WATKINS ROSS

200 Ottawa Ave NW Suite 600
Grand Rapids MI 49503
WatkinsRoss.com
616.456.9696

August 15, 2019

PERSONAL & CONFIDENTIAL

Ms. Jean Southward
City of Carson City
123 East Main Street
Carson City, Michigan 48811-9778

RE: City of Carson City Pension Plan

Dear Jean:

Enclosed are two copies of the actuarial valuation report for your defined benefit pension plan for the year July 1, 2019 through June 30, 2020. Federal regulations require that this report be prepared on a semi-annual basis. It contains information that is important to you, so we ask that you read it carefully. A summary of some of the more important results of the valuation appear in Section 3 "Summary of Results" and "Analysis of Results".

If you have any questions about the contents of this report, about your responsibility for maintaining your plan's compliance with applicable regulations, or about the benefits the plan provides to your company and its employees, please call me at (616) 742-9212 or Troy Schnabel at (616) 742-9242

Thank you for permitting us to serve you.

Sincerely,

Glen W. Bradley

Glen W. Bradley
Senior Pension Analyst

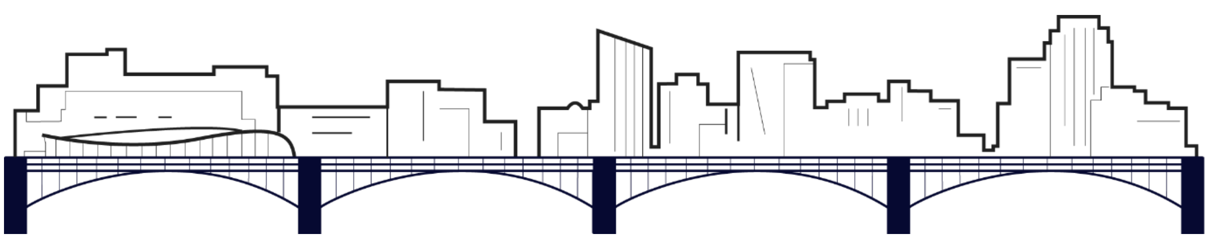
Enclosures

cc: Peter Haefner (electronic copy)
David Knooihuizen (electronic copy)

City of Carson City Pension Plan

Actuarial Valuation Report

for the Plan Year Beginning July 1, 2019



WR WATKINS ROSS | 200 OTTAWA AVE N.W. | SUITE 600 | GRAND RAPIDS, MI 49503 | 616.456.9696

Report presented by:

WATKINS ROSS

August 2019

CONTENTS

INTRODUCTION

This report contains much of the information about your organization's defined benefit pension plan that is required for ongoing operational compliance with federal regulations. It includes information about contributions about the plan's current funded status, and about those individuals who are covered by the plan and their benefits. Some parts of the report are technical in nature and may be of little interest to you. However, other parts of the report contain data that will be useful to you in your role as the plan sponsor to better understand the nature of the plan and the benefits it provides.

Because your plan is a defined benefit plan, it states benefits in terms of providing a certain level of monthly income payable to employees when they retire. Even if your plan permits employees to elect a lump sum settlement in exchange for their promised retirement income, there is always an uncertainty about precisely how much money will be needed at a future date to fund their benefits. That uncertainty is the primary reason for conducting this actuarial valuation, to estimate the benefits that will ultimately be paid, and to establish a long-term plan to fund the benefits through regular annual contributions. Unfortunately, that process encompasses the theoretical and technical aspects of defined benefit plans, including actuarial mathematics, which frequently confuse and frustrate plan sponsors and employees who are covered by them.

Plan sponsors and participants are usually more interested in the practical aspect of their plans, such as current funding requirements, allocation of contributions to individual employees, and the benefits earned to date. Some of that information is also presented in this report. It is important to understand, however, the distinction that exists between participants earning benefits in a defined benefit plan and the sponsor's funding of those benefits by making regular contributions. Employees earn ***current*** benefits based on specific personal data and fixed formulas defined by the plan. Contributions, on the other hand, are actuarially determined based on estimates of what ***future*** benefits might be. For that reason, contributions are not allocated to specific employees at the time they are made. Instead, they are pooled in a single account from which benefits are paid when individual employees terminate their employment. The necessary consequence of this timing difference is that plan assets will sometimes be more than the value of the benefits employees have earned to date, and sometimes less. This relationship between plan assets and benefits (plan liabilities) is often discussed in terms of "funded status."

Understanding this difference between benefits and contributions is key to understanding the nature of your defined benefit plan, and we trust that the information presented herein will help you to better understand how your plan operates and the benefits it provides.

CERTIFICATION OF RESULTS

Plan Name: City of Carson City Pension Plan
Plan Year: July 1, 2019 through June 30, 2020

This report was prepared on behalf of ***City of Carson City*** on the basis of employee data, asset statements and plan documents provided by the plan sponsor or its representatives. We relied upon the data as submitted, without formal audit. However, the data was tested for reasonableness, and we have no reason to believe that any other information which would have had a material effect on the results of this valuation was overlooked.

Therefore, to the best of our knowledge and belief, the information presented in this report is complete and accurate, and in our opinion, each assumption used represents our best estimate of anticipated experience under the plan. Furthermore, each assumption used (taking into account past experience and future expectations) is reasonable, or would in the aggregate result in a total contribution equivalent to that which would be determined if each assumption were reasonable.

Prepared by:

Glen W. Bradley

Glen W. Bradley
Senior Pension Analyst

Certified by:

Troy A. Schnabel

Troy A. Schnabel, ASA, M.A.A.A.
Enrolled Actuary #17-06116

August 14, 2018
Date

VALUATION SUMMARY

Summary of Results

	2019-2020	2017-2018
ONGOING VALUATION (CONTRIBUTIONS)		
Present value of projected benefits	$630,602	$572,292
Actuarial value of assets	421,421	293,194
Entry Age Normal Accrued Liability	507,628	421,318
Unfunded actuarial liability	86,207	128,124
Total normal cost[1]	20,427	19,811
Expected employee contributions	6,449	6,210
Recommended employer contribution	27,491	30,663
Employer contribution as a % of salary	12.79%	14.81%
Valuation Salary	214,980	206,991
Actual contribution paid by employees	[2]	6,369
Actual contribution paid by employer	[3]	31,600
ACCRUED BENEFIT VALUATION		
Value of vested benefits	$408,102	$302,221
Value of all accrued benefits	408,102	302,221
Market value of assets	421,421	293,194
Accrued benefit funded ratio	103.26%	97.01%
PARTICIPANT DATA		
Number of participants:		
Active	4	4
Terminated vested	1	1
Retirees	0	0
Total	5	5
Actual Salary	$210,765	$200,320

[1] Employer and employee costs at beginning of year
[2] For year ending 06/30/2019 - $30,664; for year ending 6/30/2020 - To be Determined
[3] For year ending 06/30/2019 - $6,566; for year ending 6/30/2020 - To be Determined

VALUATION SUMMARY

Analysis of Results

Contributions

For the 12 months ending June 30, 2019, the recommended employer contribution was $30,663. You chose to deposit $31,668. This year the recommended employer contribution is $27,491. Employee contributions are expected to be $6,449.

Funded Status

At the current valuation date, the ratio of current market assets to current liabilities (present value of all accrued benefits) was 103.26%. This ratio was computed based on the funding assumptions. This ratio assumes an ongoing plan, not settlement of liabilities such as on a termination basis. This measure of funded status of your plan may change significantly from one year to the next, because the funded ratio depends on many variables, including how long the plan has been in effect, assumed interest rates, actual investment experience, recent pay raises or benefit distributions, etc. Thus, while it is useful to assess current status, a low (or high) ratio is not, by itself, indicative of long-term problems for an ongoing plan. Of greater importance is whether current assets and future anticipated contributions are sufficient to pay benefits when due.

EXHIBITS

Asset Reconciliation – Market Value of Assets[1]

1.	Market Value of assets as of July 1, 2018		$359,750
2.	Income:		
	a. Employer Contributions:		
	(i) For Prior Year	0	
	(ii) For Current Year	31,170	
	Employee Contributions:		
	(i) For Prior Year	0	
	(ii) For Current Year	6,566	
	b. Investment income[2]	23,436	
	c. Realized gain/(loss)	-	
	d. Unrealized gain/(loss) during plan year	-	
	e. Other income	0	
	f. Total Income		
3.	Distributions:		
	a. Lump Sum Benefit Payments	0	
	b. Monthly Benefit Payments	0	
	c. Investment Management and Trustee Fees	0	
	d. Administrative Expenses	0	
	e. Other Adjustments		
	f. Total Expenses		61,172
4.	Assets as of July 1, 2019, (1) + (2) - (3)		420,922
5.	Accrued employer contributions		499
	Accrued employee contributions		0
6.	Market Value as of July 1, 2019, (5) + (6) + (7)		421,421
7.	Average Market Value		378,463
8.	Return on assets, net of investment and trustee fees (2b) + (2c) + (2d) + (2e) - (3c)		$ 23,436
9.	Time weighted rate of return, (8) / (7)		6.19%

[1] As of June 30, 2019, the market value consists of the following asset ratios by category:

Domestic Equity	60.0%
International Equity	20.0%
Fixed Income	15.0%
Other	2.0%
Cast	3.0%
Total	100.0%

[2] Includes realized and unrealized gains and losses

EXHIBITS

Recommended Employer Contribution

1.	Entry Age Normal Accrued Liability	$ 507,628
2.	Actuarial Value of Assets	421,421
3.	Unfunded Accrued Liability	86,207
4.	9-year amortization of unfunded accrued liability	11,957
5.	Entry Age Normal Cost	20,427
6.	Expected Employee Contribution during the year	6,449
7.	Employer Normal Cost, (5) – (6)	13,978
8.	Interest on (4) and (7) to end of plan year	1,556
9.	Recommended employer contribution	$ 27,491

Reconciliation of Participant Data

	Active	Terminated Vested	Retiree	Total
Prior Year	4	1	0	5
Additions	0	0	0	0
Departures	0	0	0	1
Current Year	**4**	**1**	**0**	**5**

EXHIBITS

Accrued Benefit Values

Present Value of Accumulated Plan Benefits

		2017 Estimated Lump sum values	2019 Estimated Lump sum values
1.	Present value of vested benefits		
	a. Actives participants	$ 301,749	407,623
	b. Terminated vested participants	427	474
	c. Subtotal	302,221	408,102
	d. Participants receiving	0	0
	e. Total	302,221	408,102
2.	Present value of non-vested benefits	0	0
3.	Present value of accumulated benefits, (1)+(2)	302,221	408,102
4.	Assets available for benefits	293,194	421,421
5.	Unfunded present value of vested benefits, (1)-(4)	9,027	0
6.	Unfunded present valued of accumulated benefits, (3)-(4)	$ 9,027	0
7.	Accrued benefit funding ratio, (4)÷(3)	97.01%	103.26%

Amounts shown in both of the columns above measure the value on the valuation date July 1, 2019 of all plan benefits earned to date. The lump sum amounts are ***estimates*** of the plan's liability, where each participant elects to receive a lump sum. Under the plan, assets would be allocated to the extent sufficient. The ongoing plan values were computed using the same assumptions as those used for determining funding requirements.

Assumptions used above include:

	Interest	Mortality Table
Pre-retirement	6%	None
Post-retirement	5%	1983 Individual Annuity Mortality (Female rates)

EXHIBITS

Historical Asset Information

Plan Year Begun On	Asset Value[1] ($)	Contributions[2] ($)	Benefits ($)	Expenses ($)	Rate of Return[3] (%)
July 1, 2014	164,219	31,319	43,517	4,338	1.47
July 1, 2015	152,051	67,858	0	0	1.40
July 1, 2016	228,040	28,116	0	0	15.23
July 1, 2017	293,194	37,969	0	0	Not Calc.
July 1, 2018	359,750	38,235	0	0	6.19
July 1, 2019	421,421				

[1] Value at beginning of year.
[2] Employer plus employee contributions.
[3] Including contractual charge.

EXHIBITS

Historical Plan Liabilities and Contributions

Plan Year Begun On	Vested Accrued Benefits[1] ($)	Total Accrued Benefits[1] ($)	Market Value of Assets	Total Projected Benefits	Recommended Employer Contribution ($)	Expected Employee Contribution ($)	Total Recommended Contribution ($)	Actual Contribution[2] ($)
July 1, 2014	226,461	226,461	164,219	348,944	25,444	5,325	30,769	31,319
July 1, 2015	207,049	207,049	152,051	491,213	36,979	5,543	42,522	73,540
July 1, 2016	224,695	224,695	228,040	504,420	27,809	5,852	33,661	28,116
July 1, 2017	302,221	302,221	293,194	572,292	30,663	6,210	36,873	33,946
July 1, 2018	Not Cal.	Not Cal.	359,750	Not Calc.	30,663	6,210	36,873	38,235
July 1, 2019	408,102	408,102	421,421	630,602	27,491	6,449	33,940	[3]

[1] Based on the funding valuation assumptions
[2] Employer plus employee contributions
[3] To be determined

SUMMARY OF ACTUARIAL ASSUMPTIONS

These are the assumptions used for the ongoing valuation calculations, unless otherwise noted.

Valuation date	July 1, 2019
Actuarial methods:	
Cost method	Entry Age Normal, Level % of pay
Asset valuation method	Market value of assets
Actuarial assumptions:	
Retirement age	Age 65
Interest rates:	
Pre-retirement	6.0% per year
Post-retirement	5.0% per year
Employee Accumulations	120% of the federal mid-term rate as in effect under Code Section 1274(b) for the first month of the plan year
Mortality table	1983 Individual Annuity Mortality (Female rates), no pre-retirement mortality
Salary Scale	2% per year
Turnover rates	None
Disability rates	None
Expenses paid from fund	Expenses paid during the prior plan year
Probability of payment form	100% of actives will choose a lump sum
Data collection:	
Date and form of data	All personnel and asset data was prepared by the plan sponsor or a representative and was generally relied upon as being correct and complete without audit by Watkins Ross, except as noted below
Data exceptions	None
Changes since prior valuation	None

SUMMARY OF PLAN PROVISIONS

Plan name	City of Carson City Pension Plan
Plan documents:	
Document type	Collectively Bargained, governmental plan
Drafted by	Corbel, volume submitter
Latest determination letter	None on file
Plan effective date	May 1, 1966, restated effective April 1, 2012
Most recent amendment effective date (execution date)	Various (PPA, HEART, WRERE and other law changes) April 1, 2012
Eligibility provisions:	
Participation	Age 21 and completion of one year service. The plan is currently closed to new participants after July 1, 2011.
Normal retirement	65th birthday
Early retirement	Age 55 with 6 Years of Service for vesting
Late retirement	Retirement after normal retirement date
Vesting schedule	20% after 2 years of service, graded to 100% after 6 years of service
Disability	Total and permanent disability for 6 months
Pre-retirement death:	
Annuity to surviving spouse	Death after becoming eligible for a nonforfeitable benefit
Lump sum	Death after becoming eligible for a nonforfeitable benefit
Benefit amounts:	
Normal retirement:	1.2% of Average Monthly Compensation multiplied by Years of Service.
Maximum benefit	IRC Section 415 limits
Early retirement	Accrued benefit payable at normal retirement date; or an actuarially equivalent benefit payable at the early retirement date

SUMMARY OF PLAN PROVISIONS

Late retirement	Accrued benefit based on compensation and service to actual retirement date or the accrued benefit as of the end of the plan year actuarially increased to the commencement date
Vested termination	Applicable percentage of accrued benefit payable at normal retirement date
Disability:	100% of the Accrued Benefit at date of disability. Actuarial equivalent reduction for payment prior to normal retirement
Pre-retirement death:	
Annuity to spouse	Actuarial Equivalent of the accrued benefit payable at normal retirement date
Lump sum	Actuarial equivalent of the accrued benefit
Definitions:	
Accrued benefit	1.2% of Average Monthly Compensation multiplied by Years of Service at the date of determination
Actuarial equivalence	
Mortality	
Pre-Retirement:	None
Post-Retirement	1983 IAM Mortality Table (Female)
Interest	
Pre-Retirement:	6% per year
Post-Retirement	5% per year
Average compensation	For all participants, total compensation during 5 consecutive years out of the last 10 which yield the highest average. Years during which Mandatory Employee Contributions were not made are excluded
Entry dates	Each July 1st. The plan is currently closed to new participants
Years of service for:	
Eligibility purposes	Completion of 1000 hours of service during the 12-month computation period
Vesting/Benefit	1000 hours of service during the plan year. One year of service granted for the short plan year May 1, 2007 through June 30, 2007
Unreduced payment form	120 Months Certain and Life thereafter annuity

SUMMARY OF PLAN PROVISIONS

Optional payment forms	Period certain, contingent annuitant and lump sum automatic for amounts less than $1,000)
Mandatory contributions	Rates in effect, 07/01/2011: 3% of compensation
Changes since prior valuation	None
Other qualified retirement plans:	457 plan

DEFINITION OF TERMS

A number of special terms and concepts are used in connection with pension plans and the actuarial valuation report. The following list reviews a number of these terms and provides a brief discussion of their meaning.

Accrued Benefit - Each participant has an accrued benefit under the plan. This is the amount of monthly benefit already earned. It is based on past employment with the company and is payable at normal retirement.

Actuarial Cost Method - This is a mathematical formula which is used to allocate the present value of projected benefits to past and future plan years.

Actuarial Liability - For active employees, this represents the excess of the present value of projected benefits over the present value of future normal costs. For retired or terminated vested employees, it represents the present value of all future benefit payments. The actuarial liability is compared to the valuation assets of the plan. The difference, which is the unfunded actuarial liability, is amortized by the company over future years.

Actuarial Value of Assets - The amount of assets recognized for actuarial valuation purposes. Recent changes in the market value of assets may be partially recognized.

Normal Cost - That portion of the total present value of projected benefits which is allocated to the current year by the specific actuarial cost method being used.

Present Value - The present value of a future payment or a series of payments is the amount of each payment, discounted to recognize the time value of money, and further reduced for the probability that the payment might not be made because of death, disability or termination of employment.

Present Value of Accumulated Benefits - The discounted value of all monthly benefit payments due in the future, based on current accrued benefits.

Present Value of Future Normal Costs - The discounted value of all future normal costs.

Present Value of Projected Benefits - The discounted value of all future monthly benefits which are expected to be paid from the plan. It includes the value of benefits expected to be earned for future periods of employment.

Present Value of Vested Accumulated Benefits - The discounted value of all monthly benefit payments due in the future, based on current vested benefits.

Projected Benefit - The estimated monthly benefit which will become payable at normal retirement date, assuming that the participant continues working full time until then.

Vested Benefit - A percentage of the accrued benefit. It may range from zero up to the full accrued benefit, based upon past service with the employer and the vesting schedule in the plan.