



RODWAN
—◆—
consulting
company

***City of Ludington
Police Retirement System***

Actuarial Valuation as of December 31, 2014



April 7, 2015

The Retirement Board
City of Ludington Police Retirement System
Ludington, Michigan

Dear Board Members:

The purpose of the annual actuarial valuation of the City of Ludington Police Retirement System as of December 31, 2014, is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members of the Retirement System,
- Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement System, and
- Compute the City's recommended contribution rate for the Fiscal Year beginning January 1, 2015.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. Data concerning active members, retirees, beneficiaries and assets was provided by the City of Ludington. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. The valuation was based on the provisions of the Retirement System as amended through December 31, 2014. Each actuarial assumption used in this valuation is reasonably related to the past experience of the System and represents reasonable expectations of future experience under the System. This valuation has been prepared under the supervision of a Member of the American Academy of Actuaries qualified to render the actuarial opinions contained herein.

Respectfully submitted,

A handwritten signature in black ink that reads 'Denise M. Jones'.

Denise M. Jones
Senior Consultant

A handwritten signature in black ink that reads 'Sandra W. Rodwan'.

Sandra W. Rodwan
Member, American Academy of Actuaries

Table of Contents

Section One: Valuation Summary

Valuation Summary.....1

Section Two: Actuarial Calculations – Funding

Computed Contribution Rates.....3

Unfunded Actuarial Accrued Liability.....4

Section Three: Retirement System Benefit Provisions

Benefit Provision Summary7

Section Four: Actuarial Assumptions and Methods

Actuarial Assumptions9

Actuarial Methods13

Section Five: Valuation Data

Asset Summary.....14

Participant Summary16





Section One:

Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the City of Ludington Police Retirement System as of December 31, 2014 is to:

- ❖ Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members of the retirement system,
- ❖ Compare accrued assets with accrued liabilities to assess the funded condition of the retirement system, and
- ❖ Compute the City's recommended contribution rate for the Fiscal Year beginning January 1, 2015.

Liabilities and Funded Condition of Retirement System

Accrued liabilities of the Retirement System as of December 31, 2014, were computed to be \$6,472,506. The funding value of assets was \$4,744,156. The ratio of the funding value of assets to accrued liabilities was 73.3%.

Funding Value of Assets

A smoothed market value of assets was used for the December 31, 2014 valuation. This method, which is unchanged from prior years, spreads the difference between actual and expected investment return over four years.

City's Computed City Contribution Rate

The City's normal cost contribution rate was computed to be 13.33% of active member payroll (19.33% total normal cost less 6.00% member contributions). The unfunded accrued liabilities were amortized over 15 years as a level percent of payroll. The 15 year period is the same as the period used last year. The amortization of the unfunded accrued liabilities was 15.94% of member payroll. The City's total contribution for FY 2015 was therefore computed to be 29.27% of member payroll.

Retirement System Experience

The experience of the Retirement System during the year ended December 31, 2014 was largely offsetting. The recognized rate of investment return (8.85% versus 7% assumed) based on the smoothed market value was the primary source of the favorable experience. Salary increases which were greater than assumed and the retirement during the year were the primary sources of unfavorable experience.

Benefit Provision Changes

The following benefits are in effect for those hired on or after January 2, 2015:

Members are eligible to retire at age 50 or older with 25 years of service.
 The benefit multiplier applicable for the first 25 years of service will be 2.5%.

Assumption and Method Changes

There were no assumption or method changes used in this valuation.

Participant Data

One member was hired and one retired during 2014 and no retired members were removed.

	<u>12/31/2014</u>	<u>12/31/2013</u>
Active Members	14	14
Active Member Payroll	\$888,155	\$809,192
Retirees and Beneficiaries	13	12
Annual Pensions	\$358,057	\$312,397

Financial Data

	<u>12/31/2014</u>	<u>12/31/2013</u>
Smoothed Valuation Assets	\$4,744,156	\$4,357,319
Market Value of Assets	\$4,974,641	\$4,668,700