EAST HEMPFIELD POLICE PENSION PLAN

Governmental Accounting Standards Board Statements
GASB 68 Information
for the fiscal year ended
December 31, 2018

Prepared by:

BEYER-BARBER COMPANY
Employee Benefit and Actuarial Consultants
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Allentown, PA 18101
(610) 435-9577

In Cooperation With:

GIRARD PENSION SERVICES
EAST HEMPFIELD POLICE PENSION PLAN

ACTUARIAL CERTIFICATION

This report provides disclosure and reporting information as required under Government Accounting Standards Board Statement 68 (GASB 68) for the measurement period ending December 31, 2018. This information should be used for the fiscal year beginning January 1, 2018 and ending on December 31, 2018.

Determinations for purposes other than financial accounting requirements may be significantly different from the results in this report. Thus, the use of this report for purposes other than those expressed here may not be appropriate.

This accounting valuation report relies on liabilities calculated as part of the January 1, 2017 funding valuation for the Plan. The census data and benefit provisions underlying the liabilities were prepared as of January 1, 2017. This report also relies on asset information as of December 31, 2018 as supplied by Girard Pension Services.

With the provided liability and asset information, the total pension liability, net pension liability and pension expense were developed for the measurement period using standard actuarial techniques. In addition, the results are based on our understanding of the financial accounting and reporting requirements under U.S. Generally Accepted Accounting Principles as set forth in GASB 68. The information in this report is not intended to supersede the advice and interpretations of the employer's auditor.

The undersigned is familiar with the near-term and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. The information provided in this report is dependent upon various factors as documented throughout this report, which may be subject to change. Each section of this report is considered to be an integral part of the actuarial opinions.

Beyer-Barber Company

[Signature]

Lawrence C. Brisman, E.A. #17-04972
Member American Academy Of Actuaries
Member American Society Of Pension Professionals And Actuaries

3/14/2019
Date
This report includes the GASB 68 Cost Measurement and Financial Reporting Statement to be used for your fiscal year beginning January 1, 2018 and ending on December 31, 2018 for the Plan. GASB Statement No. 68 replaced GASB 27 effective for fiscal years beginning after June 15, 2014.

Statement 68 was issued by GASB in June 2012, requiring public employers to comply with new accounting and financial reporting standards. Statement 68 outlines a different approach to the recognition and calculation of pension obligations. Under the new GASB standards, employers are required to record the net pension liability (NPL) and pension expense (PE) in their financial statements as part of their financial position.

NPL is the plan’s total pension liability (TPL) based on entry age normal actuarial funding method less the plan’s fiduciary net position (FNP). This may be a negative liability (net pension asset).

Pension expense is the change in net pension liability from the previous fiscal year to the current fiscal year less adjustments. This may be a negative expense (pension income).

This GASB 68 report provides reportable financial and accounting pension information to be used in the employer’s financial reports. The pension expense is for the measurement period of January 1, 2018 - December 31, 2018 and the net pension liability is measured as of December 31, 2018. Liabilities are based on the results of the actuarial calculations performed as of January 1, 2017 rolled forward to December 31, 2018. Fiduciary net position is based on fair value of assets as of December 31, 2018.
NOTE 4 - PENSION LIABILITY

Net Pension Liability

The components of the net pension liability of the Plan as of December 31, 2018 were as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pension Liability (TPL)</td>
<td>$14,109,671</td>
</tr>
<tr>
<td>Plan Fiduciary Net Position</td>
<td>$10,086,205</td>
</tr>
<tr>
<td>Net Pension Liability (NPL)</td>
<td>$4,023,466</td>
</tr>
<tr>
<td>Plan Fiduciary Net Position as a Percentage</td>
<td></td>
</tr>
<tr>
<td>of the Total Pension Liability</td>
<td>71.5%</td>
</tr>
</tbody>
</table>

Actuarial Assumptions

An actuarial valuation of the total pension liability is performed biennially. The total pension liability was determined as part of an actuarial valuation at January 1, 2017. Update procedures were used to roll forward to the plan's fiscal year ending December 31, 2018. This report was based upon the plan's actuarial assumptions, asset valuation method, and cost method as described below:

Discount Rate

The discount rate used to measure the total pension liability was 8%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that municipal contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Net Pension Liability Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the net pension liability calculated using the discount rate of 8% as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (7%) or 1 percentage point higher (9%) than the current rate:

<table>
<thead>
<tr>
<th>Discount Rate</th>
<th>1% Decrease</th>
<th>Current</th>
<th>1% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.00%</td>
<td>$5,684,365</td>
<td>$4,023,466</td>
<td>$2,627,648</td>
</tr>
<tr>
<td>8.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## EAST HEMPFIELD POLICE PENSION PLAN

### SCHEDULE OF CHANGES IN PLAN'S NET PENSION LIABILITY AND RELATED RATIOS

**Last 10 Fiscal Years**

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Pension Liability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Cost</td>
<td>$251,038</td>
<td>$264,075</td>
<td>$277,279</td>
<td>$305,151</td>
<td>$320,409</td>
</tr>
<tr>
<td>Interest</td>
<td>$873,904</td>
<td>$895,682</td>
<td>$939,837</td>
<td>$1,022,953</td>
<td>$1,073,705</td>
</tr>
<tr>
<td>Changes of Benefit Terms</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Differences Between Expected and Actual Experience</td>
<td>-</td>
<td>$(217,009)</td>
<td>-</td>
<td>$166,762</td>
<td>-</td>
</tr>
<tr>
<td>Changes of Assumptions</td>
<td>-</td>
<td>$244,829</td>
<td>-</td>
<td>264,471</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Benefit Payments, Including Refunds of Member Contributions</strong></td>
<td>$(511,909)</td>
<td>$(613,924)</td>
<td>$(627,320)</td>
<td>$(647,233)</td>
<td>$(770,686)</td>
</tr>
<tr>
<td><strong>Net Change in Total Pension Liability</strong></td>
<td>$613,033</td>
<td>$573,823</td>
<td>$566,796</td>
<td>$1,112,104</td>
<td>$625,428</td>
</tr>
<tr>
<td><strong>Total Pension Liability - Beginning</strong></td>
<td>10,597,887</td>
<td>11,210,720</td>
<td>11,784,343</td>
<td>12,374,139</td>
<td>13,486,243</td>
</tr>
<tr>
<td><strong>Total Pension Liability - Ending</strong></td>
<td>$11,210,720</td>
<td>$11,784,343</td>
<td>$12,374,139</td>
<td>$13,486,243</td>
<td>$14,109,671</td>
</tr>
</tbody>
</table>

### Plan Fiduciary Net Position

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributions - Employer</td>
<td>$43,030</td>
<td>$227,864</td>
<td>$412,239</td>
<td>$471,756</td>
<td>$453,711</td>
</tr>
<tr>
<td>Contributions - State Aid</td>
<td>256,597</td>
<td>266,517</td>
<td>288,727</td>
<td>302,825</td>
<td>316,538</td>
</tr>
<tr>
<td>Contributions - Member</td>
<td>132,010</td>
<td>131,471</td>
<td>137,134</td>
<td>143,775</td>
<td>144,089</td>
</tr>
<tr>
<td>Net Investment Income</td>
<td>343,769</td>
<td>(149,998)</td>
<td>477,526</td>
<td>1,396,336</td>
<td>(786,138)</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Benefit Payments, Including Refunds of Member Contributions</td>
<td>$(511,909)</td>
<td>$(613,924)</td>
<td>$(627,320)</td>
<td>$(647,233)</td>
<td>$(770,686)</td>
</tr>
<tr>
<td>Administrative Expense</td>
<td>3,730</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net Change in Plan Fiduciary Net Position</strong></td>
<td>$266,227</td>
<td>$(137,370)</td>
<td>$688,306</td>
<td>1,667,459</td>
<td>$(630,485)</td>
</tr>
</tbody>
</table>

### Plan Net Position

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Net Position - Beginning</td>
<td>8,232,068</td>
<td>8,409,295</td>
<td>8,360,925</td>
<td>9,049,231</td>
<td>10,716,690</td>
</tr>
<tr>
<td>Plan Net Position - Ending</td>
<td>$8,498,265</td>
<td>$8,360,925</td>
<td>$9,049,231</td>
<td>$10,716,690</td>
<td>$10,866,205</td>
</tr>
</tbody>
</table>

### Plan's Net Pension Liability

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</td>
<td>75.8%</td>
<td>70.9%</td>
<td>73.1%</td>
<td>79.5%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Covered Employee Payroll</td>
<td>$2,450,000</td>
<td>$2,475,000</td>
<td>$2,600,000</td>
<td>$2,760,000</td>
<td>$2,886,000</td>
</tr>
<tr>
<td>Plan's Net Pension Liability as a Percentage of Covered Employee Payroll</td>
<td>110.7%</td>
<td>138.3%</td>
<td>127.9%</td>
<td>100.3%</td>
<td>139.3%</td>
</tr>
</tbody>
</table>

### Notes to schedules:

- **Assumption Changes:** In 2015, the interest rate assumption was lowered from 8.25% to 8.0% per annum and the salary scale was lowered from 5.25% to 5.0%. In 2017, the mortality assumption was changed from the RP-2000 Table to the RP-2000 Table projected to 2017 using Scale AA.

- **Benefit Changes:** None.

*This schedule will be presented on a prospective basis.*
EAST HEMPFIELD POLICE PENSION PLAN
GASB 68 SUPPLEMENT

Changes in Net Pension Liability

The following table shows the changes in net pension liability recognized over the measurement period.

<table>
<thead>
<tr>
<th></th>
<th>Increase/(Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Pension Liability</td>
</tr>
<tr>
<td></td>
<td>(a)</td>
</tr>
<tr>
<td>Balances at 12/31/2017</td>
<td>$13,486,243</td>
</tr>
<tr>
<td>Changes for the year:</td>
<td></td>
</tr>
<tr>
<td>Service Cost</td>
<td>320,409</td>
</tr>
<tr>
<td>Interest</td>
<td>1,073,705</td>
</tr>
<tr>
<td>Changes in Benefit Terms</td>
<td></td>
</tr>
<tr>
<td>Differences Between Expected and Actual Experience</td>
<td>-</td>
</tr>
<tr>
<td>Changes of Assumptions</td>
<td>-</td>
</tr>
<tr>
<td>Contributions - Employer</td>
<td>-</td>
</tr>
<tr>
<td>Contributions - State Aid</td>
<td>-</td>
</tr>
<tr>
<td>Contributions - Member</td>
<td>-</td>
</tr>
<tr>
<td>Net Investment Income</td>
<td>-</td>
</tr>
<tr>
<td>Benefit Payments</td>
<td>(770,686)</td>
</tr>
<tr>
<td>Administrative Expense</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
</tr>
<tr>
<td>Net Changes</td>
<td>623,428</td>
</tr>
<tr>
<td>Balances at 12/31/2018</td>
<td>$14,109,671</td>
</tr>
</tbody>
</table>

Pension Expense for Fiscal Year Ended December 31, 2018

<table>
<thead>
<tr>
<th></th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Cost</td>
<td>320,409</td>
</tr>
<tr>
<td>Interest on Total Pension Liability</td>
<td>1,073,705</td>
</tr>
<tr>
<td>Changes in Benefit Terms</td>
<td>-</td>
</tr>
<tr>
<td>Differences Between Expected and Actual Experience</td>
<td>(5,011)</td>
</tr>
<tr>
<td>Changes of Assumptions</td>
<td>56,565</td>
</tr>
<tr>
<td>Employee Contributions</td>
<td>(144,090)</td>
</tr>
<tr>
<td>Projected Earnings on Pension Plan Investments</td>
<td>(847,916)</td>
</tr>
<tr>
<td>Differences Between Projected and Actual Earnings on Investments</td>
<td>392,525</td>
</tr>
<tr>
<td>Administrative Expense</td>
<td>-</td>
</tr>
<tr>
<td>Other Changes in Fiduciary Net Position</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Pension Expense</strong></td>
<td><strong>$ 846,187</strong></td>
</tr>
</tbody>
</table>
## Deferred Outflows and Deferred Inflows of Resources

For the year ended December 31, 2018, the municipality recognized a pension expense of $846,187. At December 31, 2018, the municipality reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<table>
<thead>
<tr>
<th>Description</th>
<th>Deferred Outflows of Resources</th>
<th>Deferred Inflows of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences Between Expected and Actual Experience</td>
<td>$7,313</td>
<td>$-</td>
</tr>
<tr>
<td>Changes in Assumptions</td>
<td>342,538</td>
<td>-</td>
</tr>
<tr>
<td>Net Difference Between Projected and Actual Earnings on Pension Plan Investments</td>
<td>1,139,290</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>$1,489,141</td>
<td>$-</td>
</tr>
</tbody>
</table>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the pension expense as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$444,077</td>
</tr>
<tr>
<td>2020</td>
<td>280,108</td>
</tr>
<tr>
<td>2021</td>
<td>242,957</td>
</tr>
<tr>
<td>2022</td>
<td>378,364</td>
</tr>
<tr>
<td>2023</td>
<td>51,554</td>
</tr>
<tr>
<td>Thereafter</td>
<td>92,081</td>
</tr>
</tbody>
</table>