.00%
Consumer Price Index (Urban)	3.00%
Inflation Rate Included	3.00%

### Actuarial Assumptions (Demographic)

Mortality Table	L&A 2012 Illinois Firefighters 100%
Retirement Rates	L&A 2012 Illinois Firefighters 100% Capped at age 65
Disability Rates	L&A 2012 Illinois Firefighters 100%
Termination Rates	L&A 2012 Illinois Firefighters 100%
Percent Married	80.0%

All rates shown in the economic assumptions are assumed to be annual rates, compounded on an annual basis.

### Assumption Changes

There have been no changes in assumptions from the prior year.



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## NOTES ON ACTUARIAL ASSUMPTIONS

### INDIVIDUAL PAY INCREASES

Individual pay increases include provisions for annual cost of living increases, plus any additional increases in pensionable pay provided (step increases, longevity increases, promotions, educations, etc). Sample rates are as follows:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	15.25%	8	4.00%
1	7.25%	9	7.00%
2	10.25%	10	4.00%
3	4.00%	15	4.00%
4	5.00%	20	4.00%
5	4.00%	25	4.00%
6	4.00%	30	4.00%
7	4.00%		

### DEMOGRAPHIC ASSUMPTIONS

Mortality rates are based on rates developed in the L&A 2012 Mortality Table for Illinois Firefighters.

Other demographic assumption rates are based on a review of assumptions in the L&A 2012 study for Illinois Firefighters.

### POSTEMPLOYMENT BENEFIT CHANGES

Eligibility for postemployment benefit increases is determined based on the Illinois Pension code. Tier 1 Firefighter retirees are provided with an annual 3.0% increase in retirement benefits by statute when eligible. Tier 2 Firefighter retirees are provided postemployment benefit increases based on one-half of the Consumer Price Index (Urban) for the prior September.

The CPI-U for September, 1983 was 100.7. The CPI-U for September, 2013 was 234.1. The average increase in the CPI-U for September, 1983 through September, 2013 was 2.85% (on a compounded basis).



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## EXPECTED RETURN ON PENSION PLAN INVESTMENTS

The long-term expected rate of return on assets shown here is from the State of Illinois Department of Insurance Actuarial Experience Study dated September 26, 2012. The best estimate of future real rates of return are developed for each of the major asset classes. Expected inflation is added back in. Adjustment is made to reflect geometric returns.

A summary of the best estimate of future real rates of returns (annual arithmetic average) are included in the table below.

<u>Asset Class</u>	<u>Long-Term Expected Rate of Return</u>	<u>Long-Term Inflation Expectations</u>	<u>Long-Term Expected Real Rate of Return</u>
Corporate Bonds	4.20%	2.50%	1.70%
US Government Fixed Income	3.20%	2.50%	0.70%
US Large Cap Equities	8.30%	2.50%	5.80%
US Mid Cap Equities	9.30%	2.50%	6.80%
US Small Cap Equities	9.30%	2.50%	6.80%
Non-US Developed Large Cap Equity Unhedged	8.40%	2.50%	5.90%
Emerging Markets Equity Unhedged	10.50%	2.50%	8.00%
Global Real Estate - REITS	8.30%	2.50%	5.80%
Commodities - Long Only	4.90%	2.50%	2.40%

Long-term expected real returns under GASB reflect the period of time that begins when a plan member begins to provide service to the employer and ends at the point when all benefits to the plan member have been paid.

The expected inflation rate is 2.50% and is included in the long-term rate of return on investments. Long-term rates of return are expected to exhibit geometric properties. Geometric rates of return are equal to arithmetic rates of return when the annual returns exhibit no volatility over time. When arithmetic returns are volatile on a year-to-year basis, the actual realized geometric returns over time will be lower. The higher the volatility, the greater the difference.





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## **MUNICIPAL BOND RATE**

The municipal bond rate assumption is based on The Bond Buyer 20-Bond GO Index. The rate shown earlier in the Actuarial Assumption section is the April 30, 2015 rate. The 20-Bond GO Index is based on an average of certain general obligation municipal bonds maturing in 20 years and having an average rating equivalent of Moody's Aa2 and Standard & Poor's AA.

The 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.

The indexes represent theoretical yields rather than actual price or yield quotations. Municipal bond traders are asked to estimate what a current-coupon bond for each issuer in the indexes would yield if the bond was sold at par value. The indexes are simple averages of the average estimated yields of the bonds.

## **DISCOUNT RATE**

The discount rate used in the determination of the Total Pension Liability is based on a combination of the expected long-term rate of return on plan investments and the municipal bond rate.

Cash flow projections were used to determine the extent which the plan's future net position will be able to cover future benefit payments. To the extent future benefit payments are covered by the plan's projected net position, the expected rate of return on plan investments is used to determine the portion of the net pension liability associated with those payments. To the extent future benefit payments are not covered by the plan's projected net position, the municipal bond rate is used to determine the portion of the net pension liability associated with those payments.

The plan's projected net position is expected to cover future benefit payments in full for the current employees through 2094.

Projected benefit payments are determined during the actuarial process based on the assumptions. More details on the assumptions are in the prior section. The expected contributions are based on the funding policy of the plan. The funding policy is discussed in the next section in more detail.



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### SENSITIVITY OF THE DISCOUNT RATE

The Net Pension Liability has been determined using the discount rate listed in the assumption section. Below is a table illustrating the sensitivity of the Net Pension Liability to the discount rate assumption.

	<b>1% Decrease (6.00%)</b>	<b>Current Discount Rate (7.00%)</b>	<b>1% Increase (8.00%)</b>
Employer Net Pension Liability	\$65,584,109	\$51,712,642	\$40,233,554

The sensitivity of the Net Pension Liability to the discount rate is based primarily on two factors:

1. The duration of the plan's expected benefit payments. Younger plans with benefit payments further in the future will be more sensitive to changes in the discount rate.
2. The funded percentage of the plan (ratio of the net position to the total pension liability). The higher the funded percentage, the higher the sensitivity to the discount rate.



## PARTICIPANT DATA

Participant Demographic Data  
Expected Future Working Lifetime

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## **PARTICIPANT DEMOGRAPHIC DATA**

The chart below summarizes the employee count and payroll as of the Actuarial Valuation Date:

	<u><b>2015</b></u>
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	87
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1
Active Plan Members	<u>109</u>
Total	<u><u>197</u></u>
 Payroll of Active Plan Members	 <u><u>\$8,617,171</u></u>

Participant count is shown as of the Actuarial Valuation Date. Pay is the active pensionable pay as of the Actuarial Valuation Date.

## **EXPECTED FUTURE WORKING LIFETIME**

The chart below summarizes the expected future working lifetime of fund members:

	<u><b>2015</b></u>
Average Future Working Career (In Years)	
Active Plan Members	14.10
Inactive Plan Members	0.00
Total	7.80

The expected future working lifetime is measured as of the Actuarial Valuation Date and is based on the demographic assumptions used in the preparation of the Actuary's report.



## FUNDING POLICY

Formal Funding Policy  
Informal Funding Policy

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## **COMPONENTS OF THE ACTUARIALLY DETERMINED CONTRIBUTION**

The Actuarially Determined Contribution (ADC) includes the determination of the Normal Cost contribution for active plan members, as well as provision for the payment of unfunded liability.

The actuarial funding method used in the determination of the normal cost and the actuarial liability is the Entry Age Normal Cost method (level percent of pay). The method allocates normal cost contributions by employee over the working career of the employee as a level percent of their pay.

Unfunded liability is the excess of the actuarial liability over the actuarial value of assets. The actuarially determined contribution includes a payment towards unfunded liability existing at the actuarial valuation date. The payment towards unfunded liability is set up as a level percent of payroll payment that is expected to increase during the payment period. The period of repayment as of the Actuarial Valuation Date is 26 years.

The Actuarial Value of Assets smooths gains and losses on the market value of assets over a 5 year period.

Under no circumstances will the Actuarially Determined Contribution be less than the amount determined as the Statutory Minimum Contribution under Illinois statutes.

### **FORMAL FUNDING POLICY**

There is a Formal Funding Policy that exists between the Pension Board and the City at this time. The formal funding policy parameters are from the City Ordinance Chapter 16, Section 46. The formal funding policy is being used for GASB 67/68 reporting purposes.

### **INFORMAL FUNDING POLICY**

In determining the most appropriate informal funding policy, GASB provides the following guidance in the Statement:

*Application of professional judgment should consider the most recent five-year contribution history of the employers and nonemployer contributing entities as a key indicator of future contributions from those sources and should reflect all other known events and conditions.... the amount of projected cash flows for contributions from employers and nonemployer contributing entities should be limited to an average of contributions from those sources over the most recent five-year period and may be modified based on consideration of subsequent events. For this purpose, the basis for the average (for example, percentage of covered payroll contributed or percentage of actuarially determined contributions made) should be a matter of professional judgment.*



In our review of informal funding policy the following factors are considered and described herein:

1. The five-year contribution history of the Employer (with a focus on the average contributions from those sources.)
2. All other known events and conditions
3. Consideration of subsequent events.

Five-Year Contribution History of the Employer

Employer contributions (under the informal policy) should be limited to the average over the most recent five years. In determining the basis for the average we reviewed three possibilities: (a) The average dollar contribution; (b) the average percent of pensionable pay; and (c) The average percent of the actuarial determined contribution. Please see the table below for a summary of these values:

<u>Fiscal Year End</u>	<u>Employer Contributions</u>	<u>Most Applicable ADC</u>	<u>% of ADC</u>	<u>Covered Payroll</u>	<u>% of Payroll</u>
4/30/2015	\$3,941,587	\$4,045,021	97%	\$8,617,171	45.74%
4/30/2014	\$2,910,842	\$4,015,969	72%	\$8,277,186	35.17%
4/30/2013	\$3,115,854	\$3,925,208	79%	\$7,137,776	43.65%
4/30/2012	\$3,460,505	\$3,202,697	108%	\$7,359,892	47.02%
4/30/2011	\$3,140,710	\$3,116,325	101%	\$7,137,776	44.00%

The contribution history suggests that the contribution as a percent of Actuarially Determined Contribution is the most stable contribution, when compared to the other contribution policies reviewed.

Other Known Events and Conditions

GASB has a provision for consideration of any other known events or conditions in the most recent five-year history in applying judgement for the informal funding policy. There are no events or conditions that have been considered in the development of the informal funding policy.

Consideration of Subsequent Events

GASB has a provision for modification based on consideration of subsequent events in development of the informal funding policy. There are no subsequent events that have been considered in the development of the informal funding policy.



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### Informal Funding Policy – Selected

Because a formal funding policy exists between the Pension Board and the City, we have not developed an informal funding policy for GASB 67/68 purposes.

### **FUNDING POLICY – OTHER CONSIDERATIONS**

Under GASB, the future contribution amount is not intended to include dollars contributed on behalf of future employees. Contributions are only intended to cover contributions towards the Normal Cost of existing employees as of the Actuarial Valuation Date as well as payment of unfunded liability on behalf of the current existing employees. Contributions under the funding policy have been adjusted as necessary to exclude dollars that would be anticipated to be contributed on behalf of future employees hired after the actuarial valuation date.

The contribution level may not pay off the unfunded liability during the active working lifetimes of current employees. In that case contributions will persist beyond the working lifetimes of current employees. To the extent a portion of the above total contribution is anticipated to pay contributions for future employee normal cost, the amount has been netted out. The remaining amount is anticipated to be paid towards the unfunded liability existing for current employees.

The actuarial determined contribution is determined annually based on the parameters previously discussed. The funding methods and procedures are assumed to continue into the future. The tax levy in the next December when combined with contributions from other City sources is assumed to be the actuarially determined contribution. Funding is assumed to go into the fund during the next full fiscal year.





## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability  
Schedule of Total Pension Liability and Related Ratios  
Schedule of the Actuarially Determined Contribution

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**SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY**

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>Total Pension Liability</b>										
Service Cost	\$ 2,332,694									
Interest	6,681,712									
Changes of Benefit Terms	-									
Differences Between Expected and Actual Experience	-									
Changes in Assumptions	-									
Benefit Payments and Refunds	(4,320,164)									
<b>Net Change In Total Pension Liability</b>	4,694,242									
<b>Total Pension Liability - Beginning</b>	97,613,111									
<b>Total Pension Liability - Ending (A)</b>	102,307,353									
<b>Plan Fiduciary Net Position</b>										
Contributions - Employer	3,941,587									
Contributions - Member	803,647									
Net Investment Income	2,891,289									
Benefit Payments and Refunds	(4,320,164)									
Administrative Expense	(62,718)									
Other	5,075									
<b>Net Change in Plan Fiduciary Net Position</b>	3,258,715									
<b>Plan Fiduciary Net Position - Beginning</b>	47,335,996									
<b>Plan Fiduciary Net Position - Ending (b)</b>	50,594,711									
<b>Employer Net Pension Liability - Ending (a) - (b)</b>	51,712,642									

The current year information was developed in the completion of this report.



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**SCHEDULE OF TOTAL PENSION LIABILITY AND RELATED RATIO**

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>Total Pension Liability - Ending (a)</b>	<u>\$ 102,307,353</u>									
<b>Plan Fiduciary Net Position - Ending (b)</b>	<u>50,594,711</u>									
<b>Employer Net Pension Liability - Ending (a) - (b)</b>	<u>51,712,642</u>									
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	49.45%									
<b>Covered-Employee Payroll</b>	8,617,171									
<b>Employer Net Pension Liability as a Percentage of Covered-Employee Payroll</b>	600.11%									

Covered employee payroll shown is the pensionable pay for the fiscal year for all fund members.



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## SCHEDULE OF CONTRIBUTIONS

	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
Actuarially Determined Contribution	\$ 4,045,021									
Contributions in Relation to the Actuarially Determined Contribution	<u>3,941,587</u>									
Contribution Deficiency (excess)	<u>103,434</u>									
Covered-Employee Payroll	<u>8,617,171</u>									
Contributions as a Percentage of Covered-Employee Payroll	45.7%									

## NOTES TO SCHEDULE OF CONTRIBUTIONS

The actuarially determined contribution shown is from the April 30, 2013 actuary's report completed by Tepfer Consulting Group, Ltd. for the tax levy recommendation for the December, 2013 tax levy.



# GASB METHODS AND PROCEDURES

GASB Methods and Procedures  
Methodology for Deferred Outflows and Inflows

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**GASB METHODS AND PROCEDURES**

	<u>Statement 67</u> <u>Pension Fund Financials</u>	<u>Statement 68</u> <u>Employer Financials</u>
Fiscal Year End for Reporting	<b>April 30, 2015</b>	<b>April 30, 2015</b>
Measurement Date	April 30, 2015	April 30, 2015
Actuarial Valuation Date	May 1, 2015	May 1, 2015
Actuarial Valuation - Data Date	April 30, 2015	April 30, 2015
Asset Valuation Method	Market Value	Market Value
Actuarial Cost Method	Entry Age Normal (Level %)	Entry Age Normal (Level %)

**Methodology Used in the Determination of Deferred Inflows and Outflows of Resources**

Amortization Method	Straight Line	Straight Line
Amortization Period		
Actuarial Experience (TPL)	7.80 Years	7.80 Years
Changes in Assumptions	7.80 Years	7.80 Years
Asset Experience	5.00 Years	5.00 Years



## SUPPLEMENTARY TABLES

Projection of Contributions  
Projection of the Pension Fund's Fiduciary Net Position  
Actuarial Present Value of Projected Benefit Payments

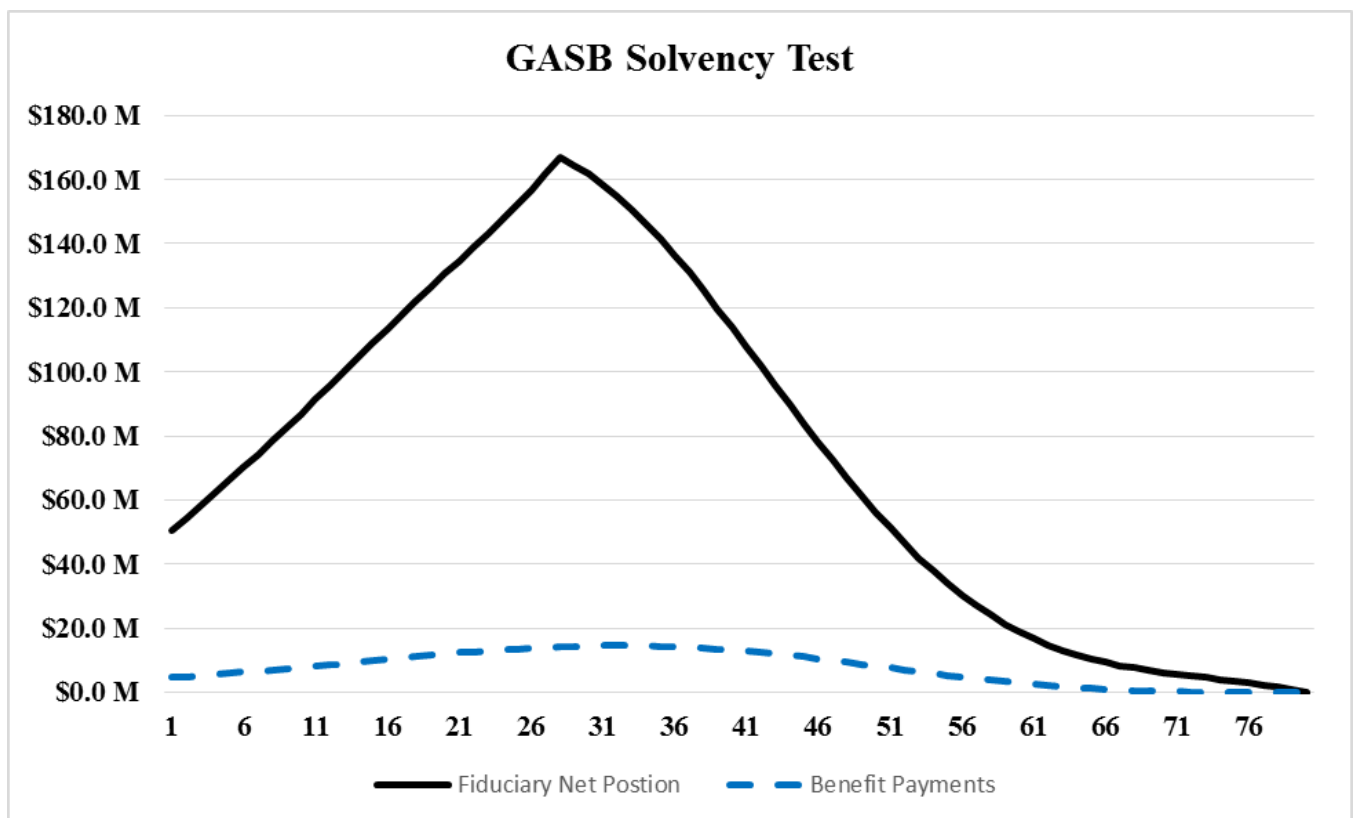
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## GASB PROJECTIONS – SUMMARY AND PROCEDURE

GASB requires a solvency test to use in the determination of the discount rate each year. The Fiduciary Net Position of the fund is projected forward. To the extent the Net Position of the Fund is anticipated to be greater than \$0, benefit payments during that time period are discounted based on the expected rate of return on plan assets.

If the Fiduciary Net Position of the fund is anticipated to go to \$0 prior to the payment of future benefit payments for employees who are in the fund as of the Actuarial Valuation Date, then remaining expected future benefit payments are discounted using a high quality Municipal Bond rate as described in the assumption section of the report. Below is a chart with a high level summary of the projections:







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### Limitations

Projections of any type require assumptions about future events. The projections required for GASB reporting are deterministic in nature. That means that values are projected forward under one set of assumptions which can be thought of as the average result. Actual results could vary, and projections of one deterministic assumption set do not necessarily provide a framework for making risk management or funding policy decisions. Projections that deal with risk management are outside the scope of this report.

In addition, GASB requirements create results that are specific only to financial statement reporting, and should not be used or interpreted for other purposes. For example, GASB cash flow projections do not entail the total expected cash flows of the pension fund, but rather a subset of cash flows specific to members who are in the pension fund as of the Actuarial Valuation date. While the likely expectation may be that new employees are hired to replace the old, cash flows attributable to their benefits are not considered. Under GASB, when the Net Position goes to \$0, that represents only the Net Position for the assets attributable to the current fund members.

GASB also mandates certain assumptions that are made in the projection process. Most notably, future contributions under an informal funding policy. In proposing an informal funding policy, GASB suggests a focus be placed on the average contribution rate over the past 5 years. Assumed contributions noted in this section may be based on the five year average, unless a formal funding policy is in place.

Contributions reflecting informal funding policy are applied under GASB, whether or not the future results dictate a need for more or less contributions. This would not be the case with other uses for projections. Any events that are taken into account (past or future) in the informal funding policy are discussed in the “Funding Policy” section of this report.

The further you look forward with projections, the more sensitive the results are to assumptions. With projections that run out close to 80 years, a small change in an assumption will have a dramatic impact in the look of the projections on the following pages. If there is no change to the solvency of the fund as determined by GASB, big swings in the projection results may not necessarily lead to big swings in the determination of the Total Pension Liability.

We recommend the projections are not used for any other purposes, other than providing backup information for purposes of the financial statement report.

The following pages provide the detail behind the charts shown on the chart in this section.



## PROJECTION OF CONTRIBUTIONS – YEARS 1 TO 30

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
1	\$ 8,617,166	\$ -	\$ 8,617,166	\$ 814,753	\$ 4,405,755	\$ -	\$ 5,220,508
2	8,670,030	291,823	8,961,853	819,751	4,422,203	-	5,241,955
3	8,724,768	595,559	9,320,327	824,927	4,565,537	-	5,390,463
4	8,625,171	1,067,969	9,693,140	815,510	4,715,092	-	5,530,602
5	8,521,204	1,559,661	10,080,865	805,680	4,844,735	-	5,650,415
6	8,372,163	2,111,937	10,484,100	791,588	4,977,135	-	5,768,723
7	8,264,940	2,638,524	10,903,464	781,450	5,108,211	-	5,889,661
8	8,145,903	3,193,700	11,339,603	770,195	5,251,288	-	6,021,483
9	8,090,555	3,702,632	11,793,187	764,962	5,395,595	-	6,160,557
10	7,999,557	4,265,357	12,264,914	756,358	5,559,076	-	6,315,434
11	7,865,409	4,890,102	12,755,511	743,674	5,720,979	-	6,464,654
12	7,729,046	5,536,685	13,265,731	730,781	5,877,925	-	6,608,707
13	7,491,994	6,304,366	13,796,360	708,368	6,037,538	-	6,745,906
14	7,282,880	7,065,335	14,348,215	688,596	6,181,737	-	6,870,333
15	6,940,861	7,981,282	14,922,143	656,258	6,337,505	-	6,993,763
16	6,615,686	8,903,343	15,519,029	625,513	6,466,587	-	7,092,100
17	6,217,507	9,922,283	16,139,790	587,865	6,608,090	-	7,195,955
18	5,876,349	10,909,033	16,785,382	555,609	6,741,976	-	7,297,585
19	5,475,968	11,980,829	17,456,797	517,753	6,890,619	-	7,408,372
20	5,115,319	13,039,750	18,155,069	483,653	7,036,861	-	7,520,514
21	4,779,281	14,101,991	18,881,272	451,881	7,203,363	-	7,655,244
22	4,420,121	15,216,402	19,636,523	417,922	7,383,243	-	7,801,165
23	4,044,986	16,376,998	20,421,984	382,453	7,571,470	-	7,953,923
24	3,684,123	17,554,740	21,238,863	348,334	7,769,701	-	8,118,034
25	3,404,837	18,683,580	22,088,417	321,927	7,982,417	-	8,304,344
26	3,170,850	19,801,104	22,971,954	299,804	8,223,282	-	8,523,086
27	2,920,695	20,970,137	23,890,832	276,152	8,485,757	-	8,761,909
28	2,604,828	22,241,638	24,846,466	246,286	416,145	-	662,431
29	2,346,237	23,494,087	25,840,324	221,837	355,812	-	577,649
30	2,097,553	24,776,384	26,873,937	198,324	308,270	-	506,594

Column d – Contributions from employees to the pension fund (employees as of the valuation date)

Column e – Employer contributions to the fund excluding contributions for employees hired after the actuarial valuation date

Column f – Contributions from future employees to the extent they are anticipated to be greater than required to pay their total normal cost



**PROJECTION OF CONTRIBUTIONS – YEARS 31 TO 60**

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
31	\$ 1,830,902	\$ 26,117,993	\$ 27,948,895	\$ 173,112	\$ 265,687	\$ -	\$ 438,799
32	1,552,734	27,514,117	29,066,851	146,811	226,361	-	373,172
33	1,253,152	28,976,373	30,229,525	118,486	184,760	-	303,246
34	988,063	30,450,643	31,438,706	93,421	142,761	-	236,182
35	779,495	31,916,759	32,696,254	73,701	110,219	-	183,920
36	593,794	33,410,310	34,004,104	56,143	85,530	-	141,673
37	437,176	34,927,092	35,364,268	41,335	64,371	-	105,706
38	304,620	36,474,219	36,778,839	28,802	45,074	-	73,876
39	205,616	38,044,376	38,249,992	19,441	29,978	-	49,419
40	134,181	39,645,811	39,779,992	12,687	19,780	-	32,467
41	81,642	41,289,550	41,371,192	7,719	12,570	-	20,289
42	48,112	42,977,927	43,026,039	4,549	7,674	-	12,223
43	15,570	44,731,511	44,747,081	1,472	4,503	-	5,975
44	-	46,536,964	46,536,964	-	1,449	-	1,449
45	-	48,398,443	48,398,443	-	-	-	-
46	-	50,334,380	50,334,380	-	-	-	-
47	-	52,347,756	52,347,756	-	-	-	-
48	-	54,441,666	54,441,666	-	-	-	-
49	-	56,619,333	56,619,333	-	-	-	-
50	-	58,884,106	58,884,106	-	-	-	-
51	-	61,239,470	61,239,470	-	-	-	-
52	-	63,689,049	63,689,049	-	-	-	-
53	-	66,236,611	66,236,611	-	-	-	-
54	-	68,886,075	68,886,075	-	-	-	-
55	-	71,641,518	71,641,518	-	-	-	-
56	-	74,507,179	74,507,179	-	-	-	-
57	-	77,487,466	77,487,466	-	-	-	-
58	-	80,586,965	80,586,965	-	-	-	-
59	-	83,810,443	83,810,443	-	-	-	-
60	-	87,162,861	87,162,861	-	-	-	-

Column d – Contributions from employees to the pension fund (employees as of the valuation date)

Column e – Employer contributions to the fund excluding contributions for employees hired after the actuarial valuation date

Column f – Contributions from future employees to the extent they are anticipated to be greater than required to pay their total normal cost



**PROJECTION OF CONTRIBUTIONS – YEARS 61 TO 80**

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
61	\$ -	\$ 90,649,376	\$ 90,649,376	\$ -	\$ -	\$ -	\$ -
62	-	94,275,351	94,275,351	-	-	-	-
63	-	98,046,365	98,046,365	-	-	-	-
64	-	101,968,219	101,968,219	-	-	-	-
65	-	106,046,948	106,046,948	-	-	-	-
66	-	110,288,826	110,288,826	-	-	-	-
67	-	114,700,379	114,700,379	-	-	-	-
68	-	119,288,394	119,288,394	-	-	-	-
69	-	124,059,930	124,059,930	-	-	-	-
70	-	129,022,327	129,022,327	-	-	-	-
71	-	134,183,220	134,183,220	-	-	-	-
72	-	139,550,549	139,550,549	-	-	-	-
73	-	145,132,571	145,132,571	-	-	-	-
74	-	150,937,874	150,937,874	-	-	-	-
75	-	156,975,389	156,975,389	-	-	-	-
76	-	163,254,404	163,254,404	-	-	-	-
77	-	169,784,580	169,784,580	-	-	-	-
78	-	176,575,964	176,575,964	-	-	-	-
79	-	183,639,002	183,639,002	-	-	-	-
80	-	190,984,562	190,984,562	-	-	-	-

**NOTES TO PROJECTION OF CONTRIBUTIONS**

Total payroll is assumed to increase annually at the assumed payroll increase rate shown in the assumption section of this report. Payroll for current employees (employees active as of the actuarial valuation date) has been projected on an employee by employee basis, using expected pay increases and probability of remaining in active employment for future periods.

Employer contributions are related to current employees in the fund as of the Actuarial Valuation Date. To the extent future contributions under the Employer funding policy are made to cover the Normal Cost of providing benefits for future employees, those contributions have been excluded out for purposes of these projections and this report.

Contributions are based on the Funding Policy described in an earlier section of this report. The contributions do not factor in changes in funding policy based on an assumed Employer decision if the projections were to play out in this fashion. The only future events that have been considered were outlined in the funding policy section of the report.

Contributions from future employees have not been included. It is assumed that contributions made by future employees will not exceed the Normal Cost of their participation in the Fund. In addition, contributions by the employer on behalf of service for future employees have not been included per the GASB parameters.



**PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 1 TO 30**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
1	\$ 50,594,711	\$ 5,220,508	\$ 4,696,299	\$ 79,362	\$ 3,374,482	\$ 54,414,040
2	54,414,040	5,241,955	4,931,584	81,742	3,633,516	58,276,185
3	58,276,185	5,390,463	5,246,972	84,195	3,892,742	62,228,224
4	62,228,224	5,530,602	5,591,981	86,721	4,157,221	66,237,345
5	66,237,345	5,650,415	5,953,650	89,322	4,425,110	70,269,898
6	70,269,898	5,768,723	6,314,323	92,002	4,694,671	74,326,967
7	74,326,967	5,889,661	6,651,822	94,762	4,966,757	78,436,802
8	78,436,802	6,021,483	6,970,617	97,605	5,243,188	82,633,252
9	82,633,252	6,160,557	7,314,856	100,533	5,524,789	86,903,209
10	86,903,209	6,315,434	7,679,380	103,549	5,810,822	91,246,537
11	91,246,537	6,464,654	8,029,114	106,655	6,102,506	95,677,927
12	95,677,927	6,608,707	8,425,985	109,855	6,398,700	100,149,494
13	100,149,494	6,745,906	8,841,959	113,151	6,697,036	104,637,326
14	104,637,326	6,870,333	9,306,017	116,545	6,994,823	109,079,920
15	109,079,920	6,993,763	9,736,808	120,042	7,290,605	113,507,439
16	113,507,439	7,092,100	10,202,858	123,643	7,584,093	117,857,131
17	117,857,131	7,195,955	10,638,392	127,352	7,873,198	122,160,540
18	122,160,540	7,297,585	11,098,013	131,173	8,158,216	126,387,156
19	126,387,156	7,408,372	11,554,019	135,108	8,437,982	130,544,383
20	130,544,383	7,520,514	11,949,438	139,161	8,715,006	134,691,304
21	134,691,304	7,655,244	12,313,311	143,336	8,992,409	138,882,310
22	138,882,310	7,801,165	12,713,395	147,636	9,271,626	143,094,071
23	143,094,071	7,953,923	13,071,460	152,065	9,553,762	147,378,230
24	147,378,230	8,118,034	13,340,393	156,627	9,844,080	151,843,325
25	151,843,325	8,304,344	13,562,234	161,326	10,148,708	156,572,818
26	156,572,818	8,523,086	13,761,330	166,166	10,472,635	161,641,044
27	161,641,044	8,761,909	14,011,213	171,150	10,818,490	167,039,079
28	167,039,079	662,431	14,182,593	176,285	11,190,175	164,532,807
29	164,532,807	577,649	14,309,277	181,574	11,010,117	161,629,722
30	161,629,722	506,594	14,392,625	187,021	10,803,793	158,360,463

Column b – Contributions on behalf of current employees only as of the Actuarial Valuation Date.

Column d – Based on average administrative expenses in recent years and projected to increase going forward.

Column e – Based on the current expected return on assets. Does not factor in allocation changes.



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**PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 31 TO 60**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
31	\$ 158,360,463	\$ 438,799	\$ 14,481,167	\$ 192,631	\$ 10,571,649	\$ 154,697,113
32	154,697,113	373,172	14,564,319	198,410	10,312,102	150,619,658
33	150,619,658	303,246	14,574,655	204,363	10,026,110	146,169,997
34	146,169,997	236,182	14,520,964	210,494	9,716,299	141,391,020
35	141,391,020	183,920	14,442,291	216,808	9,384,303	136,300,144
36	136,300,144	141,673	14,291,481	223,313	9,032,992	130,960,016
37	130,960,016	105,706	14,109,597	230,012	8,665,315	125,391,428
38	125,391,428	73,876	13,882,779	236,912	8,283,211	119,628,823
39	119,628,823	49,419	13,581,930	244,020	7,890,109	113,742,402
40	113,742,402	32,467	13,238,443	251,340	7,489,826	107,774,911
41	107,774,911	20,289	12,851,996	258,880	7,085,363	101,769,687
42	101,769,687	12,223	12,440,342	266,647	6,679,133	95,754,054
43	95,754,054	5,975	11,990,584	274,646	6,273,501	89,768,300
44	89,768,300	1,449	11,511,869	282,886	5,870,965	83,845,959
45	83,845,959	-	11,011,215	291,372	5,473,627	78,016,998
46	78,016,998	-	10,487,082	300,113	5,083,638	72,313,441
47	72,313,441	-	9,950,883	309,117	4,702,841	66,756,282
48	66,756,282	-	9,402,847	318,390	4,332,696	61,367,741
49	61,367,741	-	8,836,082	327,942	3,975,001	56,178,718
50	56,178,718	-	8,259,207	337,780	3,631,616	51,213,346
51	51,213,346	-	7,681,389	347,914	3,303,909	46,487,952
52	46,487,952	-	7,102,318	358,351	2,993,033	42,020,316
53	42,020,316	-	6,527,602	369,102	2,700,038	37,823,650
54	37,823,650	-	5,954,791	380,175	2,425,932	33,914,616
55	33,914,616	-	5,392,291	391,580	2,171,588	30,302,333
56	30,302,333	-	4,845,083	403,327	1,937,469	26,991,392
57	26,991,392	-	4,321,238	415,427	1,723,614	23,978,341
58	23,978,341	-	3,821,249	427,890	1,529,764	21,258,966
59	21,258,966	-	3,346,987	440,727	1,355,558	18,826,809
60	18,826,809	-	2,905,526	453,948	1,200,295	16,667,630

Column b – Contributions on behalf of current employees only as of the Actuarial Valuation Date.

Column d – Based on average administrative expenses in recent years and projected to increase going forward.

Column e – Based on the current expected return on assets. Does not factor in allocation changes.



**PROJECTION OF THE PENSION PLAN’S FIDUCIARY NET POSITION – YEARS 61 TO 80**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
61	\$ 16,667,630	\$ -	\$ 2,498,779	\$ 467,567	\$ 1,062,912	\$ 14,764,196
62	14,764,196	-	2,125,686	481,594	942,239	13,099,155
63	13,099,155	-	1,789,519	496,042	836,946	11,650,541
64	11,650,541	-	1,488,650	510,923	745,553	10,396,520
65	10,396,520	-	1,221,977	526,251	666,568	9,314,861
66	9,314,861	-	990,979	542,038	598,385	8,380,229
67	8,380,229	-	793,215	558,299	539,313	7,568,027
68	7,568,027	-	625,814	575,048	487,732	6,854,896
69	6,854,896	-	486,466	592,300	442,086	6,218,217
70	6,218,217	-	372,553	610,069	400,883	5,636,478
71	5,636,478	-	280,978	628,371	362,726	5,089,856
72	5,089,856	-	208,340	647,222	326,345	4,560,639
73	4,560,639	-	151,802	666,639	290,599	4,032,798
74	4,032,798	-	108,673	686,638	254,460	3,491,947
75	3,491,947	-	76,361	707,237	217,010	2,925,359
76	2,925,359	-	52,675	728,454	177,436	2,321,666
77	2,321,666	-	35,669	750,308	135,007	1,670,696
78	1,670,696	-	23,578	772,817	89,075	963,376
79	963,376	-	15,337	796,001	39,040	191,078
80	191,078	-	9,789	819,881	-	-

**NOTES TO PROJECTION OF FIDUCIARY NET POSITION**

Total contributions are Employee and Employer contributions anticipated to be made under the funding policy on behalf of employees in the fund as of the Actuarial Valuation Date. The amounts shown were detailed earlier in this section.

Projected benefit payments shown represent only employees active as of the Actuarial Valuation Date. The fund will also be paying benefit payments in the future on behalf of employees hired after the Actuarial Valuation Date, but those have not been estimated for this purpose.

Projected investment earnings are based on the current expected rate of return on plan assets. Administrative expenses are not typically charged on a per employee basis. Administrative expenses shown have not been adjusted to distinguish between current employees and future employees.

The projected Net Position represents assets held or projected to be held on behalf of current employees as of the Actuarial Valuation Date. The fund will also hold assets in the future on behalf of new employees that are not shown here.



**ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 1 TO 30**

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
1	\$ 50,594,711	\$ 4,696,299	\$ 4,696,299	\$ -	\$ 4,540,084	\$ -	\$ 4,540,084
2	54,414,040	4,931,584	4,931,584	-	4,455,647	-	4,455,647
3	58,276,185	5,246,972	5,246,972	-	4,430,465	-	4,430,465
4	62,228,224	5,591,981	5,591,981	-	4,412,884	-	4,412,884
5	66,237,345	5,953,650	5,953,650	-	4,390,928	-	4,390,928
6	70,269,898	6,314,323	6,314,323	-	4,352,272	-	4,352,272
7	74,326,967	6,651,822	6,651,822	-	4,284,953	-	4,284,953
8	78,436,802	6,970,617	6,970,617	-	4,196,555	-	4,196,555
9	82,633,252	7,314,856	7,314,856	-	4,115,700	-	4,115,700
10	86,903,209	7,679,380	7,679,380	-	4,038,130	-	4,038,130
11	91,246,537	8,029,114	8,029,114	-	3,945,826	-	3,945,826
12	95,677,927	8,425,985	8,425,985	-	3,869,967	-	3,869,967
13	100,149,494	8,841,959	8,841,959	-	3,795,345	-	3,795,345
14	104,637,326	9,306,017	9,306,017	-	3,733,214	-	3,733,214
15	109,079,920	9,736,808	9,736,808	-	3,650,496	-	3,650,496
16	113,507,439	10,202,858	10,202,858	-	3,574,977	-	3,574,977
17	117,857,131	10,638,392	10,638,392	-	3,483,723	-	3,483,723
18	122,160,540	11,098,013	11,098,013	-	3,396,480	-	3,396,480
19	126,387,156	11,554,019	11,554,019	-	3,304,709	-	3,304,709
20	130,544,383	11,949,438	11,949,438	-	3,194,213	-	3,194,213
21	134,691,304	12,313,311	12,313,311	-	3,076,149	-	3,076,149
22	138,882,310	12,713,395	12,713,395	-	2,968,317	-	2,968,317
23	143,094,071	13,071,460	13,071,460	-	2,852,260	-	2,852,260
24	147,378,230	13,340,393	13,340,393	-	2,720,507	-	2,720,507
25	151,843,325	13,562,234	13,562,234	-	2,584,810	-	2,584,810
26	156,572,818	13,761,330	13,761,330	-	2,451,174	-	2,451,174
27	161,641,044	14,011,213	14,011,213	-	2,332,414	-	2,332,414
28	167,039,079	14,182,593	14,182,593	-	2,206,489	-	2,206,489
29	164,532,807	14,309,277	14,309,277	-	2,080,559	-	2,080,559
30	161,629,722	14,392,625	14,392,625	-	1,955,774	-	1,955,774

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position was shown in more detail earlier in this section.





**ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 31 TO 60**

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
31	\$ 158,360,463	\$ 14,481,167	\$ 14,481,167	\$ -	\$ 1,839,070	\$ -	\$ 1,839,070
32	154,697,113	14,564,319	14,564,319	-	1,728,627	-	1,728,627
33	150,619,658	14,574,655	14,574,655	-	1,616,685	-	1,616,685
34	146,169,997	14,520,964	14,520,964	-	1,505,355	-	1,505,355
35	141,391,020	14,442,291	14,442,291	-	1,399,251	-	1,399,251
36	136,300,144	14,291,481	14,291,481	-	1,294,056	-	1,294,056
37	130,960,016	14,109,597	14,109,597	-	1,194,007	-	1,194,007
38	125,391,428	13,882,779	13,882,779	-	1,097,956	-	1,097,956
39	119,628,823	13,581,930	13,581,930	-	1,003,890	-	1,003,890
40	113,742,402	13,238,443	13,238,443	-	914,487	-	914,487
41	107,774,911	12,851,996	12,851,996	-	829,712	-	829,712
42	101,769,687	12,440,342	12,440,342	-	750,595	-	750,595
43	95,754,054	11,990,584	11,990,584	-	676,129	-	676,129
44	89,768,300	11,511,869	11,511,869	-	606,669	-	606,669
45	83,845,959	11,011,215	11,011,215	-	542,322	-	542,322
46	78,016,998	10,487,082	10,487,082	-	482,717	-	482,717
47	72,313,441	9,950,883	9,950,883	-	428,071	-	428,071
48	66,756,282	9,402,847	9,402,847	-	378,033	-	378,033
49	61,367,741	8,836,082	8,836,082	-	332,006	-	332,006
50	56,178,718	8,259,207	8,259,207	-	290,029	-	290,029
51	51,213,346	7,681,389	7,681,389	-	252,092	-	252,092
52	46,487,952	7,102,318	7,102,318	-	217,839	-	217,839
53	42,020,316	6,527,602	6,527,602	-	187,114	-	187,114
54	37,823,650	5,954,791	5,954,791	-	159,527	-	159,527
55	33,914,616	5,392,291	5,392,291	-	135,007	-	135,007
56	30,302,333	4,845,083	4,845,083	-	113,371	-	113,371
57	26,991,392	4,321,238	4,321,238	-	94,498	-	94,498
58	23,978,341	3,821,249	3,821,249	-	78,098	-	78,098
59	21,258,966	3,346,987	3,346,987	-	63,930	-	63,930
60	18,826,809	2,905,526	2,905,526	-	51,867	-	51,867

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position was shown in more detail earlier in this section.



**ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 61 TO 80**

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
61	\$ 16,667,630	\$ 2,498,779	\$ 2,498,779	\$ -	\$ 41,688	\$ -	\$ 41,688
62	14,764,196	2,125,686	2,125,686	-	33,143	-	33,143
63	13,099,155	1,789,519	1,789,519	-	26,077	-	26,077
64	11,650,541	1,488,650	1,488,650	-	20,273	-	20,273
65	10,396,520	1,221,977	1,221,977	-	15,553	-	15,553
66	9,314,861	990,979	990,979	-	11,788	-	11,788
67	8,380,229	793,215	793,215	-	8,818	-	8,818
68	7,568,027	625,814	625,814	-	6,502	-	6,502
69	6,854,896	486,466	486,466	-	4,723	-	4,723
70	6,218,217	372,553	372,553	-	3,381	-	3,381
71	5,636,478	280,978	280,978	-	2,383	-	2,383
72	5,089,856	208,340	208,340	-	1,651	-	1,651
73	4,560,639	151,802	151,802	-	1,124	-	1,124
74	4,032,798	108,673	108,673	-	752	-	752
75	3,491,947	76,361	76,361	-	494	-	494
76	2,925,359	52,675	52,675	-	319	-	319
77	2,321,666	35,669	35,669	-	202	-	202
78	1,670,696	23,578	23,578	-	125	-	125
79	963,376	15,337	15,337	-	76	-	76
80	191,078	9,789	9,789	-	45	-	45

**NOTES TO THE ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS**

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Net Position was shown in more detail earlier in this section.

The Funded and Unfunded portion of the Benefit Payments is split based on the time that the Fiduciary Net Position is projected to go to \$0 (based on assets for current fund members).

The Present Value of the Funded portion and Unfunded portion of the benefit payments has been determined separately. The PV of the funded portion of the benefit payments uses the assumption for the expected rate of return on plan assets. The PV of the unfunded portion of the benefit payments has been determined using the high quality Municipal Bond Rate as of the Measurement Date as described in the Actuarial Assumption section of the report.

The discount rate used for GASB purposes is the rate that is when applied to the total Projected Benefit payments results in a present value that equals the sum of the present value of the funded and unfunded payments. The discount rate has been round to four decimal places. Therefore the resulting present value comparisons might show a slight difference due to rounding.

Lauterbach & Amen, LLP  
27W457 Warrenville Road  
Warrenville, IL 60555-3902

Actuarial Valuation  
as of May 1, 2015



BLOOMINGTON  
FIREFIGHTERS'  
PENSION FUND

Contributions Budgeted For the Fiscal Year  
May 1, 2016 to April 30, 2017

*LAUTERBACH & AMEN, LLP*

# Actuarial Valuation – Funding Recommendation

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Lauterbach & Amen, LLP

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CERTIFIED PUBLIC ACCOUNTANTS

## BLOOMINGTON FIREFIGHTERS' PENSION FUND

**Contributions Budgeted for the Fiscal Year  
May 1, 2016 to April 30, 2017**

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**Submitted by:**

Lauterbach & Amen, LLP  
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[www.lauterbachamen.com](http://www.lauterbachamen.com)

**Contact:**

Todd A. Schroeder  
October 2, 2015

***LAUTERBACH & AMEN, LLP***



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## ACTUARIAL CERTIFICATION

This report documents the results of the Actuarial valuation of the Bloomington Firefighters' Pension Fund. The purpose is to report the actuarial contribution requirement for the contribution year May 1, 2015 to April 30, 2016. Determinations for purposes other than meeting the employer's actuarial contribution requirements may be significantly different from the results herein.

The results in this report are based on information and data submitted by the Bloomington Firefighters' Pension Fund including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to May 1, 2014. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness, as appropriate, based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Bloomington Firefighters' Pension Fund selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned of Lauterbach & Amen, LLP, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Opinion. There is no relationship between the Bloomington Firefighters' Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Bloomington Firefighters' Pension Fund and the City of Bloomington in connection with our actuarial valuation. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.

Respectfully Submitted,  
LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA





## MANAGEMENT SUMMARY

Contribution Recommendation  
Funded Status  
Management Summary

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## MANAGEMENT SUMMARY

### CONTRIBUTION RECOMMENDATION

	Statutory Minimum Contribution	Prior Year Recommended Contribution	City* Recommended Contribution
Contribution Requirement	\$3,624,314	\$4,405,755	\$4,673,635
Expected Payroll	\$8,789,514	\$8,442,730	\$8,789,514
Contribution Requirement as a Percent of Expected Payroll	41.23%	52.18%	53.17%

*The City  
Recommended  
Contribution is  
\$1,049,321  
Greater than  
the Statutory  
Minimum  
Contribution.*

\*The City recommended contribution is based on the Funding Policy adopted by the City Council on November 12, 2013.

### FUNDED STATUS

	Statutory (1) Minimum Contribution	Prior Year Recommended Contribution	City (1) Recommended Contribution
Normal Cost	\$2,565,111	\$2,307,885	\$2,332,694
Market Value of Assets	\$50,594,711	\$47,335,996	\$50,594,711
Actuarial Value of Assets	\$49,896,372	\$46,005,790	\$49,896,372
Actuarial Accrued Liability	\$87,678,910	\$94,861,692	\$102,307,353
Unfunded Actuarial Accrued Liability	\$37,782,538	\$48,855,902	\$52,410,981
Percent Funded			
Actuarial Value of Assets	56.91%	48.50%	48.77%
Market Value of Assets	57.70%	49.90%	49.45%

*The Difference  
in Funded  
Percentage is  
Due to  
Changes in the  
City Funding  
Policy to a  
Different  
Actuarial Cost  
Method.*

(1) Statutory guidelines require 90% funding by 2040 under the Projected Unit Credit cost method, as opposed to the City's goal of 100% funding in the same time period under the Entry Age Normal cost method.



## MANAGEMENT SUMMARY

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### MANAGEMENT SUMMARY – COMMENTS AND ANALYSIS

#### Contribution Results

The contribution recommendation is based on the funding policies and procedures that are outlined in the “Actuarial Funding Policies” section of this report.

The State of Illinois statutes for pension funds contain parameters that should be used to determine the minimum amount of contribution to a public pension fund. Those parameters and the resulting minimum contribution can be found in the “Illinois Statutory Minimum Contribution” section of this report.

#### Defined Benefit Plan Risks

##### *Asset Growth*

Pension funding involves preparing plan assets to pay benefits for the members when they retire. During their working careers, assets need to build with contributions and investment earnings, and then the pension fund distributes assets during retirement. Based on the fund’s current mix of employees and funded status, the fund should be experiencing positive asset growth on average if requested contributions are made and expected investment earnings come in. In the current year the fund asset growth was positive by \$3,258,715.

Asset growth is important long-term. Long-term cash flow out of the pension fund is primarily benefit payments. Expenses make up a smaller portion. The fund should monitor the impact of expected benefit payments and the impact on asset growth in the future. In the next 5 years, benefits payments are anticipated to increase 45-50%, or approximately \$1.9 million dollars. In the next 10 years, the expected increase in benefit payments is 85-90%, or approximately \$3.7 million dollars.

##### *Unfunded Liability:*

Unfunded liability represents dollars we expect to be in the pension fund already for the fund members based on funding policy. To the extent dollars are not in the pension fund the fund is losing investment returns on those dollars going forward. Payments to unfunded liability pay for the lost investment earnings, as well as the outstanding unfunded amount. If payment is not made, the unfunded liability will grow.

In the early 1990s, many pension funds in Illinois adopted an increasing payment to handle unfunded liability due to a change in legislation. The initial payments decreased, and payments were anticipated to increase annually after that. In many situations, payments early on may be less than the interest on unfunded liability, which means unfunded liability is expected to *increase* even if contributions are at the recommended level.



## MANAGEMENT SUMMARY

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The current contribution recommendation includes a payment to unfunded liability that is currently approximately \$660,000 less than interest on the unfunded liability. All else being equal and contributions being made, unfunded liability would still be expected to increase. The employer and the fund should anticipate currently that improvement in the funded percent will be mitigated in the short-term. The employer and the fund should understand this impact as we progress forward to manage expectations.

### *Actuarial Value of Assets:*

The pension fund smooths asset returns that vary from expectations over a five year period. The intention over time is that asset returns for purposes of funding recommendations are a combination of several years. The impact is intended to smooth out the volatility of contribution recommendations over time, but not necessarily increase or decrease the level of contributions over the long-term.

When asset returns are smoothed, there are always gains or losses on the Market Value of Assets that are going to be deferred for current funding purposes, and recognized in future years. Currently, the pension fund is deferring approximately \$698,000 in gains on the Market Value of Assets. These are asset gains that will be recognized in upcoming periods, independent of the future performance of the Market Value of Assets.

### Plan Assets

The results in this report are based on the Assets held in the pension fund. Assets consist of funds held for investment and for benefit payments as of the Valuation Date. In addition, Assets may be adjusted for other events representing dollars that are reasonably expected to be paid out from the pension fund or deposited into the pension fund after the Actuarial Valuation Date as well.

The current fund Assets are Audited. .

The actuarial value of assets under the funding policy is equal to the fair market value of assets, with unexpected gains and losses smoothed over 5 years. More detail on the Actuarial Value of Assets can be found in the funding policy section of the report.

*The Plan  
Assets Used in  
this Report  
are Audited.*



## MANAGEMENT SUMMARY

---

### Demographic Data

Demographic factors can change from year to year within a pension fund. Changes in this category include hiring new employees, employees retiring or becoming disabled, retirees passing away, and other changes. Demographic changes can cause an actuarial gain (contribution that is less than expected compared to the prior year) or an actuarial loss (contribution that is greater than expected compared to the prior year).

Demographic gains and losses occur when the assumptions over the one-year period for employee changes do not meet our long-term expectation. For example, if no employees become disabled during the year, we would expect a liability gain. If more employees become disabled than anticipated last year, we would expect a liability loss. Generally we expect short-term fluctuations in demographic experience to create 1%-3% gains or losses in any given year, but to balance out in the long-term.

In the current report, the key demographic changes were as follows:

*New hires:* The fund added 6 new active members in the current year through hiring. When a new member is admitted to the pension fund, the employer contribution will increase to reflect the new member. The increase in the recommended contribution in the current year for new fund members is approximately \$41,000.

*Disability:* There was 1 member of the fund who became disabled during the year. When a member becomes disabled, the fund will often experience a decrease in normal cost. Due to the anticipation of the member retiring soon, the fund experienced a decrease in unfunded liability. The decrease in the recommended contribution in the current year for the new disability was approximately \$4,000.

*Retirement:* There were 3 members of the fund who retired during the year. When a fund member retires the normal cost will decrease. Any change in the actuarial liability will be considered when determining the amount to pay towards unfunded liability each year. The decrease in the recommended contribution in the current year due to the retirement experience is approximately \$22,500.

*Termination:* There was 1 member of the fund who terminated employment during the year. The member took a refund. The fund is no longer obligated to pay a benefit to the member in the future. The decrease in the recommended contribution in the current year due to the termination experience is approximately \$14,000.



## MANAGEMENT SUMMARY

---

*Mortality:* There were 2 retirees who passed away during the year, one with an eligible surviving spouse. When a retiree passes away the fund liability will decrease as the pension fund no longer will make future payments to the retiree. If there is an eligible surviving spouse, the fund liability will increase to represent the value of the expected payments that will be made to the spouse. The decrease in the recommended contribution in the current year due to the passing of the retiree is approximately \$30,000.

*Salary Increases:* Salary increases were greater than anticipated in the current year. Most active members received increases of 6% and higher. This caused an increase in the recommended contribution in the current year of approximately \$57,500.

### Assumption Changes

The actuarial assumptions were not changed in the current year.

### Funding Policy Changes

The funding policy was not changed in the current year.



## *MANAGEMENT SUMMARY*

---

### **ACTUARIAL CONTRIBUTION RECOMMENDATION - RECONCILIATION**

Actuarial liability is expected to increase each year for both interest for the year and as active employees earn additional service years towards retirement. Similarly actuarial liability is expected to decrease when the fund pays benefits to inactive employees.

Contributions are expected to increase as expected pay increases under the funding policy for the Fund.

Other increases or decreases in actuarial liability (key changes noted below) will increase or decrease the amount of unfunded liability in the plan. To the extent unfunded liability increases or decreases unexpectedly, the contribution towards unfunded liability will also change unexpectedly.

	Actuarial <u>Liability</u>	Contribution <u>Recommendation</u>
Salary Increase Greater than Expected	649,183	57,567
Demographic Changes	2,188,111	20,952
Asset Return Greater than Expected *	-	(12,915)
Contributions Less than Expected	-	26,045
Total Actuarial Experience	<u>\$ 2,837,294</u>	<u>\$ 91,649</u>

\*The impact on contribution due to asset performance is based on the Actuarial Value of Assets.

Key demographic changes were discussed in the prior section.





## VALUATION OF FUND ASSETS

Market Value of Assets  
Actuarial Value of Assets

---

## VALUATION OF FUND ASSETS

### MARKET VALUE OF ASSETS

#### Statement of Assets

	Prior Valuation	Current Valuation
Cash and Cash Equivalents	\$ 4,708,740	\$ 4,111,106
Fixed Income	7,036	5,737
Insurance Contracts	42,581,648	46,468,494
Receivables (Net of Payables)	38,572	9,374
Net Assets Available for Pensions	<u>\$ 47,335,996</u>	<u>\$ 50,594,711</u>

*The Total Value of Assets has Increased \$3,258,715 from Prior Valuation.*

#### Statement of Changes in Assets

Total Market Value - Prior Valuation	\$ 47,335,996
Plus - Employer Contributions	3,941,587
Plus - Employee Contributions	808,722
Plus - Return on Investments	2,891,289
Less - Benefit and Related Payments	(4,320,164)
Less - Other Expenses	(62,718)
Total Market Value - Current Valuation	<u>\$ 50,594,711</u>

*The Return on Investment on the Market Value of Assets for the Fund was Approximately 5.9% Net of Administrative Expenses.*

The return on investments shown has been determined as the Return on Assets from the statement of changes in assets, as a percent of the average of the beginning and ending Market Value of Assets. Return on Investment is net of the Other Expenses as shown. The Return on Investments has been excluded from the Total Market Value of Assets at the end of the year for this calculation.





## *VALUATION OF FUND ASSETS*

---

### **MARKET VALUE OF ASSETS (GAIN)/LOSS**

#### Current Year (Gain)/Loss on Market Value of Assets

Total Market Value - Prior Valuation	\$ 47,335,996
Contributions	4,750,309
Benefit Payments	(4,320,164)
Expected Return on Investments	<u>3,328,575</u>
Expected Total Market Value - Current Valuation	51,094,715
Actual Total Market Value - Current Valuation	<u>50,594,711</u>
Current Market Value (Gain)/Loss	<u>\$ 500,004</u>
Expected Return on Investments	\$ 3,328,575
Actual Return on Investments (Net of Expenses)	<u>2,828,571</u>
Current Market Value (Gain)/Loss	<u>\$ 500,004</u>

*The Return on  
the Market  
Value of Assets  
was Lower than  
Expected Over  
the Most Recent  
Year.*

The (Gain)/Loss on the Market Value of Assets has been determined based on expected returns at the actuarial rate.



## VALUATION OF FUND ASSETS

### DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

Total Market Value - Current Valuation		\$ 50,594,711
Adjustment for Prior (Gains)/Losses		
	<u>Full Amount</u>	
First Preceding Year	\$ 500,004	400,003
Second Preceding Year	(1,345,005)	(807,003)
Third Preceding Year	(1,642,377)	(656,951)
Fourth Preceding Year	1,828,059	365,612
Total Deferred (Gain)/Loss		<u>(698,339)</u>
Initial Actuarial Value of Assets - Current Valuation		49,896,372
Less Contributions for the Current Year and Interest		-
Less Adjustment for the Corridor		<u>-</u>
Actuarial Value of Assets - Current Valuation		<u>\$ 49,896,372</u>

*The Actuarial Value of Assets is Equal to the Fair Market Value of Assets with Unanticipated Gains/Losses Recognized over 5 Years. The Actuarial Value of Assets is Currently 99% of the Market Value.*

### (GAIN)/LOSS ON THE ACTUARIAL VALUE OF ASSETS

Total Actuarial Value - Prior Valuation		\$ 46,005,790
Plus - Employer Contributions		3,941,587
Plus - Employee Contributions		808,722
Plus - Return on Investments		3,523,156
Less - Benefit and Related Payments		(4,320,164)
Less - Other Expenses		<u>(62,718)</u>
Total Actuarial Value - Current Valuation		<u>\$ 49,896,372</u>

*The Return on Investment on the Actuarial Value of Assets for the Fund was Approximately 7.5% Net of Administrative Expenses.*

The Actuarial Value of Assets incorporates portions of gains and losses over multiple years.



## *VALUATION OF FUND ASSETS*

---

### **HISTORICAL ASSET PERFORMANCE**

The chart below shows the historical rates of return on plan assets for both Market Value of Assets and Actuarial Value of Assets.

	<u>Market Value</u>	<u>Actuarial Value</u>
First Preceding Year	5.9%	7.5%

The returns on assets shown above were calculated based on the annual return on investment for the year, as a percentage of the average value of the assets for the year.

For purposes of determining the average value of assets during the year, the ending market value of assets has been adjusted to net out to the portion related to the investment returns themselves. All other cash flows are included.

For purposes of determining the annual return on investment we have adjusted the figures shown on the preceding pages. The figures shown on the preceding pages are net of investment expenses. We have made an additional adjustment to net out administrative expenses. Netting out administrative expenses allows us to capture returns for the year that can be used to make benefit payments as part of the ongoing actuarial process.

The adjustment we make is for actuarial reporting purposes only. By netting out administrative expenses and capturing return dollars that are available to pay benefits, it provides us a comparison to the estimated rate of return on assets, but does not provide a figure that would be consistent with the return rates that are determined by other parties. Therefore this calculated rate of return should not be used to analyze investment performance of the Fund or the performance of the investment professionals.





## CITY RECOMMENDED CONTRIBUTION DETAIL

Actuarial Accrued Liability  
Funded Status  
Development of the Normal Cost  
Recommended Contribution  
Actuarial Methods – Recommended Contribution

---

## *CITY RECOMMENDED CONTRIBUTION DETAIL*

---

### ACTUARIAL ACCRUED LIABILITY

	Current Valuation
Active Employees	\$ 45,694,195
Inactive Employees	
Terminated Employees - Vested	5,774
Retired Employees	44,730,530
Disabled Employees	7,557,892
Other Beneficiaries	4,318,962
Total Inactive Employees	56,613,158
Total Actuarial Accrued Liability	\$ 102,307,353

*Actuarial  
Accrued Liability  
is Based on the  
Funding Policy  
Adopted by the  
City.*

---

### FUNDED STATUS

	Current Valuation
Total Actuarial Accrued Liability	\$ 102,307,353
Total Actuarial Value of Assets	49,896,372
Unfunded Actuarial Accrued Liability	\$ 52,410,981
Total Market Value of Assets	\$ 50,594,711
Percent Funded	
Actuarial Value of Assets	48.77%
Market Value of Assets	49.45%

*The Current  
Funding Policy is  
for the Pension  
Fund to be 100%  
Funded on an  
Actuarial Basis  
(Entry Age Normal  
Cost Method) by  
the Year 2041.*



## *CITY RECOMMENDED CONTRIBUTION DETAIL*

### DEVELOPMENT OF THE EMPLOYER NORMAL COST

	Current Valuation
Total Normal Cost	\$ 2,332,694
Estimated Employee Contributions	(831,049)
Employer Normal Cost	\$ 1,501,645

*At a 100%  
Funding Level,  
the Normal Cost  
Contribution is  
Still Required.*

### NORMAL COST AS A PERCENTAGE OF EXPECTED PAYROLL

	Current Valuation
Expected Payroll	\$ 8,789,514
Employee Normal Cost Rate	<u>9.455%</u>
Employer Normal Cost Rate	<u>17.08%</u>
Total Normal Cost Rate	<u>26.54%</u>

*Ideally the  
Employer  
Normal Cost  
Rate will Remain  
Stable.*

### CONTRIBUTION RECOMMENDATION

	Current Valuation
Employer Normal Cost*	\$ 1,664,934
Amortization of Unfunded Accrued Liability/(Surplus)	3,008,701
Funding Requirement	\$ 4,673,635

*The Recommended  
Contribution is Based  
on the Funding  
Policy Adopted by the  
City Which Includes  
100% Funding  
Target.*

\*Employer Normal Cost Includes Interest Through the End of the Year.



## ***CITY RECOMMENDED CONTRIBUTION DETAIL***

---

### **ACTUARIAL METHODS – RECOMMENDED CONTRIBUTION**

Actuarial Valuation Date	May 1, 2015
Data Collection Date	April 30, 2015
Actuarial Cost Method	Entry Age Normal (Level % Pay)
Amortization Method	Level % Pay (Closed)
Amortization Target	100% Funded in year 2041
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.





# ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Minimum Contribution  
Methods and Assumptions

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## *ILLINOIS STATUTORY MINIMUM CONTRIBUTION*

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### STATUTORY MINIMUM CONTRIBUTION

	<u>Minimum Contribution</u>
Contribution Requirement	\$3,624,314
Expected Payroll	\$8,789,514
Contribution Requirement as a Percent of Expected Payroll	41.23%

---

### FUNDED STATUS – STATUTORY MINIMUM

	<u>Minimum Contribution</u>
Normal Cost	\$2,565,111
Market Value of Assets	\$50,594,711
Actuarial Value of Assets	\$49,896,372
Actuarial Accrued Liability	\$87,678,910
Unfunded Actuarial Accrued Liability	\$37,782,538
Percent Funded	
Actuarial Value of Assets	56.91%
Market Value of Assets	57.70%

---



## *ILLINOIS STATUTORY MINIMUM CONTRIBUTION*

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The Statutory Minimum Contribution is based on funding methods and funding parameters in the Illinois statutes for pension funding. The resulting contribution is lower than the recommended contribution for the current plan year. The lower contribution amount is not recommended because it represents a deferral of contributions when compared to the recommended contribution method.

The recommended contribution method is intended to allocate pension contributions in a manner that provides for increases that are manageable going forward. When contributions are lowered in current years, the resulting contributions in future years can increase more rapidly, with the risk of becoming unmanageable. The Securities and Exchange Commission in 2013 used the phrase “Statutory Underfunding” to describe situations where contributions appear to be more manageable in the short-term, but set up future contribution requirements that are less likely to be manageable.



## ***ILLINOIS STATUTORY MINIMUM CONTRIBUTION***

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### **ACTUARIAL METHODS – ILLINOIS STATUTORY MINIMUM CONTRIBUTION**

Actuarial Valuation Date	May 1, 2015
Data Collection Date	April 30, 2015
Actuarial Cost Method	Projected Unit Credit (Level % of Pay)
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.





## ACTUARIAL VALUATION DATA

Active Employees  
Retirees and Beneficiaries

---

## *ACTUARIAL VALUATION DATA*

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### ACTIVE EMPLOYEES

	<u>Current Valuation</u>
Vested	63
Nonvested	<u>46</u>
Total Active Employees	<u>109</u>
Total Payroll	<u>\$ 8,617,171</u>

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### INACTIVE EMPLOYEES

	<u>Current Valuation</u>
Terminated Employees - Vested	1
Retired Employees	51
Disabled Employees	15
Other Beneficiaries	<u>21</u>
Total Inactive Employees	<u>88</u>

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### SUMMARY OF BENEFIT PAYMENTS

	<u>Current Valuation</u>
Terminated Employees - Vested	\$ 243
Retired Employees	275,876
Disabled Employees	52,262
Other Beneficiaries	<u>47,889</u>
Total Inactive Employees	<u>\$ 376,269</u>

Benefits shown for terminated employees under deferred retirement are not currently in pay status.

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## ACTUARIAL FUNDING POLICIES

Actuarial Cost Method  
Financing Unfunded Accrued Liability  
Actuarial Value of Assets

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## ***ACTUARIAL FUNDING POLICIES***

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### **ACTUARIAL COST METHOD**

The actuarial cost method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

In accordance with the Pension Fund's Funding Policy the actuarial cost method for the recommended contribution basis is Entry Age Normal (Level Percent of Pay). The Entry Age Normal Cost Method is a method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age. The portion of this actuarial present value allocated to a valuation year is called normal cost. The portion of the actuarial present value not provided at a valuation date by the actuarial present value of future normal costs is called the actuarial liability.

### **FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITY**

The Unfunded Actuarial Accrued Liability may be amortized over a period either in level dollar amounts or as a level percentage of projected payroll.

In accordance with the Pension Fund's Funding Policy for the recommended contribution the unfunded actuarial accrued liabilities are amortized by level percent of payroll contributions to 100% funding target over the remaining 26 future years including the municipality's fiscal year 2041.

### **ACTUARIAL VALUE OF ASSETS**

The pension fund is an ongoing plan. The employer wishes to smooth the effect of volatility in the market value of assets on the annual contribution. The Actuarial Value of Assets is equal to the Market Value of Assets with unanticipated gains/losses recognized over five years.

The asset valuation method is intended to create an Actuarial Value of Assets that remains reasonable in relation to the Market Value of Assets over time. The method produces results that can fall above and below the Market Value of Assets. The period of recognition is short.

It is intended that the period of recognition is short enough to keep the Actuarial Value of Assets within a decent range of the Market Value. The employer has not placed a specific corridor around the Market Value of Assets.





## ACTUARIAL ASSUMPTIONS

Nature of Actuarial Calculations  
Actuarial Assumptions in the Valuation Process  
Actuarial Assumptions Utilized

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# ***ACTUARIAL ASSUMPTIONS***

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## **NATURE OF ACTUARIAL CALCULATIONS**

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.

## **ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS**

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described in the previous section.

The principal areas of financial risk which require assumptions about future experience are:

- Long-term Rates of Investment Return
- Patterns of Pay Increases for Members
- Rates of Mortality Among Members and Beneficiaries
- Rates of Withdrawal of Active Members
- Rates of Disability Among Members
- Age Patterns of Actual Retirement

Actual experience of the Pension Fund will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution requirement.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).



## *ACTUARIAL ASSUMPTIONS*

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Details behind the selection of the actuarial assumptions can be found in the assumption document provided to the client. The client has reviewed and approved the assumptions as a reasonable expectation of the future anticipated experience under the plan.



## *ACTUARIAL ASSUMPTIONS*

---

### ACTUARIAL ASSUMPTIONS UTILIZED

<b>Expected Return on Investments</b>	7.00% net of administrative expenses.
<b>CPI-U</b>	3.00%
<b>Total Payroll Increases</b>	4.00%
<b>Individual Pay Increases</b>	4.00% - 15.25%

Individual salary increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample Rates as Follows:

Service	Rate	Service	Rate
0	15.25%	8	4.00%
1	7.25%	9	7.00%
2	10.25%	10	4.00%
3	4.00%	15	4.00%
4	5.00%	20	4.00%
5	4.00%	25	4.00%
6	4.00%	30	4.00%
7	4.00%	35	4.00%

### Retirement Rates

100% of the L&A Assumption Study Cap Age 65 for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.100	53	0.180
51	0.100	54	0.180
52	0.100	55	0.180



## *ACTUARIAL ASSUMPTIONS*

---

### **Withdrawal Rates**

100% of the L&A Assumption Study for Firefighters 2012.  
Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.049	40	0.008
30	0.030	45	0.004
35	0.016	50	0.000

### **Disability Rates**

100% of the L&A Assumption Study for Firefighters 2012.  
Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.000	40	0.004
30	0.000	45	0.007
35	0.002	50	0.012

### **Mortality Rates**

L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.0005	40	0.0005
30	0.0003	45	0.0008
35	0.0003	50	0.0013

### **Married Participants**

80% of Active Participants are Assumed to be Married. Female Spouses are Assumed to be 3 Years Younger than Male Spouses.





## SUMMARY OF PRINCIPAL PLAN PROVISIONS

Establishment of the Fund  
Administration  
Employee Contributions  
Normal Retirement Pension Benefits  
Pension to Survivors  
Termination Benefits  
Disability Benefits

---

## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **ESTABLISHMENT OF THE FUND**

The Firefighters' Pension Fund is established and administered as prescribed by "Article 4. Firefighters' Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.

### **ADMINISTRATION**

The Firefighters' Pension Fund is administered by a Board of Trustees located in each municipality maintaining a pension fund for its firefighters. Its duties are to control and manage the pension fund, to hear and determine applications for pensions, to authorize payment of pensions, to establish rules, to pay expenses, to invest funds, and to keep records.

### **EMPLOYEE CONTRIBUTIONS**

Employees contribute 9.455% of salary.

### **NORMAL RETIREMENT PENSION BENEFIT**

#### Hired Prior to January 1, 2011

*Eligibility:* Age 50 with at least 20 years of creditable service and no longer a firefighter.

*Benefit:* 50% of final salary is payable commencing at retirement for 20 years of service. An additional 2.5% of final salary is added for each additional year of service (prorated monthly) in excess of 20 years of service (not to exceed 75% of final salary). "Final salary" is based on the pay rate for the firefighter at retirement.

*Annual Increase in Benefit:* A firefighter is entitled to an initial pension increase equal to 1/12 of 3% of the original monthly benefit for each full month that has passed since the pension began. The initial increase date will be the later of the first day of the month following the attainment of age 55, or the first anniversary of the date of retirement. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.



## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **NORMAL RETIREMENT PENSION BENEFIT - CONTINUED**

#### Hired on or After January 1, 2011

*Eligibility:* Age 55 with at least 10 years of creditable service and no longer a firefighter.

*Benefit:* 2.5% of final average salary for each year of service is payable at retirement (not to exceed 75% of final average salary). "Final average salary" is determined by dividing the highest total salary over 96 consecutive months of service in the last 120 months of service by the total number of months of service in the period. Annual salary for this purpose will not exceed \$106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

### **EARLY RETIREMENT PENSION BENEFIT**

#### Hired Prior to January 1, 2011

None

#### Hired on or After January 1, 2011

*Eligibility:* Age 50 with at least 10 years of creditable service and no longer a firefighter.

*Benefit:* The normal retirement pension benefit reduced by ½ of 1% for each month that the firefighter's age is under age 55.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.



## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **PENSION TO SURVIVORS**

#### Hired Prior to January 1, 2011

##### Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the firefighter on the last day of service, payable immediately.

##### Death - Non-Duty

*Current Pensioners (Including Disabled Pensioners):* Surviving spouse to receive continuation of the pension at the time of death or 54% of pensionable salary at the time pension began, if greater.

*Active Employee with 20+ Years of Service:* Surviving spouse is entitled to the full pension earned by the firefighter at the time of death, or 54% of the pensionable salary at death if greater.

*Active Employee with 10-20 Years of service:* Surviving spouse is entitled to 54% of the salary attached to the rank of the firefighter on the last day of service, payable immediately

*Annual Increase in Benefit:* None.

#### Hired on or After January 1, 2011

##### Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the firefighter on the last day of service, payable immediately.

##### Death - Non-Duty

*Current Pensioners (Including Disabled Pensioners), Active Employee with 20+ Years of Service, and Active Employee with 10-20 Years of service:* Surviving spouse to receive 66 ⅔% of the firefighter's earned pension at the date of death.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> after the attainment of age 60 by the recipient of the survivor's pension. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original survivor's pension amount.





## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **TERMINATION BENEFIT**

#### Hired Prior to January 1, 2011

*Eligibility:* At least 10 years but less than 20 years of creditable service.

*Benefit:* An accrual factor times final salary for each year of service is payable beginning at age 60. “Accrual Factor” is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. “Final salary” is based on the pay rate for the firefighter on the date of separation.

*Annual Increase in Benefit:* A firefighter will receive an initial increase of 3% on the first anniversary of the date of start of payments. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.

#### Hired on or After January 1, 2011

*Eligibility:* At least 10 years but less than 20 years of creditable service.

*Benefit:* An accrual factor times final salary for each year of service is payable beginning at age 60. “Accrual Factor” is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. “Final salary” is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the firefighter at termination of employment. Annual salary for this purpose will not exceed \$106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the first payment. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.



## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **DISABILITY BENEFIT**

#### Hired Prior to January 1, 2011

*Eligibility:* Disability (duty; or non-duty with 7 years of service).

*Benefit:* A firefighter who becomes disabled on duty is entitled to receive a pension equal to the greatest of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the firefighter is entitled to 50% of final salary. “Final salary” is based on the pay rate for the firefighter at retirement.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the attainment of age 60. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase is 3% of the original benefit for each full year that has passed since the pension began. Subsequent increases are 3% of the original pension benefit amount.

#### Hired on or after January 1, 2011

*Eligibility:* Disability (duty; or non-duty with 7 years of service).

*Benefit:* A firefighter who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the firefighter is entitled to 50% of final salary. “Final salary” is based on the pay rate for the firefighter at last day of service.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the attainment of age 60. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.





## GLOSSARY OF TERMS

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## ***GLOSSARY OF TERMS***

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### **GLOSSARY OF TERMS**

***Actuarial Accrued Liability*** –The actuarial present value of future benefits based on employees’ service rendered to the measurement date using the selected actuarial cost method. It is that portion of the Actuarial Present Value of plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

***Actuarial Cost Method*** – The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants.

***Actuarial Value of Asset*** – The value of the assets used in the determination of the Unfunded Actuarial Accrued Liability. The Actuarial Value of Assets is related to Market Value of Assets, with adjustments made to spread unanticipated gains and losses for a given year over a period of several years. Actuarial Value of Assets is generally equally likely to fall above or below the Market Value of Assets, and generally does not experience as much volatility over time as the Market Value of Assets.

***Asset Valuation Method*** – A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

***Funding Policy*** – A set of procedures for a Pension Fund that outlines the “best practices” for funding the pension benefits based on the goals of the plan sponsor. A Funding Policy discusses items such as assumptions, Actuarial Cost Method, assets, and other parameters that will best help the sponsor meet their goal of working in the best interest of the plan participant.

***Market Value of Assets*** – The value of the cash, bonds, securities and other assets held in the pension trust as of the measurement date.

***Normal Cost*** –The present value of future benefits earned by employees during the current fiscal year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

***Unfunded Actuarial Accrued Liability*** – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability is amortized over a period either in level dollar amounts or as a level percentage of projected payroll



Lauterbach & Amen, LLP  
27W457 Warrenville Road  
Warrenville, IL 60555-3902

Actuarial Valuation  
as of May 1, 2015



**BLOOMINGTON POLICE  
PENSION FUND**

Contributions Budgeted For the Fiscal Year  
May 1, 2016 to April 30, 2017

***LAUTERBACH & AMEN, LLP***

# Actuarial Valuation – Funding Recommendation

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**Lauterbach & Amen, LLP**

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CERTIFIED PUBLIC ACCOUNTANTS

## **BLOOMINGTON POLICE PENSION FUND**

**Contributions Budgeted for the Fiscal Year  
May 1, 2016 to April 30, 2017**

---

**Submitted by:**

Lauterbach & Amen, LLP  
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**Contact:**

Todd A. Schroeder  
October 2, 2015

***LAUTERBACH & AMEN, LLP***



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## ACTUARIAL CERTIFICATION

This report documents the results of the Actuarial valuation of the Bloomington Police Pension Fund. The purpose is to report the actuarial contribution requirement for the contribution year May 1, 2015 to April 30, 2016. Determinations for purposes other than meeting the employer's actuarial contribution requirements may be significantly different from the results herein.

The results in this report are based on information and data submitted by the Bloomington Police Pension Fund including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to May 1, 2014. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness, as appropriate, based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Bloomington Police Pension Fund selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned of Lauterbach & Amen, LLP, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Opinion. There is no relationship between the Bloomington Police Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Bloomington Police Pension Fund and the City of Bloomington in connection with our actuarial valuation. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.

Respectfully Submitted,  
LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA





## MANAGEMENT SUMMARY

Contribution Recommendation  
Funded Status  
Management Summary

---

## MANAGEMENT SUMMARY

### CONTRIBUTION RECOMMENDATION

	Statutory Minimum Contribution	Prior Year Recommended Contribution	City* Recommended Contribution
Contribution Requirement	\$3,687,194	\$4,667,258	\$4,947,245
Expected Payroll	\$10,616,795	\$10,218,974	\$10,616,795
Contribution Requirement as a Percent of Expected Payroll	34.73%	45.67%	46.60%

*The City  
Recommended  
Contribution is  
\$1,260,051  
Greater than  
the Statutory  
Minimum  
Contribution.*

### FUNDED STATUS

	Statutory (1) Minimum Contribution	Prior Year Recommended Contribution	City (1) Recommended Contribution
Normal Cost	\$2,917,727	\$2,650,568	\$2,726,173
Market Value of Assets	\$63,941,898	\$59,449,698	\$63,941,898
Actuarial Value of Assets	\$62,731,465	\$58,450,333	\$62,731,465
Actuarial Accrued Liability	\$100,181,044	\$109,258,481	\$116,425,624
Unfunded Actuarial Accrued Liability	\$37,449,579	\$50,808,148	\$53,694,159
Percent Funded			
Actuarial Value of Assets	62.62%	53.50%	53.88%
Market Value of Assets	63.83%	54.41%	54.92%

*The Difference  
in Funded  
Percentage is  
Due to  
Changes in the  
City Funding  
Policy to a  
Different  
Actuarial Cost  
Method.*

(1) Statutory guidelines require 90% funding by 2040 under the Projected Unit Credit cost method, as opposed to the City's goal of 100% funding in the same time period under the Entry Age Normal cost method.



## MANAGEMENT SUMMARY

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### MANAGEMENT SUMMARY – COMMENTS AND ANALYSIS

#### Contribution Results

The contribution recommendation is based on the funding policies and procedures that are outlined in the “Actuarial Funding Policies” section of this report.

The State of Illinois statutes for pension funds contain parameters that should be used to determine the minimum amount of contribution to a public pension fund. Those parameters and the resulting minimum contribution can be found in the “Illinois Statutory Minimum Contribution” section of this report.

#### Defined Benefit Plan Risks

##### *Asset Growth*

Pension funding involves preparing plan assets to pay benefits for the members when they retire. During their working careers, assets need to build with contributions and investment earnings, and then the pension fund distributes assets during retirement. Based on the fund’s current mix of employees and funded status, the fund should be experiencing positive asset growth on average if requested contributions are made and expected investment earnings come in. In the current year the fund asset growth was positive by \$4,492,200.

Asset growth is important long-term. Long-term cash flow out of the pension fund is primarily benefit payments. Expenses make up a smaller portion. The fund should monitor the impact of expected benefit payments and the impact on asset growth in the future. In the next 5 years, benefits payments are anticipated to increase 35-40%, or approximately \$1.9 million dollars. In the next 10 years, the expected increase in benefit payments is 85-90%, or approximately \$4.2 million dollars.

##### *Unfunded Liability:*

Unfunded liability represents dollars we expect to be in the pension fund already for the fund members based on funding policy. To the extent dollars are not in the pension fund the fund is losing investment returns on those dollars going forward. Payments to unfunded liability pay for the lost investment earnings, as well as the outstanding unfunded amount. If payment is not made, the unfunded liability will grow.

In the early 1990s, many pension funds in Illinois adopted an increasing payment to handle unfunded liability due to a change in legislation. The initial payments decreased, and payments were anticipated to increase annually after that. In many situations, payments early on may be less than the interest on unfunded liability, which means unfunded liability is expected to *increase* even if contributions are at the recommended level.



## MANAGEMENT SUMMARY

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The current contribution recommendation includes a payment to unfunded liability that is currently approximately \$676,000 less than interest on the unfunded liability. All else being equal and contributions being made, unfunded liability would still be expected to increase. The employer and the fund should anticipate currently that improvement in the funded percent will be mitigated in the short-term. The employer and the fund should understand this impact as we progress forward to manage expectations.

### *Actuarial Value of Assets:*

The pension fund smooths asset returns that vary from expectations over a five year period. The intention over time is that asset returns for purposes of funding recommendations are a combination of several years. The impact is intended to smooth out the volatility of contribution recommendations over time, but not necessarily increase or decrease the level of contributions over the long-term.

When asset returns are smoothed, there are always gains or losses on the Market Value of Assets that are going to be deferred for current funding purposes, and recognized in future years. Currently, the pension fund is deferring approximately \$1.2 million dollars in gains on the Market Value of Assets. These are asset gains that will be recognized in upcoming periods, independent of the future performance of the Market Value of Assets.

### Plan Assets

The results in this report are based on the Assets held in the pension fund. Assets consist of funds held for investment and for benefit payments as of the Valuation Date. In addition, Assets may be adjusted for other events representing dollars that are reasonably expected to be paid out from the pension fund or deposited into the pension fund after the Actuarial Valuation Date as well.

The current fund Assets are Unaudited. As of the date of this report, the audit of the fund assets is not complete, not available, or has not been provided.

The current fund Assets are based on the year-end financials as prepared by the pension fund accountant. The year-end financials represent a full accrual version of the fiduciary fund as of the end of the fiscal year, prepared in preparation for the audit. The changes to the fund cash balance as of the fiscal year-end are non-cash items that can include accrued interest, due/unpaid expenses, prepaids and other adjustments.

*The Plan  
Assets Used in  
this Report  
are  
Unaudited.*

The actuarial value of assets under the funding policy is equal to the fair market value of assets, with unexpected gains and losses smoothed over 5 years. More detail on the Actuarial Value of Assets can be found in the funding policy section of the report.



## *MANAGEMENT SUMMARY*

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### Demographic Data

Demographic factors can change from year to year within a pension fund. Changes in this category include hiring new employees, employees retiring or becoming disabled, retirees passing away, and other changes. Demographic changes can cause an actuarial gain (contribution that is less than expected compared to the prior year) or an actuarial loss (contribution that is greater than expected compared to the prior year).

Demographic gains and losses occur when the assumptions over the one-year period for employee changes do not meet our long-term expectation. For example, if no employees become disabled during the year, we would expect a liability gain. If more employees become disabled than anticipated last year, we would expect a liability loss. Generally we expect short-term fluctuations in demographic experience to create 1%-3% gains or losses in any given year, but to balance out in the long-term.

In the current report, the key demographic changes were as follows:

*New hires:* The fund added 4 new active members in the current year through hiring. When a new member is admitted to the pension fund, the employer contribution will increase to reflect the new member. The increase in the recommended contribution in the current year for new fund members is approximately \$32,000.

*Retirement:* There were 3 members of the fund who retired during the year. When a fund member retires the normal cost will decrease. Any change in the actuarial liability will be considered when determining the amount to pay towards unfunded liability each year. The decrease in the recommended contribution in the current year due to the retirement experience is approximately \$38,500.

*Termination:* There was 1 member of the fund who terminated employment during the year. The member took a refund. The fund is no longer obligated to pay a benefit to the member in the future. The decrease in the recommended contribution in the current year due to the termination experience is approximately \$8,500.

### Assumption Changes

The actuarial assumptions were not changed in the current year.

### Funding Policy Changes

The funding policy was not changed in the current year.



## *MANAGEMENT SUMMARY*

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### **ACTUARIAL CONTRIBUTION RECOMMENDATION - RECONCILIATION**

Actuarial liability is expected to increase each year for both interest for the year and as active employees earn additional service years towards retirement. Similarly actuarial liability is expected to decrease when the fund pays benefits to inactive employees.

Contributions are expected to increase as expected pay increases under the funding policy for the Fund.

Other increases or decreases in actuarial liability (key changes noted below) will increase or decrease the amount of unfunded liability in the plan. To the extent unfunded liability increases or decreases unexpectedly, the contribution towards unfunded liability will also change unexpectedly.

	Actuarial <u>Liability</u>	Contribution <u>Recommendation</u>
Salary Increase Less than Expected	(157,275)	1,258
Demographic Changes	1,722,127	57,665
Asset Return Greater than Expected *	-	(14,491)
Contributions Less than Expected	-	48,865
Total Actuarial Experience	<u>\$ 1,564,852</u>	<u>\$ 93,297</u>

\*The impact on contribution due to asset performance is based on the Actuarial Value of Assets.

Key demographic changes were discussed in the prior section.





## VALUATION OF FUND ASSETS

Market Value of Assets  
Actuarial Value of Assets

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## VALUATION OF FUND ASSETS

### MARKET VALUE OF ASSETS

#### Statement of Assets

	Prior Valuation	Current Valuation
Money Market	\$ 992,453	\$ 1,723,254
Fixed Income	19,343,704	20,249,604
Insurance Contracts	2,644,454	734,811
Mutual Funds	36,215,281	41,082,274
Receivables (Net of Payables)	253,807	151,956
Net Assets Available for Pensions	<u>\$ 59,449,698</u>	<u>\$ 63,941,898</u>

*The Total  
Value of Assets  
has Increased  
\$4,492,200  
from Prior  
Valuation.*

#### Statement of Changes in Assets

Total Market Value - Prior Valuation	\$ 59,449,698
Plus - Employer Contributions	3,758,825
Plus - Employee Contributions	1,069,911
Plus - Return on Investments	4,611,828
Less - Benefit and Related Payments	(4,889,439)
Less - Other Expenses	(58,926)
Total Market Value - Current Valuation	<u>\$ 63,941,898</u>

*The Return on  
Investment on  
the Market Value  
of Assets for the  
Fund was  
Approximately  
7.7% Net of  
Administrative  
Expenses.*

The return on investments shown has been determined as the Return on Assets from the statement of changes in assets, as a percent of the average of the beginning and ending Market Value of Assets. Return on Investment is net of the Other Expenses as shown. The Return on Investments has been excluded from the Total Market Value of Assets at the end of the year for this calculation.



## *VALUATION OF FUND ASSETS*

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### **MARKET VALUE OF ASSETS (GAIN)/LOSS**

#### Current Year (Gain)/Loss on Market Value of Assets

Total Market Value - Prior Valuation	\$ 59,449,698
Contributions	4,828,736
Benefit Payments	(4,889,439)
Expected Return on Investments	<u>4,159,354</u>
Expected Total Market Value - Current Valuation	63,548,351
Actual Total Market Value - Current Valuation	<u>63,941,898</u>
Current Market Value (Gain)/Loss	<u><u>\$ (393,548)</u></u>
Expected Return on Investments	\$ 4,159,354
Actual Return on Investments (Net of Expenses)	<u>4,552,902</u>
Current Market Value (Gain)/Loss	<u><u>\$ (393,548)</u></u>

*The Return on  
the Market  
Value of Assets  
was Higher  
than Expected  
Over the Most  
Recent Year.*

The (Gain)/Loss on the Market Value of Assets has been determined based on expected returns at the actuarial rate.



## VALUATION OF FUND ASSETS

### DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

Total Market Value - Current Valuation		\$ 63,941,898
Adjustment for Prior (Gains)/Losses		
	<u>Full Amount</u>	
First Preceding Year	\$ (393,548)	(314,838)
Second Preceding Year	(1,511,792)	(907,075)
Third Preceding Year	(935,558)	(374,223)
Fourth Preceding Year	1,928,513	385,703
Total Deferred (Gain)/Loss		<u>(1,210,433)</u>
Initial Actuarial Value of Assets - Current Valuation		62,731,465
Less Contributions for the Current Year and Interest		-
Less Adjustment for the Corridor		<u>-</u>
Actuarial Value of Assets - Current Valuation		<u>\$ 62,731,465</u>

*The Actuarial Value of Assets is Equal to the Fair Market Value of Assets with Unanticipated Gains/Losses Recognized over 5 Years. The Actuarial Value of Assets is Currently 98% of the Market Value.*

### (GAIN)/LOSS ON THE ACTUARIAL VALUE OF ASSETS

Total Actuarial Value - Prior Valuation		\$ 58,450,333
Plus - Employer Contributions		3,758,825
Plus - Employee Contributions		1,069,911
Plus - Return on Investments		4,400,760
Less - Benefit and Related Payments		(4,889,439)
Less - Other Expenses		<u>(58,926)</u>
Total Actuarial Value - Current Valuation		<u>\$ 62,731,465</u>

*The Return on Investment on the Actuarial Value of Assets for the Fund was Approximately 7.4% Net of Administrative Expenses.*

The Actuarial Value of Assets incorporates portions of gains and losses over multiple years.



## *VALUATION OF FUND ASSETS*

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### **HISTORICAL ASSET PERFORMANCE**

The chart below shows the historical rates of return on plan assets for both Market Value of Assets and Actuarial Value of Assets.

	<u>Market Value</u>	<u>Actuarial Value</u>
First Preceding Year	7.7%	7.4%

The returns on assets shown above were calculated based on the annual return on investment for the year, as a percentage of the average value of the assets for the year.

For purposes of determining the average value of assets during the year, the ending market value of assets has been adjusted to net out to the portion related to the investment returns themselves. All other cash flows are included.

For purposes of determining the annual return on investment we have adjusted the figures shown on the preceding pages. The figures shown on the preceding pages are net of investment expenses. We have made an additional adjustment to net out administrative expenses. Netting out administrative expenses allows us to capture returns for the year that can be used to make benefit payments as part of the ongoing actuarial process.

The adjustment we make is for actuarial reporting purposes only. By netting out administrative expenses and capturing return dollars that are available to pay benefits, it provides us a comparison to the estimated rate of return on assets, but does not provide a figure that would be consistent with the return rates that are determined by other parties. Therefore this calculated rate of return should not be used to analyze investment performance of the Fund or the performance of the investment professionals.





## CITY RECOMMENDED CONTRIBUTION DETAIL

Actuarial Accrued Liability  
Funded Status  
Development of the Normal Cost  
Recommended Contribution  
Actuarial Methods – Recommended Contribution

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## *CITY RECOMMENDED CONTRIBUTION DETAIL*

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### ACTUARIAL ACCRUED LIABILITY

	Current Valuation
Active Employees	\$ 49,624,063
Inactive Employees	
Terminated Employees - Vested	812,877
Retired Employees	55,268,976
Disabled Employees	7,879,753
Other Beneficiaries	2,839,955
Total Inactive Employees	66,801,561
Total Actuarial Accrued Liability	\$ 116,425,624

*Acturaial  
Accrued Liability  
is Based on the  
Funding Policy  
Adopted by the  
City.*

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### FUNDED STATUS

	Current Valuation
Total Actuarial Accrued Liability	\$ 116,425,624
Total Actuarial Value of Assets	62,731,465
Unfunded Actuarial Accrued Liability	\$ 53,694,159
Total Market Value of Assets	\$ 63,941,898
Percent Funded	
Actuarial Value of Assets	53.88%
Market Value of Assets	54.92%

*The Current  
Funding Policy is  
for the Pension  
Fund to be 100%  
Funded on an  
Actuarial Basis  
(Entry Age Normal  
Cost Method) by  
the Year 2041.*



## ***CITY RECOMMENDED CONTRIBUTION DETAIL***

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### **DEVELOPMENT OF THE EMPLOYER NORMAL COST**

	Current Valuation
Total Normal Cost	\$ 2,726,173
Estimated Employee Contributions	(1,052,124)
Employer Normal Cost	\$ 1,674,049

*At a 100%  
Funding Level,  
the Normal Cost  
Contribution is  
Still Required.*

### **NORMAL COST AS A PERCENTAGE OF EXPECTED PAYROLL**

	Current Valuation
Expected Payroll	\$ 10,616,795
Employee Normal Cost Rate	9.910%
Employer Normal Cost Rate	15.77%
Total Normal Cost Rate	25.68%

*Ideally the  
Employer  
Normal Cost  
Rate will Remain  
Stable.*

### **CONTRIBUTION RECOMMENDATION**

	Current Valuation
Employer Normal Cost*	\$ 1,864,881
Amortization of Unfunded Accrued Liability/(Surplus)	3,082,364
Funding Requirement	\$ 4,947,245

*The Recommended  
Contribution is Based  
on the Funding  
Policy Adopted by the  
City Which Includes  
100% Funding  
Target.*

\*Employer Normal Cost Includes Interest Through the End of the Year.



## ***CITY RECOMMENDED CONTRIBUTION DETAIL***

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### **ACTUARIAL METHODS – RECOMMENDED CONTRIBUTION**

Actuarial Valuation Date	May 1, 2015
Data Collection Date	April 30, 2015
Actuarial Cost Method	Entry Age Normal (Level % Pay)
Amortization Method	Level % Pay (Closed)
Amortization Target	100% Funded in year 2041
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.







# ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Minimum Contribution  
Methods and Assumptions

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## *ILLINOIS STATUTORY MINIMUM CONTRIBUTION*

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### STATUTORY MINIMUM CONTRIBUTION

	<u>Minimum Contribution</u>
Contribution Requirement	\$3,687,194
Expected Payroll	\$10,616,795
Contribution Requirement as a Percent of Expected Payroll	34.73%

---

### FUNDED STATUS – STATUTORY MINIMUM

	<u>Minimum Contribution</u>
Normal Cost	\$2,917,727
Market Value of Assets	\$63,941,898
Actuarial Value of Assets	\$62,731,465
Actuarial Accrued Liability	\$100,181,044
Unfunded Actuarial Accrued Liability	\$37,449,579
Percent Funded	
Actuarial Value of Assets	62.62%
Market Value of Assets	63.83%

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## *ILLINOIS STATUTORY MINIMUM CONTRIBUTION*

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The Statutory Minimum Contribution is based on funding methods and funding parameters in the Illinois statutes for pension funding. The resulting contribution is lower than the recommended contribution for the current plan year. The lower contribution amount is not recommended because it represents a deferral of contributions when compared to the recommended contribution method.

The recommended contribution method is intended to allocate pension contributions in a manner that provides for increases that are manageable going forward. When contributions are lowered in current years, the resulting contributions in future years can increase more rapidly, with the risk of becoming unmanageable. The Securities and Exchange Commission in 2013 used the phrase “Statutory Underfunding” to describe situations where contributions appear to be more manageable in the short-term, but set up future contribution requirements that are less likely to be manageable.



## ***ILLINOIS STATUTORY MINIMUM CONTRIBUTION***

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### **ACTUARIAL METHODS – ILLINOIS STATUTORY MINIMUM CONTRIBUTION**

Actuarial Valuation Date	May 1, 2015
Data Collection Date	April 30, 2015
Actuarial Cost Method	Projected Unit Credit (Level % of Pay)
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.





## ACTUARIAL VALUATION DATA

Active Employees  
Retirees and Beneficiaries

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## *ACTUARIAL VALUATION DATA*

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### ACTIVE EMPLOYEES

	<u>Current Valuation</u>
Vested	85
Nonvested	<u>38</u>
Total Active Employees	<u>123</u>
Total Payroll	<u>\$ 10,408,623</u>

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### INACTIVE EMPLOYEES

	<u>Current Valuation</u>
Terminated Employees - Vested	2
Retired Employees	63
Disabled Employees	12
Other Beneficiaries	<u>16</u>
Total Inactive Employees	<u>93</u>

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### SUMMARY OF BENEFIT PAYMENTS

	<u>Current Valuation</u>
Terminated Employees - Vested	\$ 8,767
Retired Employees	342,937
Disabled Employees	43,372
Other Beneficiaries	<u>32,201</u>
Total Inactive Employees	<u>\$ 427,277</u>

Benefits shown for terminated employees under deferred retirement are not currently in pay status.

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## ACTUARIAL FUNDING POLICIES

Actuarial Cost Method  
Financing Unfunded Accrued Liability  
Actuarial Value of Assets

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## ***ACTUARIAL FUNDING POLICIES***

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### **ACTUARIAL COST METHOD**

The actuarial cost method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

In accordance with the Pension Fund's Funding Policy the actuarial cost method for the recommended contribution basis is Entry Age Normal (Level Percent of Pay). The Entry Age Normal Cost Method is a method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age. The portion of this actuarial present value allocated to a valuation year is called normal cost. The portion of the actuarial present value not provided at a valuation date by the actuarial present value of future normal costs is called the actuarial liability.

### **FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITY**

The Unfunded Actuarial Accrued Liability may be amortized over a period either in level dollar amounts or as a level percentage of projected payroll.

In accordance with the Pension Fund's Funding Policy for the recommended contribution the unfunded actuarial accrued liabilities are amortized by level percent of payroll contributions to 100% funding target over the remaining 26 future years including the municipality's fiscal year 2041.

### **ACTUARIAL VALUE OF ASSETS**

The pension fund is an ongoing plan. The employer wishes to smooth the effect of volatility in the market value of assets on the annual contribution. The Actuarial Value of Assets is equal to the Market Value of Assets with unanticipated gains/losses recognized over five years.

The asset valuation method is intended to create an Actuarial Value of Assets that remains reasonable in relation to the Market Value of Assets over time. The method produces results that can fall above and below the Market Value of Assets. The period of recognition is short.

It is intended that the period of recognition is short enough to keep the Actuarial Value of Assets within a decent range of the Market Value. The employer has not placed a specific corridor around the Market Value of Assets.







## ACTUARIAL ASSUMPTIONS

Nature of Actuarial Calculations  
Actuarial Assumptions in the Valuation Process  
Actuarial Assumptions Utilized

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# ***ACTUARIAL ASSUMPTIONS***

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## **NATURE OF ACTUARIAL CALCULATIONS**

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.

## **ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS**

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described in the previous section.

The principal areas of financial risk which require assumptions about future experience are:

- Long-term Rates of Investment Return
- Patterns of Pay Increases for Members
- Rates of Mortality Among Members and Beneficiaries
- Rates of Withdrawal of Active Members
- Rates of Disability Among Members
- Age Patterns of Actual Retirement

Actual experience of the Pension Fund will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution requirement.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). Details behind the selection of the actuarial assumptions can be found in the assumption document provided to the client. The client has reviewed and approved the assumptions as a reasonable expectation of the future anticipated experience under the plan.



## *ACTUARIAL ASSUMPTIONS*

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### ACTUARIAL ASSUMPTIONS UTILIZED

<b>Expected Return on Investments</b>	7.00% net of administrative expenses.
<b>CPI-U</b>	3.00%
<b>Total Payroll Increases</b>	4.00%
<b>Individual Pay Increases</b>	4.00% - 14.00%

Individual salary increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample Rates as Follows:

Service	Rate	Service	Rate
0	11.25%	8	4.00%
1	8.25%	9	7.00%
2	9.00%	10	4.00%
3	4.00%	15	4.00%
4	4.00%	20	4.00%
5	4.00%	25	4.00%
6	4.00%	30	4.00%
7	4.00%	35	4.00%

### Retirement Rates

100% of the L&A Assumption Study Cap Age 65 for Police 2012.  
Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.170	53	0.170
51	0.170	54	0.220
52	0.170	55	0.220



## *ACTUARIAL ASSUMPTIONS*

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### **Withdrawal Rates**

100% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.064	40	0.019
30	0.047	45	0.012
35	0.031	50	0.000

### **Disability Rates**

100% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.001	40	0.005
30	0.002	45	0.006
35	0.004	50	0.007

### **Mortality Rates**

L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.0002	40	0.0009
30	0.0003	45	0.0015
35	0.0005	50	0.0024

### **Married Participants**

85% of Active Participants are Assumed to be Married. Female Spouses are Assumed to be 3 Years Younger than Male Spouses.





## SUMMARY OF PRINCIPAL PLAN PROVISIONS

Establishment of the Fund  
Administration  
Employee Contributions  
Normal Retirement Pension Benefits  
Pension to Survivors  
Termination Benefits  
Disability Benefits

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## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **ESTABLISHMENT OF THE FUND**

The Police Pension Fund is established and administered as prescribed by “Article 3. Police Pension Fund – Municipalities 500,000 and Under” of the Illinois Pension Code.

### **ADMINISTRATION**

The Police Pension Fund is administered by a Board of Trustees located in each municipality maintaining a pension fund for its police officers. Its duties are to control and manage the pension fund, to hear and determine applications for pensions, to authorize payment of pensions, to establish rules, to pay expenses, to invest funds, and to keep records.

### **EMPLOYEE CONTRIBUTIONS**

Employees contribute 9.910% of salary.

### **NORMAL RETIREMENT PENSION BENEFIT**

#### Hired Prior to January 1, 2011

*Eligibility:* Age 50 with at least 20 years of creditable service and no longer a police officer.

*Benefit:* 50% of final salary is payable commencing at retirement for 20 years of service. An additional 2.5% of final salary is added for each additional year of service in excess of 20 years of service (not to exceed 75% of final salary). “Final salary” is the salary attached to rank held on the last day of services or for 1 year prior to the last day, whichever is greater.

*Annual Increase in Benefit:* An officer will receive an initial increase of 1/12 of 3% for each month that has elapsed since retirement. The initial increase date will be the later of the first day of the month following the attainment of age 55, or the first anniversary of the date of retirement. Subsequent increases of 3% of the current pension amount (including prior increases) will be provided in each January thereafter.



## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **NORMAL RETIREMENT PENSION BENEFIT - CONTINUED**

#### Hired on or After January 1, 2011

*Eligibility:* Age 55 with at least 10 years of creditable service and no longer a police officer.

*Benefit:* 2.5% of final average salary for each year of service is payable at retirement (not to exceed 75% of final average salary). "Final average salary" is determined by dividing the highest total salary over 96 consecutive months of service in the last 120 months of service by the total number of months of service in the period. Annual salary for this purpose will not exceed \$106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the later of the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original benefit.

### **EARLY RETIREMENT PENSION BENEFIT**

#### Hired Prior to January 1, 2011

None

#### Hired on or After January 1, 2011

*Eligibility:* Age 50 with at least 10 years of creditable service and no longer a police officer.

*Benefit:* The normal retirement pension benefit reduced by ½ of 1% for each month that the police officer's age is under age 55.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the later of the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original benefit.



## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **PENSION TO SURVIVORS**

#### Hired Prior to January 1, 2011

##### Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the police officer on the last day of service, payable immediately.

##### Death - Non-Duty

*Current Pensioners (Including Disabled Pensioners):* Surviving spouse to receive continuation of the pension.

*Active Employee with 20+ Years of Service:* Surviving spouse is entitled to the full pension earned by the police officer at the time of death.

*Active Employee with 10-20 Years of service:* Surviving spouse is entitled to 50% of the salary attached to the rank of the police officer on the last day of service, payable immediately

*Annual Increase in Benefit:* None.

#### Hired on or After January 1, 2011

##### Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the police officer on the last day of service, payable immediately.

##### Death - Non-Duty

*Current Pensioners (Including Disabled Pensioners), Active Employee with 20+ Years of Service, and Active Employee with 10-20 Years of service:* Surviving spouse to receive 66 ⅔% of the police officer's earned pension at the date of death.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> after the attainment of age 60 by the recipient of the survivor's pension. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original survivor's benefit amount.





## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **TERMINATION BENEFIT**

#### Hired Prior to January 1, 2011

*Eligibility:* At least 8 years but less than 20 years of creditable service.

*Benefit:* 2.5% of final salary for each year of service is payable beginning at age 60. “Final salary” is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the police officer at termination of employment.

*Annual Increase in Benefit:* An officer will receive an initial increase of 3% on the first anniversary of the date of start of payments. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.

#### Hired on or After January 1, 2011

*Eligibility:* At least 10 years but less than 20 years of creditable service.

*Benefit:* 2.5% of final salary for each year of service is payable beginning at age 60. “Final salary” is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the police officer at termination of employment. Annual salary for this purpose will not exceed \$106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the first payment. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 mos. ending with the September preceding each November 1, applied to the original benefit amount.



## ***SUMMARY OF PRINCIPAL PLAN PROVISIONS***

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### **DISABILITY BENEFIT**

#### Hired Prior to January 1, 2011

*Eligibility:* Disability (duty or non-duty).

*Benefit:* A police officer who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the police officer is entitled to 50% of final salary. “Final salary” is based on the pay rate for the police officer on the last day of service.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the attainment of age 60. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase is 3% of the original benefit for each full year that has passed since the pension began. Subsequent increases will be the 3% of the original pension benefit amount.

#### Hired on or after January 1, 2011

*Eligibility:* Disability (duty or non-duty).

*Benefit:* A police officer who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the police officer is entitled to 50% of final salary. “Final salary” is based on the pay rate for the police officer on the last day of service.

*Annual Increase in Benefit:* The initial increase date will be the January 1<sup>st</sup> following the attainment of age 60. Subsequent increases will occur on each subsequent January 1<sup>st</sup>. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original benefit amount.





## GLOSSARY OF TERMS

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## ***GLOSSARY OF TERMS***

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### **GLOSSARY OF TERMS**

***Actuarial Accrued Liability*** –The actuarial present value of future benefits based on employees’ service rendered to the measurement date using the selected actuarial cost method. It is that portion of the Actuarial Present Value of plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

***Actuarial Cost Method*** – The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants.

***Actuarial Value of Asset*** – The value of the assets used in the determination of the Unfunded Actuarial Accrued Liability. The Actuarial Value of Assets is related to Market Value of Assets, with adjustments made to spread unanticipated gains and losses for a given year over a period of several years. Actuarial Value of Assets is generally equally likely to fall above or below the Market Value of Assets, and generally does not experience as much volatility over time as the Market Value of Assets.

***Asset Valuation Method*** – A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

***Funding Policy*** – A set of procedures for a Pension Fund that outlines the “best practices” for funding the pension benefits based on the goals of the plan sponsor. A Funding Policy discusses items such as assumptions, Actuarial Cost Method, assets, and other parameters that will best help the sponsor meet their goal of working in the best interest of the plan participant.

***Market Value of Assets*** – The value of the cash, bonds, securities and other assets held in the pension trust as of the measurement date.

***Normal Cost*** –The present value of future benefits earned by employees during the current fiscal year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

***Unfunded Actuarial Accrued Liability*** – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability is amortized over a period either in level dollar amounts or as a level percentage of projected payroll



Lauterbach & Amen, LLP  
27W457 Warrenville Road  
Warrenville, IL 60555-3902

Actuarial Valuation  
as of May 1, 2015



BLOOMINGTON POLICE  
PENSION FUND

GASB 67/68 Reporting

***LAUTERBACH & AMEN, LLP***

# Actuarial GASB Disclosures Statements 67 and 68

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Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

## GASB 67: BLOOMINGTON POLICE PENSION FUND

**Fiscal Year Ending: April 30, 2015**

Actuarial Valuation Date: May 1, 2015

Measurement Date: April 30, 2015

## GASB 68: CITY OF BLOOMINGTON

**Fiscal Year Ending: April 30, 2015**

Actuarial Valuation Date: May 1, 2015

Measurement Date: April 30, 2015

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### Submitted by:

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### Contact:

Todd A. Schroeder  
October 2, 2015

***LAUTERBACH & AMEN, LLP***



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## ACTUARIAL CERTIFICATION

This certification provides supplemental information as required by the Governmental Accounting Standards Board. The enclosed schedules were prepared by the undersigned to provide general information to assist in the preparation of the Annual Financial Report. The assumptions and methods used in the preparation of this disclosure meet the parameters set for the disclosures presented in the financial section as required by the Governmental Accounting Standards Board. Additional information is also provided solely to assist the auditors in preparation of the required footnote disclosures.

The results in this report are based on information and data submitted by the Bloomington Police Pension Fund. We did not prepare the actuarial valuations for the years prior to May 1, 2014. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness as appropriate based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized involve actuarial calculations that require assumptions about future events. The City of Bloomington selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in the valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned consultant of Lauterbach & Amen, LLP with actuarial credentials meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Certification. There is no relationship between the City of Bloomington and Lauterbach & Amen, LLP that impairs our objectivity.

Respectfully Submitted,  
LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA



## PENSION FUND NET POSITION

Statement of Net Position  
Statement of Changes in Net Position

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**STATEMENT OF FIDUCIARY NET POSITION**

	<u>2015</u>	<u>2014</u>
<b>Assets</b>		
Cash and Cash Equivalents	\$ 1,723,254	\$ 992,453
Total cash	<u>1,723,254</u>	<u>992,453</u>
Receivables:		
Due from Treasury	13,672	49,215
Investment Income - Accrued Interest	<u>142,242</u>	<u>210,192</u>
Total Receivables	<u>155,915</u>	<u>259,407</u>
Investments:		
Fixed Income	20,249,604	19,343,704
Insurance Contracts	734,811	2,644,454
Mutual Funds	<u>41,082,274</u>	<u>36,215,281</u>
Total Investments	<u>62,066,689</u>	<u>58,203,439</u>
Total Assets	<u>63,945,858</u>	<u>59,455,298</u>
<b>Liabilities</b>		
Payables:		
Expenses Due/Unpaid	<u>3,959</u>	<u>5,600</u>
Total Liabilities	<u>3,959</u>	<u>5,600</u>
<b>Net Position Restricted for Pensions</b>	<u>\$ 63,941,898</u>	<u>\$ 59,449,698</u>

The Fiduciary Net Position of the Fund shown above is intended to be in accordance with GAAP and Government Accounting Standards Board rules. The Fair Market Value of Investments has been provided by the reporting entity, and the results are being audited by an independent auditor. The level of the assets has been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the fair market value of the investments. The assets for 2015 are based on draft audit only and are preliminary & tentative – subject to change as of the preparation of this report.



---

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION**

	<u>2015</u>
<b>Additions</b>	
Contributions	
Employer	\$ 3,758,825
Member	1,069,911
Total Contributions	<u>4,828,736</u>
Investment Income	
Net Appreciation in Fair Value of Investments	3,143,505
Interest and Dividends	1,523,560
Less Investment Expense	<u>(55,237)</u>
Net Investment Income	<u>4,611,828</u>
Total Additions	<u>9,440,565</u>
<b>Deductions</b>	
Benefit payments and Refunds of Member Contributions	4,889,439
Administrative Expense	<u>58,926</u>
Total Deductions	<u>4,948,365</u>
Net Increase in Net Position	<u>4,492,200</u>
Net Position Restricted for Pensions	
<b>Beginning of Year</b>	<u>59,449,698</u>
End of Year	<u>\$ 63,941,898</u>

The Changes in Fiduciary Net Position of the Fund shown above is intended to be in accordance with GAAP and Government Accounting Standards Board rules. The changes have been provided by the reporting entity, and the results are being audited by an independent auditor. The changes have been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the fair market value of the investments. The assets for 2015 are based on draft audit only and are preliminary & tentative – subject to change as of the preparation of this report.



## ACTUARIAL PENSION LIABILITY INFORMATION

Statement of Total Pension Liability  
Statement of Changes in Total Pension Liability  
Statement of Changes in Net Pension Liability  
Deferred Outflows and Inflows of Resources

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**STATEMENT OF TOTAL PENSION LIABILITY**

	<u>2015</u>	<u>2014</u>
Active Employees	\$ 49,624,063	
Inactive Employees		
Terminated Employees - Vested	812,877	
Retired Employees	55,268,976	
Disabled Employees	7,879,753	
Other Beneficiaries	<u>2,839,955</u>	
Total Inactive Employees	<u>66,801,561</u>	
Total Pension Liability	<u>\$ 116,425,624</u>	<u>\$ 110,990,673</u>

The Total Pension Liability (TPL) has been determined for GASB 67/68 reporting purposes only. The resulting TPL is intended to be used in the financial statement reporting of the fund and/or the Employer. The resulting liability is not intended to be a representation of the fund liability for other purposes, including but not limited to determination of cash funding requirements and recommendations. The TPL is based on data as of the Data Date shown in this report. The TPL has been determined as of the Actuarial Valuation Date and based on the assumptions shown in this report.

This is the first year of implementation for GASB 67. The TPL for the prior fiscal year has been estimated based on the current Actuarial Valuation Date and assumptions as of the current Actuarial Valuation Date. The TPL was adjusted back to the prior fiscal year-end for purposes of providing an opening balance for the current implementation.



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**STATEMENT OF CHANGES IN TOTAL PENSION LIABILITY**

	<u>2015</u>
<b>Changes in Total Pension Liability</b>	
Service Cost	\$ 2,726,173
Interest	7,598,217
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes in Assumptions	-
Benefit Payments and Refunds	(4,889,439)
Net Change in Total Pension Liability	\$ 5,434,951
Total Pension Liability - Beginning	110,990,673
Total Pension Liability - Ending (a)	<u>\$ 116,425,624</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 63,941,898</u>
<b>Employer's Net Pension Liability - Ending (a) - (b)</b>	<u>\$ 52,483,726</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	55%
Covered-Employee Payroll	\$ 10,408,623
Employer's Net Pension Liability as a Percentage of Employee Payroll	504%

This is the first year of implementation of GASB 67/68. There are no changes in Net Pension Liability for changes in benefit terms, assumptions or actuarial experience. The plan fiduciary net position was detailed in the prior section of this report. The employer's Net Pension Liability is the excess of the Total Pension Liability over the plan fiduciary net position.

Covered employee payroll is based on total W-2 pay for the fund members during the fiscal year and is not necessarily representative of pay used to determine pension contributions or benefits.



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## STATEMENT OF CHANGES IN NET PENSION LIABILITY

The table below illustrates the change in the Net Pension Liability (NPL) from the prior Measurement Date to the current Measurement Date. Under Statement 68, the difference between the NPL from the prior measurement date to the current measurement date should be recognized as an expense, unless permitted to be recognized as a deferred outflow or inflow of resources.

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances Beginning at 05/01/14</b>	<u>110,990,673</u>	<u>59,449,698</u>	<u>51,540,975</u>
<b>Changes for the year:</b>			
Service Cost	\$ 2,726,173	\$ -	\$ 2,726,173
Interest	7,598,217	-	7,598,217
Actuarial Experience	-	-	-
Contributions - Employer	-	3,758,825	(3,758,825)
Contributions - Employee	-	1,069,911	(1,069,911)
Contributions - Other	-	-	-
Net Investment Income	-	4,611,828	(4,611,828)
Benefit payments, including refunds	(4,889,439)	(4,889,439)	-
Administrative Expense	-	(58,926)	58,926
Other Changes	-	-	-
<b>Net Changes</b>	<u>5,434,951</u>	<u>4,492,200</u>	<u>942,751</u>
<b>Balances Beginning at 04/30/15</b>	<u>\$ 116,425,624</u>	<u>\$ 63,941,898</u>	<u>\$ 52,483,726</u>

The changes in total pension liability above are described on the prior page. The plan fiduciary net position was detailed in the prior section of this report. The employer's Net Pension Liability is the excess of the Total Pension Liability over the plan fiduciary net position.





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## DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The table below shows the cumulative amounts to be shown as deferred outflows and inflows of resources. Changes in total pension liability related to the difference in actual and expected experience, or changes in assumptions regarding future events, are recognized in pension expense over the expected remaining service life of all employees (active and retired) in the pension fund. Differences in projected and actual earnings over the measurement period are recognized over a 5 year period. Amounts not yet recognized are summarized below:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences Between Expected and Actual Experience	\$ -	\$ -
Changes of Assumptions	-	-
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	398,268
Contributions Subsequent to the Measurement Date*	-	-
Total	<u>\$ -</u>	<u>\$ 398,268</u>

\* Contributions subsequent to the measurement date may be recognized as a reduction to the NPL. The amount is not known as of the date of this report. Subsequent to the measurement date, the following amounts will be recognized in pension expense in the upcoming years:

### Year ended April, 30:

2015	\$ 99,567
2016	99,567
2017	99,567
2018	99,567
2019	-
Thereafter	-



## ACTUARIAL ASSUMPTION INFORMATION

Statement of Significant Actuarial Assumptions  
Notes on Actuarial Assumptions  
Development of the Discount Rate  
Sensitivity of the Discount Rate

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## STATEMENT OF SIGNIFICANT ACTUARIAL ASSUMPTIONS

### Actuarial Assumptions (Economic)

Discount Rate used for the Total Pension Liability	7.00%
Long-Term Expected Rate of Return on Plan Assets	7.00%
High Quality 20 Year Tax-Exempt G.O. Bond Rate	3.62%
Projected Individual Salary Increases	4.00% - 14.00%
Projected Increase in Total Payroll	4.00%
Consumer Price Index (Urban)	3.00%
Inflation Rate Included	3.00%

### Actuarial Assumptions (Demographic)

Mortality Table	L&A 2012 Illinois Police 100%
Retirement Rates	L&A 2012 Illinois Police 100% Capped at age 65
Disability Rates	L&A 2012 Illinois Police 100%
Termination Rates	L&A 2012 Illinois Police 100%
Percent Married	85.0%

All rates shown in the economic assumptions are assumed to be annual rates, compounded on an annual basis.

### Assumption Changes

There have been no changes in assumptions from the prior year.



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## NOTES ON ACTUARIAL ASSUMPTIONS

### INDIVIDUAL PAY INCREASES

Individual pay increases include provisions for annual cost of living increases, plus any additional increases in pensionable pay provided (step increases, longevity increases, promotions, educations, etc). Sample rates are as follows:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	11.25%	8	4.00%
1	8.25%	9	7.00%
2	9.00%	10	4.00%
3	4.00%	15	4.00%
4	4.00%	20	4.00%
5	4.00%	25	4.00%
6	4.00%	30	4.00%
7	4.00%		

### DEMOGRAPHIC ASSUMPTIONS

Mortality rates are based on rates developed in the L&A 2012 Mortality Table for Illinois Police Officers.

Other demographic assumption rates are based on a review of assumptions in the L&A 2012 study for Illinois Police Officers.

### POSTEMPLOYMENT BENEFIT CHANGES

Eligibility for postemployment benefit increases is determined based on the Illinois Pension code. Tier 1 Police retirees are provided with an annual 3.0% increase in retirement benefits by statute when eligible. Tier 2 Police retirees are provided postemployment benefit increases based on one-half of the Consumer Price Index (Urban) for the prior September.

The CPI-U for September, 1983 was 100.7. The CPI-U for September, 2013 was 234.1. The average increase in the CPI-U for September, 1983 through September, 2013 was 2.85% (on a compounded basis).



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## EXPECTED RETURN ON PENSION PLAN INVESTMENTS

The long-term expected rate of return on assets is intended to represent the best estimate of future real rates of return and is shown for each of the major asset classes in the investment policy. The expected rates of return shown below have been provided by the investment professionals that work with the pension fund. Future real rates of return are weighted based on the target asset allocation within the Investment Policy Statement. Expected inflation is added back in.

A summary of the best estimate of future real rates of returns (annual arithmetic average) are included in the table below. The Investment Policy Statement will provide more detail regarding the Fund's policies on asset allocation targets and acceptable ranges.

<u>Asset Class</u>	<u>Long-Term Expected Rate of Return</u>	<u>Long-Term Inflation Expectations</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity Large-Caps.	7.60%	2.25%	5.35%
Domestic Equity Mid-Caps.	8.34%	2.25%	6.09%
Domestic Small-Caps.	8.81%	2.25%	6.56%
International Developed Foreign	8.10%	2.25%	5.85%
Emerging Markets	11.77%	2.25%	9.52%
Commodities	5.22%	2.25%	2.97%
Fixed Income Investment Grade Corporate	4.75%	2.25%	2.50%
Fixed Income Intermediate U.S. Treasuries	4.29%	2.25%	2.04%
Fixed Income High Yield	6.40%	2.25%	4.15%
REITS	8.17%	2.25%	5.92%
Cash	2.00%	2.25%	-0.25%

Long-term expected real returns under GASB are expected to reflect the period of time that begins when a plan member begins to provide service to the employer and ends at the point when all benefits to the plan member have been paid. The rates provided above are intended to estimate those figures.

The expected inflation rate is 2.25% and is included in the total long-term rate of return on investments. The inflation rate is from the same source as the long-term real rates of return, and is not necessarily reflective of the inflation measures used for other purposes in the report.



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Long-term rates of return may exhibit geometric properties. Geometric rates of return are equal to arithmetic rates of return when the annual returns exhibit no volatility over time. When arithmetic returns are volatile on a year-to-year basis, the actual realized geometric returns over time will be lower. The higher the volatility, the greater the difference.



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## **MUNICIPAL BOND RATE**

The municipal bond rate assumption is based on The Bond Buyer 20-Bond GO Index. The rate shown earlier in the Actuarial Assumption section is the April 30, 2015 rate. The 20-Bond GO Index is based on an average of certain general obligation municipal bonds maturing in 20 years and having an average rating equivalent of Moody's Aa2 and Standard & Poor's AA.

The 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.

The indexes represent theoretical yields rather than actual price or yield quotations. Municipal bond traders are asked to estimate what a current-coupon bond for each issuer in the indexes would yield if the bond was sold at par value. The indexes are simple averages of the average estimated yields of the bonds.

## **DISCOUNT RATE**

The discount rate used in the determination of the Total Pension Liability is based on a combination of the expected long-term rate of return on plan investments and the municipal bond rate.

Cash flow projections were used to determine the extent which the plan's future net position will be able to cover future benefit payments. To the extent future benefit payments are covered by the plan's projected net position, the expected rate of return on plan investments is used to determine the portion of the net pension liability associated with those payments. To the extent future benefit payments are not covered by the plan's projected net position, the municipal bond rate is used to determine the portion of the net pension liability associated with those payments.

The plan's projected net position is expected to cover future benefit payments in full for the current employees.

Projected benefit payments are determined during the actuarial process based on the assumptions. More details on the assumptions are in the prior section. The expected contributions are based on the funding policy of the plan. The funding policy is discussed in the next section in more detail.



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### SENSITIVITY OF THE DISCOUNT RATE

The Net Pension Liability has been determined using the discount rate listed in the assumption section. Below is a table illustrating the sensitivity of the Net Pension Liability to the discount rate assumption.

	<b>1% Decrease (6.00%)</b>	<b>Current Discount Rate (7.00%)</b>	<b>1% Increase (8.00%)</b>
Employer Net Pension Liability	\$68,709,011	\$52,483,726	\$39,106,208

The sensitivity of the Net Pension Liability to the discount rate is based primarily on two factors:

1. The duration of the plan's expected benefit payments. Younger plans with benefit payments further in the future will be more sensitive to changes in the discount rate.
2. The funded percentage of the plan (ratio of the net position to the total pension liability). The higher the funded percentage, the higher the sensitivity to the discount rate.





## PARTICIPANT DATA

Participant Demographic Data  
Expected Future Working Lifetime

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## **PARTICIPANT DEMOGRAPHIC DATA**

The chart below summarizes the employee count and payroll as of the Actuarial Valuation Date:

	<u><b>2015</b></u>
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	91
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	<u>123</u>
Total	<u><u>216</u></u>
 Payroll of Active Plan Members	 <u>\$ 10,408,623</u>

Participant count is shown as of the Actuarial Valuation Date. Pay is the active pensionable pay as of the Actuarial Valuation Date.

## **EXPECTED FUTURE WORKING LIFETIME**

The chart below summarizes the expected future working lifetime of fund members:

	<u><b>2015</b></u>
Average Future Working Career (In Years)	
Active Plan Members	12.30
Inactive Plan Members	0.00
Total	7.00

The expected future working lifetime is measured as of the Actuarial Valuation Date and is based on the demographic assumptions used in the preparation of the Actuary's report.



## FUNDING POLICY

Formal Funding Policy  
Informal Funding Policy

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## **COMPONENTS OF THE ACTUARIALLY DETERMINED CONTRIBUTION**

The Actuarially Determined Contribution (ADC) includes the determination of the Normal Cost contribution for active plan members, as well as provision for the payment of unfunded liability.

The actuarial funding method used in the determination of the normal cost and the actuarial liability is the Entry Age Normal Cost method (level percent of pay). The method allocates normal cost contributions by employee over the working career of the employee as a level percent of their pay.

Unfunded liability is the excess of the actuarial liability over the actuarial value of assets. The actuarially determined contribution includes a payment towards unfunded liability existing at the actuarial valuation date. The payment towards unfunded liability is set up as a level percent of payroll payment that is expected to increase during the payment period. The period of repayment as of the Actuarial Valuation Date is 26 years.

The Actuarial Value of Assets smooths gains and losses on the market value of assets over a 5 year period.

Under no circumstances will the Actuarially Determined Contribution be less than the amount determined as the Statutory Minimum Contribution under Illinois statutes.

### **FORMAL FUNDING POLICY**

There is a Formal Funding Policy that exists between the Pension Board and the City at this time. The formal funding policy parameters are from the City Ordinance Chapter 16, Section 46. The formal funding policy is being used for GASB 67/68 reporting purposes.

### **INFORMAL FUNDING POLICY**

In determining the most appropriate informal funding policy, GASB provides the following guidance in the Statement:

*Application of professional judgment should consider the most recent five-year contribution history of the employers and nonemployer contributing entities as a key indicator of future contributions from those sources and should reflect all other known events and conditions.... the amount of projected cash flows for contributions from employers and nonemployer contributing entities should be limited to an average of contributions from those sources over the most recent five-year period and may be modified based on consideration of subsequent events. For this purpose, the basis for the average (for example, percentage of covered payroll contributed or percentage of actuarially determined contributions made) should be a matter of professional judgment.*



In our review of informal funding policy the following factors are considered and described herein:

1. The five-year contribution history of the Employer (with a focus on the average contributions from those sources.)
2. All other known events and conditions
3. Consideration of subsequent events.

Five-Year Contribution History of the Employer

Employer contributions (under the informal policy) should be limited to the average over the most recent five years. In determining the basis for the average we reviewed three possibilities: (a) The average dollar contribution; (b) the average percent of pensionable pay; and (c) The average percent of the actuarial determined contribution. Please see the table below for a summary of these values:

<b>Fiscal Year End</b>	<b>Employer Contributions</b>	<b>Most Applicable ADC</b>	<b>% of ADC</b>	<b>Covered Payroll</b>	<b>% of Payroll</b>
4/30/2015	\$3,758,825	\$5,065,095	74%	\$10,408,623	36.11%
4/30/2014	\$3,183,834	\$4,103,510	78%	\$10,018,602	31.78%
4/30/2013	\$3,311,122	\$4,057,967	82%	\$9,722,152	34.06%
4/30/2012	\$4,111,770	\$3,956,847	104%	\$9,212,701	44.63%
4/30/2011	\$3,867,939	\$3,816,965	101%	\$8,903,996	43.44%

The contribution history suggests that the contribution as a percent of Actuarially Determined Contribution is the most stable contribution, when compared to the other contribution policies reviewed.

Other Known Events and Conditions

GASB has a provision for consideration of any other known events or conditions in the most recent five-year history in applying judgement for the informal funding policy. There are no events or conditions that have been considered in the development of the informal funding policy.

Consideration of Subsequent Events

GASB has a provision for modification based on consideration of subsequent events in development of the informal funding policy. There are no subsequent events that have been considered in the development of the informal funding policy.



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### Informal Funding Policy – Selected

Because a formal funding policy exists between the Pension Board and the City, we have not developed an informal funding policy for GASB 67/68 purposes.

### **FUNDING POLICY – OTHER CONSIDERATIONS**

Under GASB, the future contribution amount is not intended to include dollars contributed on behalf of future employees. Contributions are only intended to cover contributions towards the Normal Cost of existing employees as of the Actuarial Valuation Date as well as payment of unfunded liability on behalf of the current existing employees. Contributions under the funding policy have been adjusted as necessary to exclude dollars that would be anticipated to be contributed on behalf of future employees hired after the actuarial valuation date.

The contribution level may not pay off the unfunded liability during the active working lifetimes of current employees. In that case contributions will persist beyond the working lifetimes of current employees. To the extent a portion of the above total contribution is anticipated to pay contributions for future employee normal cost, the amount has been netted out. The remaining amount is anticipated to be paid towards the unfunded liability existing for current employees.

The actuarial determined contribution is determined annually based on the parameters previously discussed. The funding methods and procedures are assumed to continue into the future. The tax levy in the next December when combined with contributions from other City sources is assumed to be the actuarially determined contribution. Funding is assumed to go into the fund during the next full fiscal year.



## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability  
Schedule of Total Pension Liability and Related Ratios  
Schedule of the Actuarially Determined Contribution

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## SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>Total Pension Liability</b>										
Service Cost	\$ 2,726,173									
Interest	7,598,217									
Changes of Benefit Terms	-									
Differences Between Expected and Actual Experience	-									
Changes in Assumptions	-									
Benefit Payments and Refunds	(4,889,439)									
<b>Net Change In Total Pension Liability</b>	<b>5,434,951</b>									
<b>Total Pension Liability - Beginning</b>	<b>110,990,673</b>									
<b>Total Pension Liability - Ending (A)</b>	<b>116,425,624</b>									
<b>Plan Fiduciary Net Position</b>										
Contributions - Employer	3,758,825									
Contributions - Member	1,069,911									
Net Investment Income	4,611,828									
Benefit Payments and Refunds	(4,889,439)									
Administrative Expense	(58,926)									
Other	-									
<b>Net Change in Plan Fiduciary Net Position</b>	<b>4,492,200</b>									
<b>Plan Fiduciary Net Position - Beginning</b>	<b>59,449,698</b>									
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>63,941,898</b>									
<b>Employer Net Pension Liability - Ending (a) - (b)</b>	<b>52,483,726</b>									

The current year information was developed in the completion of this report.





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**SCHEDULE OF TOTAL PENSION LIABILITY AND RELATED RATIO**

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>Total Pension Liability - Ending (a)</b>	\$ 116,425,624									
<b>Plan Fiduciary Net Position - Ending (b)</b>	63,941,898									
<b>Employer Net Pension Liability - Ending (a) - (b)</b>	52,483,726									
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	54.92%									
<b>Covered-Employee Payroll</b>	10,408,623									
<b>Employer Net Pension Liability as a Percentage of Covered-Employee Payroll</b>	504.23%									

Covered employee payroll shown is the pensionable pay for the fiscal year for all fund members.



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## SCHEDULE OF CONTRIBUTIONS

	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
Actuarially Determined Contribution	\$ 5,065,095									
Contributions in Relation to the Actuarially Determined Contribution	<u>3,758,825</u>									
Contribution Deficiency (excess)	<u>1,306,270</u>									
Covered-Employee Payroll	<u>10,408,623</u>									
Contributions as a Percentage of Covered-Employee Payroll	36.1%									

## NOTES TO SCHEDULE OF CONTRIBUTIONS

The actuarially determined contribution shown is from the May 1, 2013 actuary's report completed by Tepfer Consulting Group, Ltd. for the tax levy recommendation for the December, 2013 tax levy.



# GASB METHODS AND PROCEDURES

GASB Methods and Procedures  
Methodology for Deferred Outflows and Inflows

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**GASB METHODS AND PROCEDURES**

	<u>Statement 67</u> <u>Pension Fund Financials</u>	<u>Statement 68</u> <u>Employer Financials</u>
Fiscal Year End for Reporting	<b>April 30, 2015</b>	<b>April 30, 2015</b>
Measurement Date	April 30, 2015	April 30, 2015
Actuarial Valuation Date	May 1, 2015	May 1, 2015
Actuarial Valuation - Data Date	April 30, 2015	April 30, 2015
Asset Valuation Method	Market Value	Market Value
Actuarial Cost Method	Entry Age Normal (Level %)	Entry Age Normal (Level %)

**Methodology Used in the Determination of Deferred Inflows and Outflows of Resources**

Amortization Method	Straight Line	Straight Line
Amortization Period		
Actuarial Experience (TPL)	7.00 Years	7.00 Years
Changes in Assumptions	7.00 Years	7.00 Years
Asset Experience	5.00 Years	5.00 Years



## SUPPLEMENTARY TABLES

Projection of Contributions  
Projection of the Pension Fund's Fiduciary Net Position  
Actuarial Present Value of Projected Benefit Payments

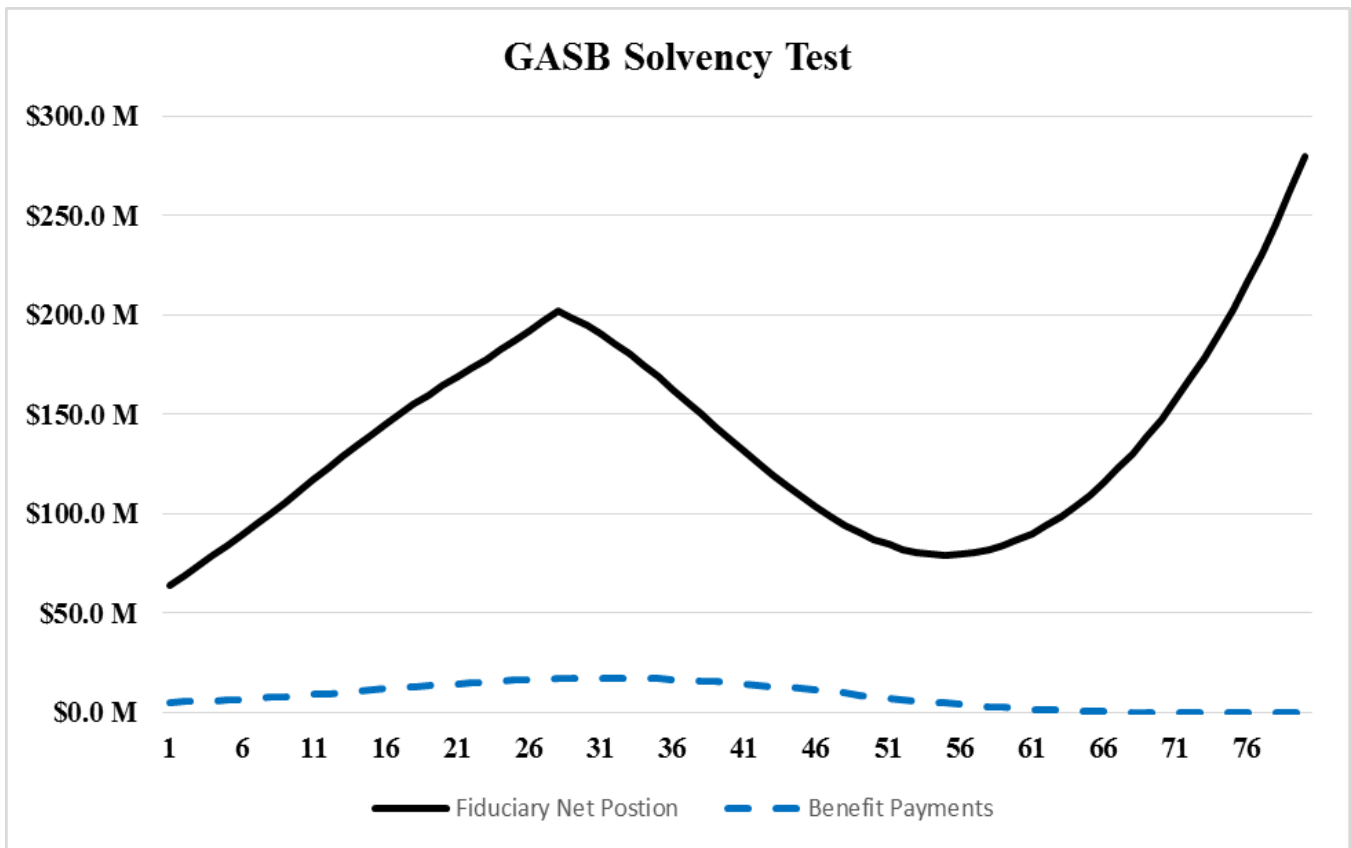
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## GASB PROJECTIONS – SUMMARY AND PROCEDURE

GASB requires a solvency test to use in the determination of the discount rate each year. The Fiduciary Net Position of the fund is projected forward. To the extent the Net Position of the Fund is anticipated to be greater than \$0, benefit payments during that time period are discounted based on the expected rate of return on plan assets.

If the Fiduciary Net Position of the fund is anticipated to go to \$0 prior to the payment of future benefit payments for employees who are in the fund as of the Actuarial Valuation Date, then remaining expected future benefit payments are discounted using a high quality Municipal Bond rate as described in the assumption section of the report. Below is a chart with a high level summary of the projections:





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### Limitations

Projections of any type require assumptions about future events. The projections required for GASB reporting are deterministic in nature. That means that values are projected forward under one set of assumptions which can be thought of as the average result. Actual results could vary, and projections of one deterministic assumption set do not necessarily provide a framework for making risk management or funding policy decisions. Projections that deal with risk management are outside the scope of this report.

In addition, GASB requirements create results that are specific only to financial statement reporting, and should not be used or interpreted for other purposes. For example, GASB cash flow projections do not entail the total expected cash flows of the pension fund, but rather a subset of cash flows specific to members who are in the pension fund as of the Actuarial Valuation date. While the likely expectation may be that new employees are hired to replace the old, cash flows attributable to their benefits are not considered. Under GASB, when the Net Position goes to \$0, that represents only the Net Position for the assets attributable to the current fund members.

GASB also mandates certain assumptions that are made in the projection process. Most notably, future contributions under an informal funding policy. In proposing an informal funding policy, GASB suggests a focus be placed on the average contribution rate over the past 5 years. Assumed contributions noted in this section may be based on the five year average, unless a formal funding policy is in place.

Contributions reflecting informal funding policy are applied under GASB, whether or not the future results dictate a need for more or less contributions. This would not be the case with other uses for projections. Any events that are taken into account (past or future) in the informal funding policy are discussed in the “Funding Policy” section of this report.

The further you look forward with projections, the more sensitive the results are to assumptions. With projections that run out close to 80 years, a small change in an assumption will have a dramatic impact in the look of the projections on the following pages. If there is no change to the solvency of the fund as determined by GASB, big swings in the projection results may not necessarily lead to big swings in the determination of the Total Pension Liability.

We recommend the projections are not used for any other purposes, other than providing backup information for purposes of the financial statement report.

The following pages provide the detail behind the charts shown on the chart in this section.



## PROJECTION OF CONTRIBUTIONS – YEARS 1 TO 30

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
1	\$ 10,408,612	\$ -	\$ 10,408,612	\$ 1,031,493	\$ 4,667,258	\$ -	\$ 5,698,751
2	10,496,002	328,954	10,824,956	1,040,154	4,504,224	-	5,544,378
3	10,507,400	750,555	11,257,955	1,041,283	4,649,875	-	5,691,158
4	10,457,322	1,250,951	11,708,273	1,036,321	4,790,578	-	5,826,898
5	10,402,479	1,774,125	12,176,604	1,030,886	4,933,320	-	5,964,206
6	10,359,472	2,304,196	12,663,668	1,026,624	5,078,637	-	6,105,261
7	10,294,575	2,875,640	13,170,215	1,020,192	5,232,608	-	6,252,801
8	10,088,548	3,608,475	13,697,023	999,775	5,388,452	-	6,388,227
9	9,903,618	4,341,286	14,244,904	981,449	5,530,773	-	6,512,221
10	9,688,151	5,126,549	14,814,700	960,096	5,680,857	-	6,640,953
11	9,455,171	5,952,117	15,407,288	937,007	5,832,814	-	6,769,822
12	9,084,546	6,939,034	16,023,580	900,279	5,981,106	-	6,881,385
13	8,663,089	8,001,434	16,664,523	858,512	6,110,937	-	6,969,449
14	8,305,860	9,025,244	17,331,104	823,111	6,237,025	-	7,060,136
15	7,818,810	10,205,538	18,024,348	774,844	6,383,515	-	7,158,359
16	7,188,276	11,557,046	18,745,322	712,358	6,508,588	-	7,220,946
17	6,658,918	12,836,217	19,495,135	659,899	6,617,532	-	7,277,431
18	6,138,993	14,135,947	20,274,940	608,374	6,748,688	-	7,357,062
19	5,629,601	15,456,337	21,085,938	557,893	6,889,406	-	7,447,299
20	5,104,541	16,824,835	21,929,376	505,860	7,042,684	-	7,548,544
21	4,702,157	18,104,394	22,806,551	465,984	7,204,791	-	7,670,775
22	4,312,560	19,406,253	23,718,813	427,375	7,396,991	-	7,824,365
23	3,977,193	20,690,372	24,667,565	394,140	7,602,201	-	7,996,340
24	3,596,738	22,057,530	25,654,268	356,437	7,826,794	-	8,183,231
25	3,231,457	23,448,981	26,680,438	320,237	8,057,150	-	8,377,388
26	2,808,837	24,938,819	27,747,656	278,356	8,305,396	-	8,583,751
27	2,374,532	26,483,030	28,857,562	235,316	8,561,899	-	8,797,215
28	1,926,514	28,085,351	30,011,865	190,918	286,628	-	477,546
29	1,508,778	29,703,561	31,212,339	149,520	228,609	-	378,129
30	1,184,293	31,276,540	32,460,833	117,363	174,217	-	291,580

Column d – Contributions from employees to the pension fund (employees as of the valuation date)

Column e – Employer contributions to the fund excluding contributions for employees hired after the actuarial valuation date

Column f – Contributions from future employees to the extent they are anticipated to be greater than required to pay their total normal cost





**PROJECTION OF CONTRIBUTIONS – YEARS 31 TO 60**

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
31	\$ 906,370	\$ 32,852,896	\$ 33,759,266	\$ 89,821	\$ 132,262	\$ -	\$ 222,083
32	677,828	34,431,809	35,109,637	67,173	97,636	-	164,809
33	474,933	36,039,089	36,514,022	47,066	70,865	-	117,931
34	314,607	37,659,976	37,974,583	31,178	48,369	-	79,547
35	213,921	39,279,646	39,493,567	21,200	30,713	-	51,913
36	135,598	40,937,711	41,073,309	13,438	20,321	-	33,759
37	81,640	42,634,602	42,716,242	8,091	12,369	-	20,460
38	43,897	44,380,994	44,424,891	4,350	7,003	-	11,353
39	23,350	46,178,537	46,201,887	2,314	3,499	-	5,813
40	15,122	48,034,840	48,049,962	1,499	1,564	-	3,063
41	7,696	49,964,265	49,971,961	763	1,013	-	1,776
42	3,029	51,967,810	51,970,839	300	488	-	788
43	-	54,049,673	54,049,673	-	173	-	173
44	-	56,211,660	56,211,660	-	-	-	-
45	-	58,460,126	58,460,126	-	-	-	-
46	-	60,798,531	60,798,531	-	-	-	-
47	-	63,230,473	63,230,473	-	-	-	-
48	-	65,759,691	65,759,691	-	-	-	-
49	-	68,390,079	68,390,079	-	-	-	-
50	-	71,125,682	71,125,682	-	-	-	-
51	-	73,970,710	73,970,710	-	-	-	-
52	-	76,929,538	76,929,538	-	-	-	-
53	-	80,006,719	80,006,719	-	-	-	-
54	-	83,206,988	83,206,988	-	-	-	-
55	-	86,535,268	86,535,268	-	-	-	-
56	-	89,996,678	89,996,678	-	-	-	-
57	-	93,596,546	93,596,546	-	-	-	-
58	-	97,340,407	97,340,407	-	-	-	-
59	-	101,234,024	101,234,024	-	-	-	-
60	-	105,283,385	105,283,385	-	-	-	-

Column d – Contributions from employees to the pension fund (employees as of the valuation date)

Column e – Employer contributions to the fund excluding contributions for employees hired after the actuarial valuation date

Column f – Contributions from future employees to the extent they are anticipated to be greater than required to pay their total normal cost



## PROJECTION OF CONTRIBUTIONS – YEARS 61 TO 80

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
61	\$ -	\$ 109,494,720	\$ 109,494,720	\$ -	\$ -	\$ -	\$ -
62	-	113,874,509	113,874,509	-	-	-	-
63	-	118,429,489	118,429,489	-	-	-	-
64	-	123,166,669	123,166,669	-	-	-	-
65	-	128,093,336	128,093,336	-	-	-	-
66	-	133,217,069	133,217,069	-	-	-	-
67	-	138,545,752	138,545,752	-	-	-	-
68	-	144,087,582	144,087,582	-	-	-	-
69	-	149,851,085	149,851,085	-	-	-	-
70	-	155,845,128	155,845,128	-	-	-	-
71	-	162,078,934	162,078,934	-	-	-	-
72	-	168,562,091	168,562,091	-	-	-	-
73	-	175,304,575	175,304,575	-	-	-	-
74	-	182,316,758	182,316,758	-	-	-	-
75	-	189,609,428	189,609,428	-	-	-	-
76	-	197,193,805	197,193,805	-	-	-	-
77	-	205,081,557	205,081,557	-	-	-	-
78	-	213,284,819	213,284,819	-	-	-	-
79	-	221,816,212	221,816,212	-	-	-	-
80	-	230,688,861	230,688,861	-	-	-	-

### NOTES TO PROJECTION OF CONTRIBUTIONS

Total payroll is assumed to increase annually at the assumed payroll increase rate shown in the assumption section of this report. Payroll for current employees (employees active as of the actuarial valuation date) has been projected on an employee by employee basis, using expected pay increases and probability of remaining in active employment for future periods.

Employer contributions are related to current employees in the fund as of the Actuarial Valuation Date. To the extent future contributions under the Employer funding policy are made to cover the Normal Cost of providing benefits for future employees, those contributions have been excluded out for purposes of these projections and this report.

Contributions are based on the Funding Policy described in an earlier section of this report. The contributions do not factor in changes in funding policy based on an assumed Employer decision if the projections were to play out in this fashion. The only future events that have been considered were outlined in the funding policy section of the report.

Contributions from future employees have not been included. It is assumed that contributions made by future employees will not exceed the Normal Cost of their participation in the Fund. In addition, contributions by the employer on behalf of service for future employees have not been included per the GASB parameters.



**PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 1 TO 30**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
1	\$ 63,941,898	\$ 5,698,751	\$ 5,162,112	\$ 77,603	\$ 4,491,999	\$ 68,892,934
2	68,892,934	5,544,378	5,434,108	79,931	4,823,567	73,746,840
3	73,746,840	5,691,158	5,773,580	82,329	5,156,513	78,738,602
4	78,738,602	5,826,898	6,081,462	84,799	5,499,824	83,899,064
5	83,899,064	5,964,206	6,428,845	87,343	5,853,615	89,200,697
6	89,200,697	6,105,261	6,783,882	89,963	6,217,148	94,649,261
7	94,649,261	6,252,801	7,202,989	92,662	6,588,948	100,195,359
8	100,195,359	6,388,227	7,647,441	95,442	6,966,262	105,806,965
9	105,806,965	6,512,221	8,074,807	98,305	7,348,356	111,494,431
10	111,494,431	6,640,953	8,520,574	101,254	7,735,280	117,248,835
11	117,248,835	6,769,822	9,051,474	104,292	8,123,910	122,986,801
12	122,986,801	6,881,385	9,590,994	107,421	8,510,480	128,680,251
13	128,680,251	6,969,449	10,112,262	110,643	8,893,747	134,320,540
14	134,320,540	7,060,136	10,700,394	113,963	9,271,040	139,837,359
15	139,837,359	7,158,359	11,315,380	117,382	9,639,011	145,201,968
16	145,201,968	7,220,946	11,972,866	120,903	9,993,589	150,322,734
17	150,322,734	7,277,431	12,600,913	124,530	10,331,911	155,206,633
18	155,206,633	7,357,062	13,195,450	128,266	10,655,631	159,895,610
19	159,895,610	7,447,299	13,752,093	132,114	10,967,401	164,426,104
20	164,426,104	7,548,544	14,244,115	136,077	11,270,720	168,865,174
21	168,865,174	7,670,775	14,686,885	140,160	11,570,093	173,278,997
22	173,278,997	7,824,365	15,052,421	144,365	11,871,495	177,778,072
23	177,778,072	7,996,340	15,453,711	148,696	12,178,253	182,350,259
24	182,350,259	8,183,231	15,848,236	153,156	12,490,882	187,022,980
25	187,022,980	8,377,388	16,267,644	157,751	12,809,928	191,784,901
26	191,784,901	8,583,751	16,578,420	162,484	13,139,443	196,767,191
27	196,767,191	8,797,215	16,896,826	167,358	13,484,359	201,984,581
28	201,984,581	477,546	17,246,691	172,379	13,545,967	198,589,024
29	198,589,024	378,129	17,412,062	177,550	13,298,830	194,676,371
30	194,676,371	291,580	17,545,984	182,877	13,017,041	190,256,131

Column b – Contributions on behalf of current employees only as of the Actuarial Valuation Date.  
 Column d – Based on average administrative expenses in recent years and projected to increase going forward.  
 Column e – Based on the current expected return on assets. Does not factor in allocation changes.



**PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 31 TO 60**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
31	\$ 190,256,131	\$ 222,083	\$ 17,611,810	\$ 188,363	\$ 12,702,696	\$ 185,380,738
32	185,380,738	164,809	17,614,182	194,014	12,359,133	180,096,484
33	180,096,484	117,931	17,538,372	199,834	11,990,044	174,466,252
34	174,466,252	79,547	17,335,186	205,829	11,601,486	168,606,270
35	168,606,270	51,913	17,093,301	212,004	11,198,570	162,551,447
36	162,551,447	33,759	16,793,894	218,364	10,784,354	156,357,301
37	156,357,301	20,460	16,444,948	224,915	10,362,282	150,070,179
38	150,070,179	11,353	16,024,911	231,663	9,936,330	143,761,289
39	143,761,289	5,813	15,554,625	238,613	9,510,730	137,484,594
40	137,484,594	3,063	15,042,653	245,771	9,088,934	131,288,167
41	131,288,167	1,776	14,489,130	253,144	8,674,254	125,221,923
42	125,221,923	788	13,896,716	260,739	8,270,051	119,335,307
43	119,335,307	173	13,266,933	268,561	7,879,735	113,679,722
44	113,679,722	-	12,605,208	276,617	7,506,717	108,304,613
45	108,304,613	-	11,915,718	284,916	7,154,301	103,258,280
46	103,258,280	-	11,203,229	293,463	6,825,695	98,587,283
47	98,587,283	-	10,473,374	302,267	6,523,962	94,335,604
48	94,335,604	-	9,731,854	311,335	6,251,981	90,544,395
49	90,544,395	-	8,984,874	320,675	6,012,413	87,251,259
50	87,251,259	-	8,239,291	330,296	5,807,653	84,489,325
51	84,489,325	-	7,501,879	340,205	5,639,780	82,287,021
52	82,287,021	-	6,779,170	350,411	5,510,556	80,667,996
53	80,667,996	-	6,077,505	360,923	5,421,415	79,650,983
54	79,650,983	-	5,403,114	371,751	5,373,449	79,249,567
55	79,249,567	-	4,761,399	382,903	5,367,419	79,472,684
56	79,472,684	-	4,157,123	394,390	5,403,785	80,324,955
57	80,324,955	-	3,593,785	406,222	5,482,747	81,807,694
58	81,807,694	-	3,074,245	418,409	5,604,296	83,919,336
59	83,919,336	-	2,600,917	430,961	5,768,238	86,655,696
60	86,655,696	-	2,174,966	443,890	5,974,239	90,011,079

Column b – Contributions on behalf of current employees only as of the Actuarial Valuation Date.

Column d – Based on average administrative expenses in recent years and projected to increase going forward.

Column e – Based on the current expected return on assets. Does not factor in allocation changes.



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## PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 61 TO 80

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
61	\$ 90,011,079	\$ -	\$ 1,796,443	\$ 457,207	\$ 6,221,898	\$ 93,979,327
62	93,979,327	-	1,464,372	470,923	6,510,818	98,554,850
63	98,554,850	-	1,177,053	485,050	6,840,666	103,733,413
64	103,733,413	-	932,322	499,602	7,211,222	109,512,710
65	109,512,710	-	727,068	514,590	7,622,432	115,893,484
66	115,893,484	-	557,741	530,028	8,074,472	122,880,187
67	122,880,187	-	420,493	545,929	8,567,788	130,481,554
68	130,481,554	-	311,792	562,306	9,103,115	138,710,571
69	138,710,571	-	227,047	579,176	9,681,522	147,585,870
70	147,585,870	-	162,137	596,551	10,304,457	157,131,639
71	157,131,639	-	113,771	614,447	10,973,727	167,377,148
72	167,377,148	-	78,333	632,881	11,691,508	178,357,442
73	178,357,442	-	52,866	651,867	12,460,355	190,113,064
74	190,113,064	-	34,933	671,423	13,283,192	202,689,900
75	202,689,900	-	22,585	691,566	14,163,298	216,139,047
76	216,139,047	-	14,263	712,313	15,104,303	230,516,774
77	230,516,774	-	8,932	733,682	16,110,183	245,884,342
78	245,884,342	-	5,444	755,693	17,185,264	262,308,469
79	262,308,469	-	3,152	778,364	18,334,240	279,861,194
80	279,861,194	-	1,836	801,714	19,562,159	298,619,803

### NOTES TO PROJECTION OF FIDUCIARY NET POSITION

Total contributions are Employee and Employer contributions anticipated to be made under the funding policy on behalf of employees in the fund as of the Actuarial Valuation Date. The amounts shown were detailed earlier in this section.

Projected benefit payments shown represent only employees active as of the Actuarial Valuation Date. The fund will also be paying benefit payments in the future on behalf of employees hired after the Actuarial Valuation Date, but those have not been estimated for this purpose.

Projected investment earnings are based on the current expected rate of return on plan assets. Administrative expenses are not typically charged on a per employee basis. Administrative expenses shown have not been adjusted to distinguish between current employees and future employees.

The projected Net Position represents assets held or projected to be held on behalf of current employees as of the Actuarial Valuation Date. The fund will also hold assets in the future on behalf of new employees that are not shown here.



**ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 1 TO 30**

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
1	\$ 63,941,898	\$ 5,162,112	\$ 5,162,112	\$ -	\$ 4,990,402	\$ -	\$ 4,990,402
2	68,892,934	5,434,108	5,434,108	-	4,909,673	-	4,909,673
3	73,746,840	5,773,580	5,773,580	-	4,875,125	-	4,875,125
4	78,738,602	6,081,462	6,081,462	-	4,799,155	-	4,799,155
5	83,899,064	6,428,845	6,428,845	-	4,741,393	-	4,741,393
6	89,200,697	6,783,882	6,783,882	-	4,675,925	-	4,675,925
7	94,649,261	7,202,989	7,202,989	-	4,640,002	-	4,640,002
8	100,195,359	7,647,441	7,647,441	-	4,604,026	-	4,604,026
9	105,806,965	8,074,807	8,074,807	-	4,543,286	-	4,543,286
10	111,494,431	8,520,574	8,520,574	-	4,480,464	-	4,480,464
11	117,248,835	9,051,474	9,051,474	-	4,448,255	-	4,448,255
12	122,986,801	9,590,994	9,590,994	-	4,405,043	-	4,405,043
13	128,680,251	10,112,262	10,112,262	-	4,340,613	-	4,340,613
14	134,320,540	10,700,394	10,700,394	-	4,292,584	-	4,292,584
15	139,837,359	11,315,380	11,315,380	-	4,242,329	-	4,242,329
16	145,201,968	11,972,866	11,972,866	-	4,195,170	-	4,195,170
17	150,322,734	12,600,913	12,600,913	-	4,126,384	-	4,126,384
18	155,206,633	13,195,450	13,195,450	-	4,038,388	-	4,038,388
19	159,895,610	13,752,093	13,752,093	-	3,933,407	-	3,933,407
20	164,426,104	14,244,115	14,244,115	-	3,807,604	-	3,807,604
21	168,865,174	14,686,885	14,686,885	-	3,669,123	-	3,669,123
22	173,278,997	15,052,421	15,052,421	-	3,514,432	-	3,514,432
23	177,778,072	15,453,711	15,453,711	-	3,372,079	-	3,372,079
24	182,350,259	15,848,236	15,848,236	-	3,231,932	-	3,231,932
25	187,022,980	16,267,644	16,267,644	-	3,100,431	-	3,100,431
26	191,784,901	16,578,420	16,578,420	-	2,952,955	-	2,952,955
27	196,767,191	16,896,826	16,896,826	-	2,812,775	-	2,812,775
28	201,984,581	17,246,691	17,246,691	-	2,683,193	-	2,683,193
29	198,589,024	17,412,062	17,412,062	-	2,531,702	-	2,531,702
30	194,676,371	17,545,984	17,545,984	-	2,384,275	-	2,384,275

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position was shown in more detail earlier in this section.



**ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 31 TO 60**

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
31	\$ 190,256,131	\$ 17,611,810	\$ 17,611,810	\$ -	\$ 2,236,654	\$ -	\$ 2,236,654
32	185,380,738	17,614,182	17,614,182	-	2,090,612	-	2,090,612
33	180,096,484	17,538,372	17,538,372	-	1,945,434	-	1,945,434
34	174,466,252	17,335,186	17,335,186	-	1,797,099	-	1,797,099
35	168,606,270	17,093,301	17,093,301	-	1,656,096	-	1,656,096
36	162,551,447	16,793,894	16,793,894	-	1,520,643	-	1,520,643
37	156,357,301	16,444,948	16,444,948	-	1,391,633	-	1,391,633
38	150,070,179	16,024,911	16,024,911	-	1,267,372	-	1,267,372
39	143,761,289	15,554,625	15,554,625	-	1,149,699	-	1,149,699
40	137,484,594	15,042,653	15,042,653	-	1,039,119	-	1,039,119
41	131,288,167	14,489,130	14,489,130	-	935,404	-	935,404
42	125,221,923	13,896,716	13,896,716	-	838,466	-	838,466
43	119,335,307	13,266,933	13,266,933	-	748,101	-	748,101
44	113,679,722	12,605,208	12,605,208	-	664,287	-	664,287
45	108,304,613	11,915,718	11,915,718	-	586,870	-	586,870
46	103,258,280	11,203,229	11,203,229	-	515,681	-	515,681
47	98,587,283	10,473,374	10,473,374	-	450,548	-	450,548
48	94,335,604	9,731,854	9,731,854	-	391,261	-	391,261
49	90,544,395	8,984,874	8,984,874	-	337,597	-	337,597
50	87,251,259	8,239,291	8,239,291	-	289,330	-	289,330
51	84,489,325	7,501,879	7,501,879	-	246,201	-	246,201
52	82,287,021	6,779,170	6,779,170	-	207,928	-	207,928
53	80,667,996	6,077,505	6,077,505	-	174,212	-	174,212
54	79,650,983	5,403,114	5,403,114	-	144,748	-	144,748
55	79,249,567	4,761,399	4,761,399	-	119,212	-	119,212
56	79,472,684	4,157,123	4,157,123	-	97,273	-	97,273
57	80,324,955	3,593,785	3,593,785	-	78,590	-	78,590
58	81,807,694	3,074,245	3,074,245	-	62,831	-	62,831
59	83,919,336	2,600,917	2,600,917	-	49,679	-	49,679
60	86,655,696	2,174,966	2,174,966	-	38,826	-	38,826

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position was shown in more detail earlier in this section.



## ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 61 TO 80

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
61	\$ 90,011,079	\$ 1,796,443	\$ 1,796,443	\$ -	\$ 29,971	\$ -	\$ 29,971
62	93,979,327	1,464,372	1,464,372	-	22,832	-	22,832
63	98,554,850	1,177,053	1,177,053	-	17,152	-	17,152
64	103,733,413	932,322	932,322	-	12,697	-	12,697
65	109,512,710	727,068	727,068	-	9,254	-	9,254
66	115,893,484	557,741	557,741	-	6,634	-	6,634
67	122,880,187	420,493	420,493	-	4,675	-	4,675
68	130,481,554	311,792	311,792	-	3,239	-	3,239
69	138,710,571	227,047	227,047	-	2,205	-	2,205
70	147,585,870	162,137	162,137	-	1,471	-	1,471
71	157,131,639	113,771	113,771	-	965	-	965
72	167,377,148	78,333	78,333	-	621	-	621
73	178,357,442	52,866	52,866	-	392	-	392
74	190,113,064	34,933	34,933	-	242	-	242
75	202,689,900	22,585	22,585	-	146	-	146
76	216,139,047	14,263	14,263	-	86	-	86
77	230,516,774	8,932	8,932	-	50	-	50
78	245,884,342	5,444	5,444	-	29	-	29
79	262,308,469	3,152	3,152	-	16	-	16
80	279,861,194	1,836	1,836	-	8	-	8

### NOTES TO THE ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Net Position was shown in more detail earlier in this section.

The Funded and Unfunded portion of the Benefit Payments is split based on the time that the Fiduciary Net Position is projected to go to \$0 (based on assets for current fund members).

The Present Value of the Funded portion and Unfunded portion of the benefit payments has been determined separately. The PV of the funded portion of the benefit payments uses the assumption for the expected rate of return on plan assets. The PV of the unfunded portion of the benefit payments has been determined using the high quality Municipal Bond Rate as of the Measurement Date as described in the Actuarial Assumption section of the report.

The discount rate used for GASB purposes is the rate that is when applied to the total Projected Benefit payments results in a present value that equals the sum of the present value of the funded and unfunded payments. The discount rate has been round to four decimal places. Therefore the resulting present value comparisons might show a slight difference due to rounding.