

Memo

2.6

To: Karen Selman, Finance Committee
From: Rosemary N. Ryba, Treasurer
CC: Board of Trustees, Village President
Date: November 17, 2014
Re: 2014 Levy Request by the BH Police Pension Fund

The attached funding request by President of the BH Police Pension Fund, Gary Hammelmann, is in the amount of \$710,000.

Also attached is the Actuarial Valuation prepared by Lauterbach and Amen, LLP as of January 1, 2014 and Municipal Compliance Report for the fiscal year ended December 31, 2013 which show the Minimum Statutory Contribution amount of \$644,805 and the Recommended Contribution Requirement amount of \$669,214.

The Village is required to levy at least the minimum contribution required under State law each year. The statutory minimum calculations use the Projected Unit Credit actuarial method, rather than the Entry Age Normal method, and allocate a higher cost at the end of the employees' working career. The dollar value of pensions paid from the funds does not change based on how the pensions are funded, only the annual amount paid towards the ultimate pension liability. Therefore, if a lower amount is contributed in earlier years, a larger amount will have to be contributed in later years.

In FY 2016, the Village will have to implement the new pension reporting requirements included in GASB 67 and 68. The actuarial method required by GASB will be used to calculate the information displayed in the financial statements. This GASB actuarial method will result in a higher liability and a lower funded percentage. The Net Pension Liability (the total liability less the actuarial value of the assets) will also be required to be reported in the Village's entity-wide financial statements. This change will significantly impact the accrual based entity-wide financial statements. The individual fund financial statements will not be affected by the change.

In light of the pending GASB 67 and 68 changes and the request submitted by the BH Police Pension Fund President, the amount of \$710,000 has been used as a placeholder in the 2015 Budget.

BARRINGTON HILLS POLICE PENSION BOARD
BARRINGTON HILLS, ILLINOIS

October 27, 2014

Mayor Martin J. McLaughlin
Village of Barrington Hills
112 Algonquin Road
Barrington Hills, IL 60010

Re: Funding Request for Police Pension Fund

Dear Mayor McLaughlin and Village Board Members:

The Barrington Hills Police Pension Board ("Police Pension Board") formally requests a contribution by the Village in the amount of \$710,000 for the upcoming year. A contribution in this amount will satisfy the minimum required contribution under the Illinois Pension Code, as determined by the actuarial analysis, and will continue a funding policy to increase the percent funded of accrued liabilities for the Police Pension Fund.

The Police Pension Board provides the enclosed information regarding the Barrington Hills Police Pension Fund ("Fund") for consideration by the Village Board as it prepares the Village's 2014 tax levy. Enclosed are the following reports:

- Actuarial Valuation as of January 1, 2014 for the Barrington Hills Police Pension Fund, prepared by Todd A. Schroeder of Lauterbach & Amen, LLP; and
- Municipal Compliance Report for the Barrington Hills Police Pension Fund for the Fiscal Year Ended December 31, 2013.

The Police Pension Board will continue to work with you to ensure that the property tax levy for the Police Pension Fund will enable the Village to meet its statutory financial obligation to the Fund, and continue the Village's ongoing commitment toward increasing the percent funded.

Very truly yours,



Gary Hammelmann, President
Barrington Hills Police Pension Board

Enclosures

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

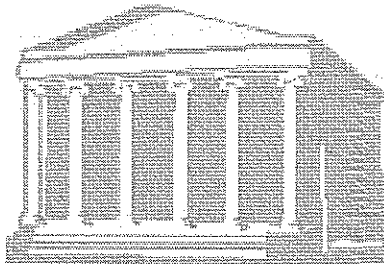
Actuarial Valuation
as of January 1, 2014

**BARRINGTON HILLS POLICE
PENSION FUND**

Utilizing Data as of December 31, 2013
For the Contribution Year January 1, 2014 to December 31, 2014

LAUTERBACH & AMEN, LLP

Actuarial Valuation
as of January 1, 2014



**BARRINGTON HILLS POLICE
PENSION FUND**

Utilizing Data as of December 31, 2013
For the Contribution Year January 1, 2014 to December 31, 2014

Submitted by:

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July 2, 2014

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INTRODUCTION

Statement of Actuarial Opinion

This report documents the results of the Actuarial valuation of the Barrington Hills Police Pension Fund. The purpose is to report the actuarial contribution requirement for the contribution year January 1, 2014 to December 31, 2014. 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 Barrington Hills Police Pension Fund including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to January 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 Barrington Hills 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 Barrington Hills Police Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Barrington Hills Police Pension Fund and the Village of Barrington Hills 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



SUMMARY OF ACTUARIAL VALUATION

Contribution Requirement

	Prior Valuation*	Current Valuation
Contribution Requirement	\$573,223	\$669,214
Expected Payroll	\$1,659,147	\$1,829,284
Contribution Requirement as a Percent of Expected Payroll	34.55%	36.58%

*Recommended
Contribution
has Increased
\$95,991 from
Prior
Valuation.*

Recommended Contribution is based on the Funding Policy agreed upon by the Board.

Funded Status

	Prior Valuation*	Current Valuation
Normal Cost	\$451,548	\$494,189
Market Value of Assets	\$4,922,356	\$7,146,077
Actuarial Value of Assets	\$5,201,065	\$7,341,229
Actuarial Accrued Liability	\$11,213,829	\$13,835,030
Unfunded Actuarial Accrued Liability	\$6,012,764	\$6,493,801
Percent Funded		
Actuarial Value of Assets	46.38%	53.06%
Market Value of Assets	43.90%	51.65%

*Funded
Percentage
has Increased
by 6.68 on an
Actuarial
Value of
Assets Basis.*

*Prior valuation as of December 31, 2011 was completed by Tim Sharpe, Actuary.



COMMENTS AND ANALYSIS

Funding Policy

The Recommended contribution is based on the Funding Policy for the Plan. A Funding Policy has three key numerical components:

1. **The Actuarial Cost Method:** The Actuarial Cost Method budgets a contribution for each year of an employee's working career. Cash contributions are made according to the budget ("Normal Cost" contributions). In addition the Actuarial Cost Method can measure how well the funding is progressing compared to the budgeted contributions.
2. **Amortization Policy:** When Plan funding is not where expected (according to budget), procedures are put into place to pay down any shortfall. This leads to a second piece of the cash contribution (the "Amortization Payment").
3. **Actuarial Value of Assets:** Fluctuations in the plans assets due to short-term gains and losses may be smoothed over some period of time to minimize long-term contribution volatility.

Actuarial Cost Method

The Actuarial Cost Method under the Funding Policy is the Entry Age Normal (EAN) Cost Method (as a percent of payroll). The EAN method creates budgeted contributions that are expected to be stable as a percent of payroll over time, creating equity over generations of taxpayers.

Amortization Policy

The Funding Policy amortizes the current unfunded liability with a target of 100% funding by 2040.

Actuarial Value of Assets

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. Only gains and losses that occurred in fiscal years subsequent to March 30, 2011 are being smoothed.

The net impact is that the actuarial value of assets is higher than the market value of assets, or about 103% of the market value of assets.



COMMENTS AND ANALYSIS - CONTINUED

Actuarial Liability/Contribution Requirement Changes

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. 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.

Contributions are expected to increase at the rate of expected pay increases under the funding policy for the Fund.

	Actuarial <u>Liability</u>	Contribution <u>Requirement</u>
Salary Increase Less than Expected	(40,174)	1,881
Demographic Changes	1,019,389	(6,009)
Assumption Changes	486,985	57,098
Asset Return Less than Expected	-	5,073
Contributions Greater than Expected	-	(9,301)

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

The assumptions for plan mortality, retirement rates, termination rates, and disability rates were changed from the prior valuation. The rates were changed to rates based on the Lauterbach & Amen, LLP 2012 study for police pensions, with adjustment for Barrington Hills Police Pension Fund experience.

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 retire 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.



ASSETS

MARKET VALUE OF ASSETS

Market Value of Assets

	Current Valuation
Cash and Cash Equivalents	\$ 146,043
Money Market Mutual Funds	482,760
Fixed Income	3,592,185
Mutual Funds	2,913,251
Receivables (Net of Payables)	11,838
Net Assets Available for Pensions	<u>\$ 7,146,077</u>

The Total Value of Assets has Increased from the Prior Valuation.

Change in Market Value of Assets

Total Market Value - Prior Valuation	\$ 6,028,110
Plus - Employer Contributions	762,171
Plus - Employee Contributions	186,410
Plus - Return on Investments	437,672
Less - Benefit and Related Payments	(238,994)
Less - Other Expenses	(29,292)
Total Market Value - Current Valuation	<u>\$ 7,146,077</u>

The Return on Investment on the Market Value of Assets for the Fund was Approximately 6.4% Net of Administrative Expenses.



ACTUARIAL VALUE OF ASSETS

Current Year Loss/(Gain) Assets

Total Market Value - Prior Valuation	\$ 6,028,110
Contributions	948,581
Benefit Payments	(238,994)
Expected Return on Investments	<u>445,718</u>
Expected Total Market Value - Current Valuation	7,183,415
Actual Total Market Value - Current Valuation	<u>7,146,077</u>
Current Market Value Loss/(Gain)	<u>\$ 37,338</u>
Expected Return on Investments	\$ 445,718
Actual Return on Investments (Net of Expenses)	<u>408,380</u>
Current Market Value Loss/(Gain)	<u>\$ 37,338</u>

The Current Year Loss/Gain is the Difference in Earnings Between the Actuarial Assumed Rate of Return on Investments and the Actual Investment Returns.

Development of the Actuarial Value of Assets

Total Market Value - Current Valuation	\$ 7,146,077
Adjustment for Prior Losses/(Gains)	
	<u>Full Amount</u>
First Proceeding Year	\$ 37,338
Second Proceeding Year	43,213
Third Proceeding Year	348,386
Fourth Proceeding Year	-
Total Deferred Loss/(Gain)	<u>195,152</u>
Initial Actuarial Value of Assets - Current Valuation	7,341,229
Less Contributions for the Current Year and Interest	-
Less Adjustment for the Corridor	<u>-</u>
Actuarial Value of Assets - Current Valuation	<u>\$ 7,341,229</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 103% of the Market Value.



RECOMMENDED CONTRIBUTION DETERMINATION

ACTUARIAL ACCRUED LIABILITY AND FUNDED STATUS

Actuarial Accrued Liability

	Current Valuation
Active Employees	\$ 10,552,310
Inactive Employees	
Terminated Employees - Vested	-
Retired Employees	2,545,399
Disabled Employees	737,320
Other Beneficiaries	-
Total Inactive Employees	3,282,719
Total Actuarial Accrued Liability	\$ 13,835,030

*Total Actuarial
Accrued Liability has
Increased from the
Prior Valuation (See
Table on Page 4).*

Funded Status

	Current Valuation
Total Actuarial Accrued Liability	\$ 13,835,030
Total Actuarial Value of Assets	7,341,229
Unfunded Actuarial Accrued Liability	\$ 6,493,800
Total Market Value of Assets	\$ 7,146,077
Percent Funded	
Actuarial Value of Assets	53.06%
Market Value of Assets	51.65%

*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 2040.*



NORMAL COST AND CONTRIBUTION REQUIREMENT

Development of the Normal Cost

	Current Valuation
Total Normal Cost	\$ 494,189
Estimated Employee Contributions	(181,282)
Employer Normal Cost	\$ 312,907

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

Normal Cost as a Percentage of Expected Payroll

	Current Valuation
Expected Payroll	\$ 1,829,284
Employee Normal Cost Rate	<u>9.91%</u>
Employer Normal Cost Rate	<u>17.11%</u>
Total Normal Cost Rate	<u>27.02%</u>

Ideally the Employer Normal Cost Rate will Remain Stable.

Contribution Requirement

	Current Valuation
Employer Normal Cost*	\$ 345,029
Amortization of Unfunded Accrued Liability/(Surplus)	324,185
Funding Requirement	\$ 669,214

The Recommended Contribution has Increased from the Prior Valuation (See Table on Page 4).

*Employer Normal Cost Contribution includes interest through the end of the year.



ACTUARIAL METHOD AND ASSUMPTIONS

Actuarial Method and Assumptions Utilized

Actuarial Valuation Date	January 1, 2014
Actuarial Cost Method	Entry Age Normal (Level % Pay)
Amortization Method	Level % Pay (Closed)
Amortization Target	100% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value
Actuarial Assumptions	
Investment Rate of Return	6.50%
Projected Salary Increases	5% - 11%
Aggregate Payroll Increases	4.50%
Inflation Rate Included	3.00%

A Summary of the Key Actuarial Assumptions and Funding Policy Decisions used in the Determination of the Recommended Contribution are Shown. More Detail is Available Later.

Actuarial assumptions are based upon per year compounded annually.

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.

In 2012, Lauterbach & Amen, LLP completed an assumption study on mortality, termination, retirement, and disability rates. These assumptions were updated to better reflect Illinois Firefighter and Police experience.

The change in the mortality assumption increased the contribution by \$41,747. The change in termination rates increased the contribution by \$5,649. The change in retirement rates lowered the contribution by \$13,972. The change in disability rates increased the contribution by \$5,209. The change in salary scale increased the contribution by \$18,465.



STATUTORY MINIMUM CONTRIBUTION

STATUTORY MINIMUM CONTRIBUTION

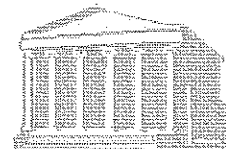
Contribution Requirement

	<u>Minimum Contribution</u>
Contribution Requirement	\$644,805
Expected Payroll	\$1,829,284
Contribution Requirement as a Percent of Expected Payroll	35.25%

*The Statutory
Minimum
Contribution is Based
on Funding Methods
and Funding
Parameters That Were
Incorporated Into the
Illinois Statutes for
Pension Funding
Effective January 1,
2011.*

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.



ACTUARIAL METHOD AND ASSUMPTIONS – STATUTORY MINIMUM

Actuarial Method and Assumptions Utilized

Actuarial Valuation Date	January 1, 2014
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
Actuarial Assumptions	
Investment Rate of Return	6.50%
Projected Salary Increases	5% - 11%
Aggregate Payroll Increases	4.50%
Inflation Rate Included	3.00%

*The Statutory
Minimum
Contribution has
Been Determined
Using the Same
Actuarial
Assumptions as the
Recommended
Contribution.*

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.



VALUATION DATA AND PROCEDURES

SUMMARY OF PLAN PARTICIPANTS

Active Employees

	<u>Current Valuation</u>
Vested	15
Nonvested	<u>4</u>
Total Active Employees	<u>19</u>
Total Payroll	<u>\$ 1,789,031</u>

Inactive Employees

	<u>Current Valuation</u>
Terminated Employees - Vested	0
Retired Employees	3
Disabled Employees	1
Other Beneficiaries	<u>0</u>
Total Inactive Employees	<u>4</u>

Inactive Employees – Summary of Monthly Benefits

	<u>Current Valuation</u>
Terminated Employees - Vested	\$ -
Retired Employees	16,298
Disabled Employees	3,401
Other Beneficiaries	<u>-</u>
Total Inactive Employees	<u>\$ 19,699</u>

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



ACTUARIAL METHODS AND ASSUMPTIONS

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 Cost Methods

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.



ACTUARIAL METHODS AND ASSUMPTIONS - CONTINUED

Financing of Unfunded Actuarial Accrued Liabilities

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 27 future years including the municipality's fiscal year 2040.

Asset Valuation Method

The Actuarial Value of Assets is equal to the Market value of assets with unanticipated gains/losses recognized over five years (beginning with gains/losses in 2011).



ACTUARIAL METHODS AND ASSUMPTIONS - CONTINUED

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 Utilized

Investment Return	Are Described in the Prior Sections of this Report
Salary Increases	Are Described in the Prior Sections of this Report
Inflation Rate Included	Are Described in the Prior Sections of this Report
Cost-of-Living Adjustments	Are Described in the Prior Sections of this Report



ACTUARIAL METHODS AND ASSUMPTIONS - CONTINUED

Actuarial Assumptions Utilized - Continued

Retirement Rates

100% of the L&A Assumption Study for Police 2012 Cap Age 65.
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

Withdrawal Rates

120% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.077	40	0.023
30	0.056	45	0.014
35	0.037	50	0.009

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	0.000	40	0.001
30	0.000	45	0.001
35	0.001	50	0.002

Married Participants

80% of Active Participants are Assumed to be Married. Spouses are Assumed to be the same age.



SUMMARY OF PRINCIPAL PLAN PROVISIONS

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 - CONTINUED

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 1st 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 1st. 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 1st 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 1st. 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 - CONTINUED

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 1st after the attainment of age 60 by the recipient of the survivor's pension. Subsequent increases will occur on each subsequent January 1st. 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 - CONTINUED

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 1st following the first payment. Subsequent increases will occur on each subsequent January 1st. 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.

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 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. 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.



SUMMARY OF PRINCIPAL PLAN PROVISIONS - CONTINUED

Disability Benefit - Continued

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 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. 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

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.



VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND
HOUSE BILL 5088 - MUNICIPAL COMPLIANCE REPORT
FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2013

**VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND**

**House Bill 5088 (Public Act 95-950) - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2013**

The Pension Board certifies to the Board of Trustees of the Village of Barrington Hills, Illinois on the condition of the Pension Fund at the end of its most recently completed fiscal year the following information:

- 1) The total net assets of the fund and their current market value of those assets:

	<u>Current Fiscal Year</u>	<u>Preceding Fiscal Year</u>
Total Net Assets	<u>\$ 7,146,077</u>	<u>\$ 6,028,110</u>
Market Value	<u>\$ 7,146,077</u>	<u>\$ 6,028,110</u>

- 2) The estimated receipts during the next succeeding fiscal year from deductions from the salaries of police officers and from other sources:

Estimated Receipts - Employee Contribution:	<u>\$ 195,900</u>
Estimated Receipts - All Other Sources	
Investment Earnings	<u>\$ 464,500</u>
Municipal Contributions	<u>\$ 669,214</u>

- 3) The estimated amount required during the next succeeding fiscal year to (a) pay all pensions and other obligations provided in Article 3 of the Illinois Pension Code, and (b) to meet the annual requirements of the fund as provided in Sections 3-125 and 3-127:

(a) Pay all Pensions and Other Obligations	<u>\$ 335,400</u>
(b) Annual Requirement of the Fund as Determined by:	
Illinois Department of Insurance	<u>\$ N/A</u>
Private Actuary - Lauterbach & Amen, LLP	
Recommended Municipal Contribution	<u>\$ 669,214</u>
Statutory Municipal Contribution	<u>\$ 644,805</u>

**VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND**

**House Bill 5088 (Public Act 95-950) - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2013**

- 4) The total net income received from investment of assets along with the assumed investment return and actual investment return received by the fund during its most recently completed fiscal year compared to the total net income, assumed investment return, and actual investment return received during the preceding fiscal year:

	<u>Current Fiscal Year</u>	<u>Preceding Fiscal Year</u>
Net Income Received from Investment of Asset	\$ 437,672	\$ 351,612
Assumed Investment Return		
Illinois Department of Insurance	N/A	6.50%
Private Actuary - Lauterbach & Amen, LLI	6.50%	N/A
Actual Investment Return	6.64%	11.67%

- 5) The total number of active employees who are financially contributing to the fund:

Number of Active Members	<u>19</u>
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- 6) The total amount that was disbursed in benefits during the fiscal year, including the number of and total amount disbursed to (i) annuitants in receipt of a regular retirement pension, (ii) recipients being paid a disability pension, and (iii) survivors and children in receipt of benefits:

	<u>Number of</u>	<u>Total Amount Disbursed</u>
(i) Regular Retirement Pension	3	\$ 195,572
(ii) Disability Pension	1	\$ 40,816
(iii) Survivors and Child Benefits	0	\$ 0
Totals	4	\$ 236,388

**VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND**

**House Bill 5088 (Public Act 95-950) - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2013**

7) The funded ratio of the fund:

	<u>Current Fiscal Year</u>	<u>Preceding Fiscal Year</u>
Illinois Department of Insurance	<u>N/A</u>	<u>53.91%</u>
Private Actuary - Lauterbach & Amen, LLI	<u>53.06%</u>	<u>N/A</u>

8) The unfunded liability carried by the fund, along with an actuarial explanation of the unfunded liability:

Unfunded Liability:

Illinois Department of Insurance	<u>\$ N/A</u>
Private Actuary - Lauterbach & Amen, LLI	<u>\$ 6,493,801</u>

The accrued liability is the actuarial present value of the portion of the projected benefits that has been accrued as of the valuation date based upon the actuarial valuation method and the actuarial assumptions employed in the valuation. The unfunded accrued liability is the excess of the accrued liability over the actuarial value of assets.

9) The investment policy of the Pension Board under the statutory investment restrictions imposed on the fund.

Investment Policy - See Attached.

Please see Notes Page attached.

CERTIFICATION OF MUNICIPAL POLICE
PENSION FUND COMPLIANCE REPORT

The Board of Trustees of the Pension Fund, based upon information and belief, and to the best of our knowledge, hereby certify pursuant to §3-143 of the Illinois Pension Code 40 ILCS 5/3-143, that the preceding report is true and accurate.

Adopted this 27th day of October, 2014

President

Date

10/27/14

Secretary

Date

10/27/14

**VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND**

**House Bill 5088 (Public Act 95-950) - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2013**

INDEX OF ASSUMPTIONS

- 1) Total Net Assets - as Reported in the Audited Financial Statements for the Years Ended December 31, 2013 and 2012.

Market Value - Same as Above.

- 2) Estimated Receipts - Employee Contributions as Reported in the Audited Financial Statements for the Year Ended December 31, 2013 plus 5.07% Increase (Actuarial Salary Increase Assumption) Rounded to the Nearest \$100.

Estimated Receipts - All Other Sources

Investment Earnings - Net Assets as Reported in the Audited Financial Statements for the Year Ended December 31, 2013, times 6.5% (Actuarial Investment Return Assumption) Rounded to the Nearest \$100.

Municipal Contributions - Recommended Tax Levy Requirement as Reported by Lauterbach & Amen, LLP, Actuarial Valuation for the Year Ended December 31, 2013.

- 3) (a) Pay all Pensions and Other Obligations - Total Deductions as Reported in the Audited Financial Statements for the Year Ended , plus a 25% Increase, Rounded to the Nearest \$100.

- (b) Annual Requirement of the Fund as Determined by:

Illinois Department of Insurance - No December 31, 2013 Actuarial Valuation available at the time of this report.

Private Actuary

Recommended Amount of Tax Levy as Reported by Lauterbach & Amen, LLP in the December 31, 2013 Actuarial Valuation.

Statutorily Required Amount of Tax Levy as Reported by Lauterbach & Amen, LLP in the December 31, 2013 Actuarial Valuation.

**VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND**

**House Bill 5088 (Public Act 95-950) - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2013**

INDEX OF ASSUMPTIONS - Continued

- 4) Net Income Received from Investment of Assets - Investment Income (Loss) net of Investment Expense, as Reported in the Audited Financial Statements for the Years Ended December 31, 2013 and 2012.

Assumed Investment Return

Illinois Department of Insurance - Preceding Fiscal Year Interest Rate Assumption as Reported in the December 31, 2012 Actuarial Valuation. No December 31, 2013 Actuarial Valuation available at the time of this report.

Private Actuary - Current Fiscal Year Interest Rate Assumption as Reported in the Lauterbach & Amen, LLP, December 31, 2013 Actuarial Valuation. No December 31, 2012 Private Actuarial Valuation available at the time of this report.

Actual Investment Return - Net Income Received from Investments as Reported Above as a Percentage of the Average of the Beginning and End of Year Net Assets as Reported in the Audited Financial Statements for the Fiscal Years Ended December 31, 2013, 2012 and 2011.

- 5) Number of Active Members - Illinois Department of Insurance Annual Statement for December 31, 2013 - Schedule P.
- 6) (i) Regular Retirement Pension - Illinois Department of Insurance Annual Statement for December 31, 2013 - Schedule P for Number of Participants and Expense page 1 for Total Amount Disbursed.
- (ii) Disability Pension - Same as above.
- (iii) Survivors and Child Benefits - Same as above.

**VILLAGE OF BARRINGTON HILLS, ILLINOIS
POLICE PENSION FUND**

**House Bill 5088 (Public Act 95-950) - Municipal Compliance Report
For the Fiscal Year Ending December 31, 2013**

INDEX OF ASSUMPTIONS - Continued

7) The funded ratio of the fund:

Illinois Department of Insurance - Preceding Fiscal Year Actuarial Value of Assets as a percentage of Actuarial Liability as Reported in the December 31, 2012 Actuarial Valuation. No December 31, 2013 Actuarial Valuation available at the time of this report.

Private Actuary - Current Fiscal Year Actuarial Value of Assets as a percentage of Actuarial Liability as Reported in the Lauterbach & Amen, LLP, December 31, 2013 Actuarial Valuation. No December 31, 2012 Private Actuarial Valuation available at the time of this

8) Unfunded Liability:

Illinois Department of Insurance - Deferred Asset (Unfunded Accrued Liability) - No December 31, 2013 Actuarial Valuation available at the time of this report.

Private Actuary - Deferred Asset (Unfunded Accrued Liability) as Reported by Lauterbach & Amen, LLP in the December 31, 2013 Actuarial Valuation.