JULY 1, 2014 ACTUARIAL VALUATION OF THE NEW PENSION PLAN OF THE CITY OF CENTRAL FALLS



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Report Summary:

nlights	July 1, 2013	<u>July 1, 2014</u>	
<u>Contributions</u>			
Funding Schedule FY 2015	\$1,979,828	\$2,311,768	
Funding Schedule FY 2016	\$2,035,938	\$2,381,121	
Funded Ratios			
GAS No. 25	18.4%	20.1%	
Participants			
Actives	72	76	
Retirees and Beneficiaries	69	67	
Vested	0	0	
Inactives	0	0	
Disabled	<u>61</u>	<u>60</u>	
Total	202	203	
Payroll			
Payroll of Active Members	\$3,849,274	\$4,025,037	
Average Payroll	53,462	52,961	
Normal Cost			
Employer	80,275	85,404	
Employee	348,883	366,242	
Administrative Expenses	<u>0</u>	<u>0</u>	
Total	429,158	451,646	
Actuarial Accrued Liabilities			
Actives	5,931,021	6,665,158	
Retirees, Beneficiaries, Disabilities and Inactives	24,236,648	24,568,988	
Total	30,167,669	31,234,146	
Actuarial Value of Assets	<u>5,544,658</u>	<u>6,267,400</u>	
Unfunded Actuarial Accrued Liabilities	\$24,623,011	\$24,966,746	

Introduction

The purpose of this report is to present the findings of an actuarial valuation as of July 1, 2014, of the Central Falls New Pension Plan.

The actuarial valuation is based on:

- Negotiated provisions with the Fire and Police unions as of July 1, 2014.
- Employee data provided by the City
- Asset information reported by the City of Central Falls

During the last twelve months, the total unfunded actuarial accrued liability increased by 1.4% to \$24,966,746. The increase is greater than expected. There was an actuarial loss of \$404,070. Sources of (gains) and losses are as follows:

	(Gain) / Loss
Assets	(35,543)
Salary Increases	(94,002)
New Participants	3,486
Active - Retirements	(33,845)
Active - Terminations	61,288
Active - Mortality	(19,478)
Active - Disabilities	(100,875)
Inactive - Mortality and data adjustments	625,362
Other	(2,324)
Total (Gain) / Loss	404,070

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Actuarial Costs and Liabilities:

Normal Costs

The normal cost is the sum of the individual normal costs determined for each member as if the assumptions underlying the cost determinations had been exactly realized. An individual normal cost represents that part of the cost of a member's future benefits which are assigned to the current year as if the costs are to remain level as a percentage of the member's pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation. Anticipated employee contributions to be made during the year are subtracted from the total normal cost to determine employer normal cost. The total normal cost is divided by total payroll to determine the normal cost as a percent of pay. The normal cost is shown in Table I.

Та	ble I	
	<u>July 1, 2013</u>	<u>July 1, 2014</u>
Superannuation	\$252,777	\$265,158
Termination	18,422	19,905
Death	24,872	26,229
Disability	133,087	140,354
Administrative Expenses	<u>0</u>	<u>0</u>
Total Normal Cost	429,158	451,646
% of Pay	11.1%	11.2%
Employee Contributions	348,883	366,242
% of Pay	9.1%	9.1%
Employer Normal Cost	\$80,275	\$85,404
% of Pay	2.1%	2.1%

Present Value of Actuarial Accrued Liabilities

The actuarial accrued liabilities (AAL) represents today's value of all benefits based on the past service of the actives and inactives. The AAL can be compared to the assets to determine the funded status of the Plan. The value of these earned benefits is shown in Table II below.

Table II		
	July 1, 2013	<u>July 1, 2014</u>
Actives		
Superannuations	\$4,929,846	\$5,563,138
Termination	(93,976)	(97,923)
Death	106,283	116,987
Disability	988,868	1,082,956
Retirees and Inactives		
Retirees and Beneficiaries	10,520,928	10,775,181
Vested	0	0
Terminated (Refund)	0	0
Disabled	<u>13,715,720</u>	<u>13,793,807</u>
Total	\$30,167,669	\$31,234,146

Present Value of Future Benefits

The present value of future benefits represents today's value of all benefits earned by the inactive participants as well as all benefits earned and expected to be earned in the coming years by the active participants. The difference between the present value of future benefits and the present value of actuarial accrued liabilities is the value of benefits to be earned in the coming years. The value of the total expected benefits is shown in Table III.

Table III		
	<u>July 1, 2013</u>	July 1, 2014
Actives		
Superannuation	7,477,766	\$8,184,829
Termination	92,475	100,478
Death	355,462	374,805
Disability	2,332,438	2,472,865
Retirees and Inactives		
Retirees and Beneficiaries	10,520,928	10,775,181
Vested	0	0
Terminated (Refund)	0	0
Disabled	<u>13,715,720</u>	13,793,807
Total	\$34,494,789	\$35,701,965

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Funded Status and Appropriations:

Market Value of Plan Assets

The trust fund composition on a market value basis is shown in Table IV.

Table IV			
	<u>July 1, 2013</u>	July 1, 2014	
Cash equivalents	\$0	\$0	
JH GAC	5,544,658	6,267,400	
JH NCU	0	0	
Accounts receivable	16,771	0	
Accounts payable	0	0	
Accrued income	<u>0</u>	<u>0</u>	
Total Market Value	\$5,561,429	\$6,267,400	
Total Actuarial Value	\$5,544,658	\$6,267,400	

Unfunded Actuarial Accrued Liabilities

Under the Entry Age Normal Actuarial Cost Method, the Actuarial Accrued Liability represents what the accumulated assets would have been as of the valuation date if:

- current plan provisions and assumptions had always been in effect,
- experience conformed exactly to assumptions, and
- the normal cost had been contributed each year since inception.

The actuarial value of the Fund's assets as of the end of the prior year are subtracted from the Actuarial Accrued Liability (AAL) to determine the Unfunded Actuarial Accrued Liability (UAAL) as of the valuation date. Over time, annual pension contributions will accumulate Plan assets equal to the AAL, and the UAAL will be eliminated. Thereafter, annual contributions equal to the normal cost will keep the Plan's assets and liabilities in balance. The UAAL is developed in Table V.

Table V				
	July 1, 2013	July 1, 2014		
Actuarial Accrued Liability	\$30,167,669	\$31,234,146		
Actuarial Assets	<u>5,544,658</u>	<u>6,267,400</u>		
Unfunded Actuarial Accrued Liability	\$24,623,011	\$24,966,746		
Funded Status	18.4%	20.1%		

Appropriations

The pension appropriation for the upcoming fiscal years have been calculated in accordance with the policy setforth in 2002. The pension appropriation is the sum of the:

- Employer normal cost,
- Increasing amortization of the unfunded actuarial accrued liability by June 30, 2030 \$ 24,966,746 over 16 years with 3.0% increasing payments
- Interest adjustment for payments deposited at the middle of the fiscal year.

The pension appropriation is shown in Table VI.

Table VI		
	July 1, 2013	<u>July 1, 2014</u>
Normal cost	\$80,275	\$85,404
Amortization payment of the unfunded accrued liability	1,827,024	2,141,675
Total cost	\$1,907,299	\$2,227,079
% of Pay	49.5%	55.3%
Fiscal 2015 cost	\$1,979,828	\$2,311,768
Fiscal 2016 cost	\$2,035,938	\$2,381,121

Appropriation Forecast

The following exhibit forecasts employer and employee contributions over the next 32 years under the adopted funding schedule.

Note that the forecast is based upon an "open group" method. This method assumes that sufficient employees will be hired each year to keep the number constant. The total payroll of the system is expected to increase 3% per year. The employee contribution rate is expected to increase to 10.5% by 2032 as members contributing base percentage of 9.5% are replaced by new members, whose base contribution is 10.5%. Payments are assumed to be made at the beginning of the year.

The employer total cost is expected to increase during the next 16 years until the unfunded liabilities are completely paid off, at which time only the normal cost will remain. The total cost represents 57% of payroll until the time the unfunded liabilities are fully paid off, leaving only a normal cost of 1.3% in 2031. The decrease in the cost as a percentage of payroll is a result of the increase in member deductions.

Appropriation Forecast

Fiscal			Employer	Amortization	Employer	Employer	
Year		Employee	Normal Cost	Payments	Total Cost	Total Cost	Funded
Ending	Payroll	<u>Contribution</u>	with Interest	with Interest	with Interest	<u>% of Payroll</u>	Ratio %*
2015	\$4,025,037	\$366,242	\$88,652	\$2,223,116	\$2,311,768	57.4	20.1
2016	\$4,145,788	\$379,426	\$89,031	\$2,289,810	\$2,378,841	57.4	22.7
2017	\$4,270,162	\$393,072	\$89,353	\$2,358,504	\$2,447,857	57.3	25.6
2018	\$4,398,267	\$407,195	\$89,614	\$2,429,259	\$2,518,873	57.3	28.7
2019	\$4,530,215	\$421,812	\$89,810	\$2,502,137	\$2,591,947	57.2	32.1
2020	\$4,666,121	\$436,939	\$89,938	\$2,577,201	\$2,667,139	57.2	35.8
2021	\$4,806,105	\$452,594	\$89,992	\$2,654,517	\$2,744,509	57.1	39.8
2022	\$4,950,288	\$468,795	\$89,968	\$2,734,152	\$2,824,120	57.0	44.2
2023	\$5,098,796	\$485,561	\$89,863	\$2,816,177	\$2,906,040	57.0	48.9
2024	\$5,251,760	\$502,911	\$89,670	\$2,900,662	\$2,990,332	56.9	54.0
2025	\$5,409,313	\$520,865	\$89,384	\$2,987,682	\$3,077,066	56.9	59.5
2026	\$5,571,593	\$539,443	\$89,001	\$3,077,313	\$3,166,314	56.8	65.3
2027	\$5,738,740	\$558,668	\$88,514	\$3,169,632	\$3,258,146	56.8	71.4
2028	\$5,910,903	\$578,560	\$87,918	\$3,264,721	\$3,352,639	56.7	78.0
2029	\$6,088,230	\$599,144	\$87,206	\$3,362,663	\$3,449,869	56.7	84.9
2030	\$6,270,876	\$620,441	\$86,373	\$3,463,543	\$3,549,916	56.6	92.2
2031	\$6,459,003	\$642,477	\$85,411	\$0	\$85,411	1.3	100.0
2032	\$6,652,773	\$665,277	\$84,313	\$0	\$84,313	1.3	100.0
2033	\$6,852,356	\$685,236	\$86,843	\$0	\$86,843	1.3	100.0
2034	\$7,057,927	\$705,793	\$89,448	\$0	\$89,448	1.3	100.0
2035	\$7,269,665	\$726,966	\$92,132	\$0	\$92,132	1.3	100.0
2036	\$7,487,754	\$748,775	\$94,896	\$0	\$94,896	1.3	100.0
2037	\$7,712,387	\$771,239	\$97,742	\$0	\$97,742	1.3	100.0
2038	\$7,943,759	\$794,376	\$100,675	\$0	\$100,675	1.3	100.0
2039	\$8,182,071	\$818,207	\$103,695	\$0	\$103,695	1.3	100.0
2040	\$8,427,534	\$842,753	\$106,806	\$0	\$106,806	1.3	100.0
2041	\$8,680,360	\$868,036	\$110,010	\$0	\$110,010	1.3	100.0
2042	\$8,940,770	\$894,077	\$113,310	\$0	\$113,310	1.3	100.0
2043	\$9,208,994	\$920,899	\$116,710	\$0	\$116,710	1.3	100.0
2044	\$9,485,263	\$948,526	\$120,211	\$0	\$120,211	1.3	100.0
2045	\$9,769,821	\$976,982	\$123,817	\$0	\$123,817	1.3	100.0
2046	\$10,062,916	\$1,006,292	\$127,532	\$0	\$127,532	1.3	100.0
* Doginn	ing of Figgel Ve	0.4					

* Beginning of Fiscal Year

GASB Statements No. 25 and No. 27

Effective for periods beginning after June 15, 1997, the Governmental Accounting Standards Board (GASB) requires the disclosure of pension related liabilities for public employer financial statements in accordance with Statements 25 and 27. These statements, which replace GASB Statement No. 5, must be adhered to by any public employee retirement system that follows Generally Accepted Accounting Principles (GAAP).

These disclosures are intended to establish a reporting framework that distinguishes between:

- current financial information about plan assets and financial activities,
- actuarially determined information from a long-term perspective,
- the funded status of the plan, and
- progress being made in accumulating sufficient assets to pay benefits when due.

Footnote disclosures required by GASB Statement No. 25 and 27 include a description of the plan, a summary of significant accounting policies, and information about contributions, legally required reserves, and investment concentrations. Some of the required disclosure information is shown in Table VII.

Table VII				
		July 1, 2013	July 1, 2014	
(1)	Actuarial Accrued Liability	\$30,167,669	\$31,234,146	
(2)	Actuarial Value of Assets	<u>5,544,658</u>	<u>6,267,400</u>	
(3)	Unfunded Actuarial Accrued Liability	24,623,011	24,966,746	
(4)	Funded Ratio (2)/(1)	18.4%	20.1%	
(5)	Covered Payroll	\$3,849,274	\$4,025,037	
(6)	UAAL as a percentage of payroll: $(3)/(5)$	639.7%	620.3%	

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ANNUAL STATEMENT GASB 25 AND 27 ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Sherman Actuarial Services as of July 1, 2014.

The normal cost for employees on that date was: The normal cost for the employer was:	\$366,242 85,404	9.1% of pay 2.1% of pay
The actuarial liability for active members was:		\$6,665,158
The actuarial liability for retired and inactive members was: Total actuarial accrued liability:		24,568,988 31,234,146
System assets as of that date:		6,267,400
Unfunded actuarial accrued liability:		\$24,966,746
The ratio of system's assets to total actuarial liability was		20.1%

The principal actuarial assumptions used in the valuation are as follows:

Investment Return:	7.75%
Rate of Salary Increase:	3.0%

SCHEDULE OF FUNDING PROGRESS

Actuarial	Actuarial	Actuarial	Unfunded	Funded	Covered	UAAL
Valuation	Value	Accrued	Actuarial	Ratio	Payroll	as a percent
Date	of Assets	Liability	Accrued			of Covered
			Liability			Payroll
	(a)	(b)	(b-a)	(a/b)	(c)	(b-a)/c
07/01/14	\$6,267,400	\$31,234,146	\$24,966,746	20.1%	\$4,025,037	620.3%
07/01/13	5,544,658	30,167,669	24,623,011	18.4%	3,849,274	639.7%
12/31/11	5,486,573	29,421,723	23,935,150	18.6%	3,620,778	661.0%
07/01/10	7,768,815	54,327,495	46,558,680	14.3%	3,289,330	1415.4%
07/01/08	12,002,382	50,739,300	38,736,918	23.7%	3,561,781	1087.6%
07/01/06	12,056,497	47,247,819	35,191,322	25.5%	3,439,867	1023.0%
07/01/04	11,298,856	43,225,235	31,926,379	26.1%	3,061,582	1042.8%
07/01/02	10,260,418	39,818,249	29,557,831	25.8%	2,701,836	1094.0%
07/01/98	7,857,460	34,304,806	26,447,346	22.9%	2,748,638	962.2%

Values prior to 2011 are a combination of the JH Pension Plan and the 1% Plan

EXHIBITS

P:\Central Falls\Pension2014\Report\[ACT1.XLS]Actives

Age/Service Distribution with Salary as of July 1, 2014

Attained	Average Salary								
Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
< 20	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
20-24	1	0	0	0	0	0	0	0	1
	43,314	0	0	0	0	0	0	0	43,314
25-29	11	3	0	0	0	0	0	0	14
	38,682	53,757	0	0	0	0	0	0	41,912
30-34	5	10	3	0	0	0	0	0	18
	44,943	49,703	56,696	0	0	0	0	0	49,547
35-39	0	6	6	0	0	0	0	0	12
	0	54,388	56,350	0	0	0	0	0	55,369
40-44	1	5	5	4	0	0	0	0	15
	43,314	53,533	57,001	65,417	0	0	0	0	57,177
45-49	0	1	1	2	3	0	0	0	7
	0	64,350	59,336	58,292	69,410	0	0	0	64,072
50-54	1	0	1	1	0	1	0	1	5
	52,257	0	54,257	52,579	0	79,860	0	63,850	60,560
55-59	0	0	0	0	0	2	1	0	3
	0	0	0	0	0	56,401	64,350	0	59,051
60-64	0	0	0	1	0	0	0	0	1
	0	0	0	52,579	0	0	0	0	52,579
65-69	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
Total Employees	19	25	16	8	3	3	1	1	76
Average Salary	41,532	52,666	56,674	60,426	69,410	64,221	64,350	63,850	52,961

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	Numbe	er of Employe	ees	Total	Payments	
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	1	1	0	15,887	15,887
< 20 20-24	0	0	0	0	13,887	15,887
20-24 25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	0	0	0	0	0	0
45-49	7	0	7	106,855	0	106,855
50-54	9	0	9	139,166	0	139,166
55-59	6	1	7	87,483	35,253	122,736
60-64	9	3	12	139,837	27,692	167,529
65-69	6	0	6	130,717	0	130,717
70-74	1	5	6	35,911	61,347	97,257
75-79	2	3	5	29,841	35,511	65,352
80-84	1	5	6	479	35,970	36,450
85-89	3	2	5	18,686	8,035	26,721
90-94	0	3	3	0	17,689	17,689
95+	0	0	0	0	0	0
	44	23	67	688,974	237,384	926,359
rage (Age/Payment)	61.02	74.83	65.76	15,659	10,321	13,826
uency Percent	65.7	34.3	100.0	74.4	25.6	100.0

Retiree Distribution as of January 1, 2014

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	Numbe	er of Employe	ees	Total I	Payments	
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	1	0	1	23,501	0	23,501
45-49	3	0	3	78,562	0	78,562
50-54	7	0	7	173,610	0	173,610
55-59	11	0	11	264,150	0	264,150
60-64	4	0	4	92,796	0	92,796
65-69	11	0	11	235,828	0	235,828
70-74	9	0	9	164,458	0	164,458
75-79	8	0	8	164,413	0	164,413
80-84	3	0	3	69,114	0	69,114
85-89	2	0	2	22,595	0	22,595
90-94	1	0	1	20,726	0	20,726
95-99	0	0	0	0	0	0
Total	60	0	60	1,309,754	0	1,309,754
Average (Age/Payment)	60.0	0.0	60.0	21,829	0	21,829
Frequency Percent	100.0	-	100.0	100.0	-	100.0

Disabled Retiree Distribution as of January 1, 2014

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EXHIBIT 4 - CASHFLOW FORECAST:

The following is a 30 year forecast of benefit payments, contribution income and investment returns.

Fiscal Year Ending	Benefit Payments	Employee Contributions	Employer Contributions	Investment Returns	Net change in plan assets
2015	\$2,250,646	\$366,242	\$2,311,768	\$516,431	\$943,795
2016	2,282,480	379,426	2,378,841	591,937	1,067,724
2017	2,321,683	393,072	2,447,857	676,877	1,196,123
2018	2,372,387	407,195	2,518,873	771,444	1,325,125
2019	2,406,271	421,812	2,591,947	876,764	1,484,252
2020	2,438,295	436,939	2,667,139	994,607	1,660,390
2021	2,471,947	452,594	2,744,509	1,126,163	1,851,319
2022	2,501,476	468,795	2,824,120	1,272,801	2,064,241
2023	2,534,903	485,561	2,906,040	1,435,922	2,292,620
2024	2,566,670	502,911	2,990,332	1,616,942	2,543,516
2025	2,607,826	520,865	3,077,066	1,817,190	2,807,296
2026	2,673,884	539,443	3,166,314	2,037,077	3,068,950
2027	2,729,568	558,668	3,258,146	2,277,785	3,365,031
2028	2,792,736	578,560	3,352,639	2,541,308	3,679,771
2029	2,859,195	599,144	3,449,869	2,829,256	4,019,073
2030	2,936,021	620,441	3,549,916	3,143,267	4,377,603
2031	3,003,259	642,477	85,411	3,349,938	1,074,567
2032	3,085,977	665,277	84,313	3,431,797	1,095,410
2033	3,178,033	685,236	86,843	3,514,833	1,108,879
2034	3,255,348	705,793	89,448	3,599,523	1,139,417
2035	3,334,543	726,966	92,132	3,686,559	1,171,114
2036	3,415,665	748,775	94,896	3,776,031	1,204,037
2037	3,498,760	771,239	97,742	3,868,034	1,238,255
2038	3,583,877	794,376	100,675	3,962,666	1,273,840
2039	3,671,065	818,207	103,695	4,060,035	1,310,872
2040	3,760,374	842,753	106,806	4,160,252	1,349,437
2041	3,851,855	868,036	110,010	4,263,436	1,389,627
2042	3,945,562	894,077	113,310	4,369,713	1,431,538
2043	4,041,548	920,899	116,710	4,479,214	1,475,275
2044	4,132,146	948,526	120,211	4,592,377	1,528,968

EXHIBIT 5 - SUMMARY OF PLAN PROVISIONS:

This summary is prepared in accordance with Fire and Police union contracts as of July 1, 2014, and does not take into account any subsequent changes.

1. Administration

The New Pension Plan is administered by the City of Central Falls.

2. <u>Participation</u>

Participation is mandatory for all full-time employees whose employment.

3. <u>Salary</u>

Salary is defined as regular compensation plus Holiday Pay and Longevity. Salary <u>does not</u> include bonuses, overtime, severance pay, unused sick leave credit or other similar compensation.

4. <u>Member Contributions</u>

Member contributions vary depending upon date hired as follows:

	Member
Date of Hire	Contribution Rate
Up to November 23, 2011	9.5% of Salary
November 24, 2011 and Later	10.5% of Salary

5. <u>Average Salary</u>

Average salary is used to determine a participant's benefit. It is defined as the average salary during the five consecutive-year period within the final 10 years of employment that produces the highest average.

6. <u>Creditable Service</u>

In general, creditable service is awarded during the period in which a member contributes to the retirement system.

7. <u>Service Retirement</u>

a. <u>Eligibility:</u>

Completion of 25 years of service

b. <u>Benefit Amount</u>:

The retirement allowance is determined as a product of the participant's Benefit Rate times Average Salary times the Early Retirement Reduction Factor. At 25 years of credited service, the Benefit Rate is 50%. For each year after 25, up to 5 additional years, the Benefit Rate is increased 1%. The Early Retirement Reduction Factor based on the RP2000 Mortality Table and 7.5%. Factors at whole ages are shown in the following table:

Age at	
Commencement	Factor
57 or Over	1.000
56	.9120
55	.8327
54	.7613
53	.6967
52	.6382
51	.5852
50	.5370
49	.4932
48	.4533
47	.4169
46	.3836
45	.3532
44	.3254
43	.2999
42	.2766
41	.2551
40	.2354

8. Deferred Vested Retirement

a. <u>Eligibility</u>:

A participant who has completed five or more years of creditable service is eligible for a deferred vested retirement benefit.

b. Benefit Amount:

The participant's accrued benefit is based on 2% per year of credited service up to 25 years, plus 1% per year (up to 5 years) times the applicable Early Retirement Reduction Factor.

b. <u>Refund of Contributions</u>:

In lieu of the deferred pension benefit, a member may elect to receive a refund of their accumulated contributions with credited interest.

9. Accidental Disability

a. <u>Eligibility</u>:

Participants are eligible for an accidental disability benefit, regardless of service or age, if they become permanently and totally incapacitated for further duty as a result of personal injury sustained while in the performance of duties.

b. <u>Benefit Amount</u>:

The accidental disability amount is 66 2/3rd% of annual salary.

10. Ordinary Disability

a. <u>Eligibility</u>:

An ordinary disability occurs when a member becomes permanently and totally disabled due to sickness or injury that is not job related. In order to be eligible for an ordinary disability benefit, a member must have five years of service.

b. Benefit Amount:

The ordinary disability amount is based on 2% per year of credited service up to 25

years, plus 1% per year (up to 5 years) times the applicable Early Retirement Reduction Factor.

11. <u>Survivor Benefits</u>

a. <u>Occupational Death</u>:

The survivors of a firefighter who dies due to an occupational injury will be entitled to a one year's salary plus a one-year deferred pension benefit equal to 66 2/3rd% of the participant's annual Salary. The survivors of a police officer who dies due to an occupational injury will be entitled to a lump sum payment of \$10,000 plus a pension benefit equal to 66 2/3rd% of the participant's annual Salary.

b. <u>Non-Occupational Death</u>:

Upon the death of a member not entitled to survivor benefits, the beneficiary is entitled to a refund of all member contributions with interest.

12. <u>Cost-of-Living Increases</u>

The amount of annual increase will be 2% of the November 23, 2011 pension amount for those receiving a pension benefit at that time, or the initial amount of pension amount for those commencing pension payments after November 23, 2011.

13. <u>Postretirement Death Benefits</u>

Any benefits following the death of a member after retirement are based upon the form of benefit the participant elected at the time of retirement.

EXHIBIT 6 - ACTUARIAL METHODS AND ASSUMPTIONS:

The actuarial cost method, factors and assumptions used in determining cost estimates are presented below.

1. Member Data

The member data used in the determination of cost estimates consist of pertinent information with respect to the active, inactive, retired and disabled members of the employer as supplied by the employer to the actuary.

2. Valuation Date

July 1, 2014.

3. <u>Actuarial Cost Method</u>

The costs of the Plan have been determined in accordance with the individual entry age normal actuarial cost method.

4. <u>Rate of Investment Return</u>

It is assumed that the assets of the fund will accumulate at a compound annual rate of 7.75% per annum.

5. <u>Cost-of-Living Increases</u>

Cost-of-living increases have been assumed to be 2.0% per year without compounding.

6. <u>Salary Scale</u>

The assumed annual rates for salary increases including longevity and holiday pay is 3%.

7. <u>Value of Investments</u>

Assets held by the fund are valued at market value as reported by the City. The actuarial value of assets is equal to the market value.

8. Annual Rate of Withdrawal Prior to Retirement

Based on the Rhode Island MERS termination rates for Class B. The assumed annual rates of withdrawal may best be illustrated by the following rates at the following ages:

<u>Service</u>	Rates
0	0.1000
5	0.0354
10	0.0191
15	0.0090
20	0.0000

9. <u>Annual Rate of Mortality</u>

It is assumed that both pre-retirement and post retirement mortality are represented by the 2011 IRS Static Mortality Table for males and females. Mortality for disabled members is represented by the RP-2000 Disabled Mortality Table.

10. Service Retirement

Based on expected experience, the assumed annual retirement rates are illustrated at the following ages and years of service:

Age	20 - 24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30+</u>
46	0.05	0.14	0.16	0.18	0.20	0.20	0.35
47	0.05	0.14	0.16	0.18	0.20	0.20	0.35
48	0.05	0.14	0.16	0.18	0.20	0.20	0.35
49	0.05	0.14	0.16	0.18	0.20	0.20	0.35
50	0.05	0.14	0.16	0.18	0.20	0.20	0.35
51	0.05	0.14	0.16	0.18	0.20	0.20	0.35
52	0.05	0.14	0.16	0.18	0.20	0.20	0.35
53	0.05	0.14	0.16	0.18	0.20	0.20	0.35
54	0.05	0.14	0.16	0.18	0.20	0.20	0.35
55	0.05	0.14	0.16	0.18	0.20	0.20	0.35
56	0.05	0.14	0.16	0.18	0.20	0.20	0.35
57	0.12	0.14	0.16	0.18	0.20	0.20	0.35
58	0.12	0.14	0.16	0.18	0.20	0.20	0.35
59	0.12	0.14	0.16	0.18	0.20	0.20	0.35
60	0.12	0.14	0.16	0.18	0.20	0.20	0.35
61	0.12	0.14	0.16	0.18	0.20	0.20	0.35
62	0.12	0.14	0.16	0.18	0.20	0.20	0.35
63	0.12	0.14	0.16	0.18	0.20	0.20	0.35
64	0.12	0.14	0.16	0.18	0.20	0.20	0.35
65	1.00	1.00	1.00	1.00	1.00	1.00	1.00

11. Annual Rate of Disability Prior to Retirement

Based on an analysis of experience, the assumed annual rates of disability may best be illustrated by the following rates at the following ages:

Attained Age	
20	0.0010
30	0.0030
40	0.0030
50	0.0125

In addition, it is assumed for the 10% of all disabilities are assumed to be ordinary and 90% are service connected.

12. Family Composition

It is assumed that 80% of all male members and 60% of all female members will be survived by a spouse and that females (males) are three years younger (older) than members.

13. Administrative Expenses

No provisions are made for administrative expenses.

EXHIBIT 7 - GLOSSARY OF TERMS:

This glossary summarizes the technical terms contained in this report.

1. <u>Actuarial Accrued Liability</u>

That portion of the Actuarial Present Value of plan benefits that is not provided for by future employer Normal Costs or employee contributions.

2. <u>Actuarial Assumptions</u>

Assumptions as to the occurrence of future events affecting the Pension Plan such as:

- Rates of investment returns
- Increases in a member's salary
- Inflation
- The probability of mortality, turnover, disablement
- Retirement at each age and other relevant items

3. <u>Actuarial Cost Method</u>

A procedure for allocating the Actuarial Present Value of pension plan benefits between Normal Cost and Actuarial Accrued Liability.

4. Actuarial Present Value

The single sum amount required at the valuation date that is required to provide for anticipated future events based upon the terms of the plan and the Actuarial Assumptions.

5. <u>Forecast</u>

A projection of future benefit payments or contribution requirements based upon the terms of the plan, the current asset amounts, the Actuarial Assumptions and additional assumptions as to the replacement of terminating employees with new employees.

6. <u>Normal Cost</u>

That portion of the Actuarial Present Value of future benefits that is assigned to the current year.

7. <u>Unfunded Actuarial Accrued Liability</u>

That portion of the Actuarial Accrued Liability that is not provided for by current actuarial value of assets.

8. <u>Valuation Method</u>

The method used to divide the cost of future benefits among the Actuarial Accrued Liability, the current year's Normal Costs and future years' Normal Costs. The resulting current funding requirement is then determined as the current year's Normal Cost plus the payment necessary to amortize the Unfunded Actuarial Liability.

9. Vested Liability

That portion of the Actuarial Present Value of Accrued Benefits that a member would be entitled to if the member terminated employment with the employer as of the valuation date.

CERTIFICATION:

This report fairly represents the actuarial position of the Central Falls New Pension Plan contributing as of July 1, 2014, in accordance with generally accepted actuarial principles applied consistently with the preceding valuation. In our opinion, each actuarial assumption used to compute actuarial accrued liability and normal cost are reasonably related to plan experience and to reasonable expectations, and represents our best estimate of anticipated plan experience.

Sherman Actuarial Services, LLC

Daniel W. Therman

Daniel W. Sherman, ASA, MAAA Enrolled Actuary No. 11-4086

September, 2014