

**ACTUARIAL COST STATEMENT
FOR PROPOSED CHANGES FOR THE
RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT**

Prepared September 15, 2020

This actuarial statement is to disclose the financial impact of the Substantial Proposed Changes to the Retirement Plan for Employees of Florissant Valley Fire Protection District which would become effective on January 1, 2021. This statement is prepared using the actuarial assumptions and methods employed in the last annual actuarial valuation in accordance with R.S.Mo. § 105.665.

Proposed Changes

Pension Benefit Formula

The current pension benefit is defined as a monthly benefit of 2.5% times Average Monthly Earnings for each year of Credited Service, limited to 30 years, where Average Monthly Earnings is defined by the following employee classifications:

Employee Classification	Monthly Earnings
Firefighter	6,852.08
Captain	7,475.00
Deputy Chief	8,097.83
Chief	8,720.83
Office Manager	4,600.00
Secretary	3,075.00

- Average Monthly Earnings for each classification specified above shall be increased by \$125 per month for each Plan Year beginning after December 31, 2013
- Average Monthly Earnings shall be limited to the highest 24-month average of the Participant's actual monthly earnings and thus, the monthly benefit under the Plan cannot exceed 75% of the highest 24-month average of the Participant's actual monthly earnings.
- If a Participant changes classification, then the Monthly Earnings shall reflect the number of days in the month to which each classification applies.

Actuarial Cost Statement
Florissant Valley Fire Protection District
Page 2

Under the proposal, the schedule of Average Monthly Earnings will be replaced with the following table as of January 1, 2020 for retirements on or after January 1, 2021:

Employee Classification	Monthly Earnings
Firefighter	7,973.00
Captain	8,596.00
Deputy Chief	9,219.00
Chief	11,474.00
Office Manager	6,725.00
Secretary	4,207.00

- Average Monthly Earnings for each classification specified above shall be increased by \$125 per month for each Plan Year beginning after December 31, 2020
- Average Monthly Earnings shall be limited to the highest 24-month average of the Participant's actual monthly earnings and thus, the monthly benefit under the Plan cannot exceed 75% of the highest 24-month average of the Participant's actual monthly earnings.
- If a Participant changes classification, then the Monthly Earnings shall reflect the number of days in the month to which each classification applies.

Actuarial Analysis

1. The basis of the proposed change is to incorporate current compensation into the Average Monthly Earnings calculation of the pension benefit.
2. Attached is a 10-year projection of the current plan and the proposed plan.
3. The District is currently contributing in excess of the amount determined by the Annual Cost in item 4 below.

Actuarial Cost Statement
Florissant Valley Fire Protection District
Page 3

4. The below table summarizes the January 1, 2021 impact of the Proposed Benefit:

	Current	Proposed
ACCRUED LIABILITY	\$37,366,000	\$38,320,000
ESTIMATED ASSETS	\$36,163,000	\$36,163,000
UNFUNDED ACCRUED LIABILITY	\$1,203,000	\$2,157,000
ACCRUED LIABILITY FUNDED RATIO	96.8%	94.4%
NORMAL COST	\$624,000	\$646,000
NORMAL COST AS A % OF PAYROLL	9.8%	10.2%
AMORTIZATION OF UNFUNDED LIABILITY	\$97,000	\$183,000
AMORTIZATION AS A % OF PAYROLL	1.5%	2.9%
ANNUAL COST (beginning of year)	\$721,000	\$829,000
ANNUAL COST (end of year)	\$768,000	\$883,000
ANNUAL COST AS A % OF PAYROLL	12.1%	13.9%
EXPECTED CONTRIBUTION	\$721,000	\$829,000
ASSUMED PAYROLL	\$6,341,000	\$6,341,000
EXPECTED BENEFIT PAYMENTS	\$1,543,000	\$1,560,000

5. As shown in the projections, we do not believe that the proposed change would impair the ability of the plan to meet the obligations thereof in effect at the time the proposal is made.
6. The assumptions used for this analysis are listed in the cost projection exhibits and the 1/1/2020 actuarial report that has been attached.
7. We believe the assumptions used for the actuarial valuation produce results which, in the aggregate, are reasonable.

Actuarial Cost Statement
Florissant Valley Fire Protection District
Page 4

8. The Recommended Contribution is based on the Entry Age Normal Cost Method, with experience gains and losses (changes in the unfunded accrued liability which result from causes other than contributions and the accrual of interest and additional normal costs) amortized over 15 years. Liability changes due to plan amendments are also amortized over 15 years. Increases and decreases resulting from changes in assumptions or funding method are amortized over 20 years. The total amortization amount is adjusted by the proportion of current Unfunded Accrued Liability to the total current balance. In addition, the total contribution is reduced by expected employee contributions.

Ekon Benefits



Keith Kowalczyk
President

Associate of the Society of Actuaries
Enrolled Actuary, No. 20-2812



RETIREMENT PLAN FOR EMPLOYEES OF FLOISSANT VALLEY FIRE PROTECTION DISTRICT 10 YEAR COST PROJECTION UNDER CURRENT PLAN

	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028	1/1/2029	1/1/2030
ACCRUED LIABILITY	\$36,037,434	\$37,366,000	\$38,866,000	\$40,358,000	\$41,734,000	\$43,160,000	\$44,638,000	\$46,137,000	\$47,544,000	\$48,838,000	\$50,188,000
ESTIMATED ASSETS	\$34,788,696	\$36,163,000	\$37,714,000	\$39,265,000	\$40,710,000	\$42,212,000	\$43,777,000	\$45,373,000	\$46,887,000	\$48,299,000	\$49,777,000
UNFUNDED ACCRUED LIABILITY	\$1,248,738	\$1,203,000	\$1,152,000	\$1,093,000	\$1,024,000	\$948,000	\$861,000	\$764,000	\$657,000	\$539,000	\$411,000
ACCRUED LIABILITY FUNDED RATIO	96.5%	96.8%	97.0%	97.3%	97.5%	97.8%	98.1%	98.3%	98.6%	98.9%	99.2%
NORMAL COST	\$549,600	\$624,000	\$633,000	\$641,000	\$647,000	\$656,000	\$662,000	\$665,000	\$671,000	\$677,000	\$673,000
AMORT OF UNFUNDED LIABILITY	\$93,481	\$97,000	\$101,000	\$106,000	\$109,000	\$113,000	\$117,000	\$120,000	\$123,000	\$124,000	\$122,000
ANNUAL COST (beginning of year)	\$643,081	\$721,000	\$734,000	\$747,000	\$756,000	\$769,000	\$779,000	\$785,000	\$794,000	\$801,000	\$795,000
ANNUAL COST (end of year)	\$684,881	\$768,000	\$782,000	\$796,000	\$805,000	\$819,000	\$830,000	\$836,000	\$846,000	\$853,000	\$847,000
COST AS A % OF PAYROLL	11.4%	12.1%	12.1%	12.0%	11.9%	11.9%	11.8%	11.7%	11.6%	11.5%	11.4%
EXPECTED CONTRIBUTION	\$643,081	\$721,000	\$734,000	\$747,000	\$756,000	\$769,000	\$779,000	\$785,000	\$794,000	\$801,000	\$795,000
ASSUMED PAYROLL	\$6,020,000	\$6,341,000	\$6,477,000	\$6,649,000	\$6,775,000	\$6,904,000	\$7,018,000	\$7,151,000	\$7,278,000	\$7,416,000	\$7,441,000
EXPECTED BENEFIT PAYMENTS	1,549,280	1,543,000	1,655,000	1,869,000	1,914,000	1,962,000	2,041,000	2,228,000	2,432,000	2,465,000	3,214,000

Assumptions

- Discount Rate 6.50%
- Rate of Return 6.50%
- Aggregate Payroll Growth 1.90%
- Inflation 2.50%
- Assumes Level Population (New Hires Replace Retirements)

ACTUARIAL REPORT

**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT**

January 1, 2020

Prepared
March 6, 2020





RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Table of Contents

Introduction and Actuarial Certification	1
Comments on Valuation	3
Summary of Valuation Results	
Change in Net Assets	4
Determination of Normal Cost	5
Analysis of Contribution Input	6
Display of Security of Vested and Accrued Benefits	7
Supporting Actuarial Exhibits	
Participant Summary as of January 1, 2020	8
Development of Unfunded Accrued Liability	9
GASB 67/68 Net Pension Liability	10
GASB No. 67 and No. 68 Disclosures	
Schedule of Employer Paid Contributions and Investment Returns	11
GASB 67 and 68 Historical Net Pension Liability	12
GASB 68 2018 Pension Expense	13
GASB 68 Statement of Deferred Outflows & Inflows of Resources	14
Basis of Actuarial Valuation	
Statement of Actuarial Methods and Assumptions	15
Summary of Plan Provisions	17



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Introduction and Actuarial Certification

Introduction

We are pleased to present the Actuarial Valuation report of the Retirement Plan for Employees of Florissant Valley Fire Protection District (the Plan) as of 1/1/2020. At the request of the Plan Trustees we have completed this Actuarial Valuation as required by federal law. This report is intended solely for the Trustees, Plan Administrator and the Independent Accountant. It may only be provided to other parties in its entirety and with our prior approval, and we are not responsible for any unauthorized use. We do not maintain any relationship or have any conflict of interest that would impact the results presented in this report.

We have relied on employee and financial data supplied by the Trustees or their representatives to calculate the values of the retirement benefits for all participants. While we have reviewed the data for reasonableness and general consistency, we have not performed the extensive analysis or examination necessary to verify any of the information provided. To determine the value of Plan benefits, in conjunction with the Trustees, we have made certain assumptions as to rates of death, termination, and investment return. Each significant non-prescribed assumption reflects market data and an estimate of future experience. Although the non-prescribed assumptions represent our best estimate of anticipated Plan experience, it is important to consider that Plan costs include a certain level of inherent risk and uncertainty. Actual Plan experience, in particular investment return experience, may result in material changes in the Plan's valuation. The funding method used determines how much of the value of these benefits which is not yet funded, is allocated to the current year.

The purpose of this Actuarial Valuation is to measure the funding status of the Plan, analyze the preceding year's experience, determine the range of contributions for the Plan Year beginning 1/1/2020, and provide GASB 67 and 68 reporting requirements. This report is not intended to represent a risk assessment under ASOP 51, as that is beyond the scope of the assignment. No adjustments have been made for any events after the measurement date. This report and its results cannot be relied upon for other than its intended purpose. Any attempt to use this report, either in whole or in part, for reasons other than those stated above can result in improper or misleading conclusions.

The funding policy of the Plan Sponsor is to contribute the Recommended Contribution provided by the Actuary as shown in this report. The funding sources for this plan include general tax revenue, employee contributions, and additional discretionary amounts from time to time. The funding policy is expected to increase future expected contributions and improve the Plan's future funded status.



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Introduction and Actuarial Certification (Continued)

Actuarial Certification

This Actuarial Valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge and belief, this valuation is complete and accurate based on our understanding of the provisions of the Plan as summarized within the report. In our opinion, the actuarial assumptions and methods used are individually reasonable and in combination represent our best estimate of anticipated experience under the Plan.

This valuation was prepared by the undersigned. Each signing actuary meets the Qualification Standards of the American Academy of Actuaries required to render the actuarial results and opinions presented within this report. We are available at any time to provide additional or supplementary information to explain the results of this report.

Ekon Benefits

Keith Kowalczyk
Associate of the Society of Actuaries
Member of the American Academy of Actuaries
Enrolled Actuary No. 17-2812

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RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Comments on Valuation

This valuation is based on employee data and financial data as of January 1, 2020.

There were no changes in plan provisions since the prior valuation.

Ekon Benefits performed a full replication of the prior actuary's January 1, 2019 valuation. Based on the data, assumptions, methods, and plan provisions outlined in the January 1, 2019 valuation report, we are noting the following:

January 1, 2019:	Ekon Benefits	Ritter Pension Services	Percentage Difference
Present Value of Benefits	\$38,623,826	\$38,931,118	-0.79%
Actuarial Accrued Liability	\$34,109,075	\$34,676,721	-1.64%
Present Value of Accrued Benefits	\$29,214,240	\$30,301,672	-3.59%

In addition, Ekon Benefits was able to recreate individual accrued benefits and projected benefits communicated to participants in 2019. If requested, more analysis can be performed to further document the methodology differences.

The Unfunded Accrued Liability decreased from \$4,714,348 on 1/1/2019 to \$1,248,738 on 1/1/2020. There were several reasons for this decrease:

- The Market Value of Assets returned 9.08% for the year, compared with the assumed long-term rate of return assumption of 6.50%.
- Plan funding of \$3,135,855 during 2019 was significantly more than the value of benefits earned during the year plus interest on the deficit.
- The mortality assumption was updated from the RP2014 static mortality table to reflect generational mortality using the PRI2012 base mortality table and projected generationally from 2012 using scale MP2019. This assumption change increased liabilities by \$510,739.
- The differences from the prior actuary noted above.

The Recommended Contribution decreased from \$926,844 to \$684,881 for the reasons cited above. The Recommended Contribution is based on a customized amortization of Unfunded Actuarial Accrued Liability.

The ratio of Plan Assets to the Present Value of Accrued Benefits increased from 99% to 112% for the reasons noted previously and the decrease in the Present Value of Accrued Benefits noted from matching the prior actuary.

The GASB 67/68 Net Pension Liability, which is equal to the Unfunded Accrued Liability, also decreased from \$4,714,348 as of 12/31/2018 to \$1,248,738 as of 12/31/2019 as indicated above. The 2019 pension expense was \$1,428,356.



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
Change in Net Assets**

(GASB 67 and 68 Change in Fiduciary Net Position)

	<u>Cash</u>	<u>Accruals</u>	<u>Total</u>
Beginning Balance January 1, 2019	\$ 29,962,373	\$ 0	\$ 29,962,373
<u>Additions</u>			
Contributions			
Employer	3,078,762	0	3,078,762
Employee	57,093	0	57,093
Total	<u>3,135,855</u>	<u>0</u>	<u>3,135,855</u>
Earnings	2,812,017	0	2,812,017
Total Additions	5,947,872	0	5,947,872
<u>Deductions</u>			
Administrative Expenses	(16,776)	0	(16,776)
Benefit Payments	<u>(1,104,773)</u>	<u>0</u>	<u>(1,104,773)</u>
Total Deductions	<u>(1,121,549)</u>	<u>0</u>	<u>(1,121,549)</u>
Net Increase/Decrease in Net Position	4,826,323	0	4,826,323
Ending Balance December 31, 2019	\$ 34,788,696	\$ 0	\$ 34,788,696



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Determination of Normal Cost

	<u>1/1/2020</u>	<u>1/1/2019</u>
1. Present Value of Projected Benefits		
Actives - Future Retirement	\$ 26,115,690	\$ 25,737,955
- Future Withdrawals	708,790	446,765
- Future Death	339,620	308,318
Retirees	13,328,812	12,165,769
Terminated Vested	522,991	272,311
TOTAL	\$ 41,015,903	\$ 38,931,118
2. Assets	34,788,696	29,962,373
3. Unfunded Accrued Liability	1,248,738	4,714,348
4. Present Value Future Normal Costs (1) - (2) - (3)	4,978,469	4,254,397
5. Present Value Future Salaries	46,636,651	30,367,509
6. Accrual Rate: (4) divided by (5)	0.106750	0.140097
7. Annual Salaries	5,224,645	5,462,812
8. Individual Normal Cost	\$ 596,693	\$ 537,721
9. Additional Loads on Normal Cost		
- Expenses	10,000	10,000
- Anticipated Employee Contributions	(57,093)	(54,628)
10. Individual Employer Normal Cost Including Additional Loads (8) + (9)	\$ 549,600	\$ 493,093



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Analysis of Contribution Input

	1/1/2020	1/1/2019
<u>Expected or Actual Employer Contributions</u>	\$ 3,078,762	\$ 1,367,995
 <u>Recommended Contribution</u>		
<u>Customized Amortization of Unfunded Actuarial Accrued Liability</u>		
Normal Cost	\$ 549,600	\$ 493,093
Amortization Payment	93,481	377,183
TOTAL (Beginning of Year)	\$ 643,081	\$ 870,276
 TOTAL (End of Year)	 \$ 684,881	 \$ 926,844
 <u>30 Year Payment of Unfunded Actuarial Accrued Liability</u>		
Normal Cost	\$ 549,600	\$ 493,093
Amortization Payment	89,789	338,979
TOTAL (Beg. of Year)	\$ 639,389	\$ 832,072
 TOTAL (End of Year)	 \$ 680,949	 \$ 886,157
 <u>20 Year Payment of Unfunded Actuarial Accrued Liability</u>		
Normal Cost	\$ 549,600	\$ 493,093
Amortization Payment	106,414	401,744
TOTAL (Beg. of Year)	\$ 656,014	\$ 894,837
 TOTAL (End of Year)	 \$ 698,655	 \$ 953,001
 <u>10 Year Payment of Unfunded Actuarial Accrued Liability</u>		
Normal Cost	\$ 549,600	\$ 493,093
Amortization Payment	163,104	615,763
TOTAL (Beg. of Year)	\$ 712,704	\$ 1,108,856
 TOTAL (End of Year)	 \$ 759,029	 \$ 1,180,932



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
Display of Security of Vested and Accrued Benefits**

	1/1/2020	1/1/2019
<u>Security of Vested Accrued Benefits</u>		
Present Value of Vested Accrued Benefits		
Retired Participants	\$ 13,328,812	\$ 12,165,769
Terminated Vested Participants	522,991	272,311
Active Participants	16,235,735	16,883,412
TOTAL	\$ 30,087,538	\$ 29,321,492
Assets	\$ 34,788,696	\$ 29,962,373
Vested Accrued Benefit Funded Status (The excess of assets over liabilities)	\$ 4,701,158	\$ 640,881
Vested Accrued Benefit Security Ratio (The ratio of assets to liabilities)	116%	102%
<u>Security of Accrued Benefits</u>		
Present Value of Accrued Benefits		
Retired Participants	13,328,812	12,165,769
Terminated Vested Participants	522,991	272,311
Active Participants	17,218,113	17,863,592
TOTAL	\$ 31,069,916	\$ 30,301,672
Assets	\$ 34,788,696	\$ 29,962,373
Accrued Benefit Funded Status (The excess of assets over liabilities)	\$ 3,718,780	\$ (339,299)
Accrued Benefit Security Ratio (The ratio of assets to liabilities)	112%	99%



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
Participant Summary as of January 1, 2020**

Active Participants

Active participants at beginning of past plan year	61
Active Participants who during the past year	
Retired	1
Died	0
Terminated.	1
Active participants at end of past plan year	59
New entrants during the past year	5
Active participants at the beginning of current plan year	64
Active participants who are fully vested	36
Active participants who are partially vested	7
Active participants who are not vested	21

Retired Participants and Beneficiaries

Retired participants and beneficiaries at beginning of past plan year	21
Active participants who retired during the past plan year	1
Terminated Vesteds who retired during the past plan year	0
Retired participants and beneficiaries who during the past plan year	
Died without a beneficiary	0
Payments completed	0
Retired participants at the beginning of current plan year	22

Terminated-Vested Participants

Terminated-vested participants as of beginning of past plan year	3
Active participants who terminated with vested benefits	1
Terminated-vested participants who during the past plan year	
Died	0
Retired	0
Terminated-vested participants as of beginning of current plan year	4



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
Development of Unfunded Accrued Liability**

1.	a) Unfunded Accrued Liability as of January 1, 2019	\$ 4,714,348
	b) Interest on 1(a) for one year	<u>306,433</u>
	c) Total	\$ 5,020,781
2.	a) Normal Cost as of January 1, 2019	547,721
	b) Interest on 2(a) for one year	<u>35,602</u>
	c) Total	\$ 583,323
3.	a) Contributions during the year	\$ 3,135,855
	b) Interest on 3(a) to the end of the Plan Year	<u>102,057</u>
	c) Total	\$ 3,237,912
4.	Expected Unfunded Accrued Liability as of December 31, 2019 (1) + (2) - (3)	2,366,192
5.	Adjust Unfunded Accrued Liability	
	- Plan Amendment	0
	- Change in Actuarial Assumptions	510,739
	- Actuarial Loss/(Gain)	(1,628,193)
6.	Adjusted Unfunded Accrued Liability as of December 31, 2019 (4) + (5)	\$ 1,248,738



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
GASB 67/68 Net Pension Liability**

	<u>12/31/2019</u>	<u>12/31/2018</u>
Total Pension Liability		
Retired Participants	\$ 13,328,812	\$ 12,165,769
Terminated Vested Participants	522,991	272,311
Active Participants	22,185,631	22,238,641
TOTAL	\$ 36,037,434	\$ 34,676,721
Plan Fiduciary Net Position	\$ 34,788,696	\$ 29,962,373
Net Pension Liability	\$ 1,248,738	\$ 4,714,348
Plan Fiduciary Net Position as % of Total Pension Liability	96.53%	86.40%
Covered Payroll	\$ 5,908,068	\$ 5,462,812
Net Pension Liability as % of Covered Payroll	21.14%	86.30%
Sensitivity of Net Pension Liability to <u>Changes in Discount Rate</u>		
1% Decrease	\$ 6,196,925	\$ 9,555,589
1% Increase	\$ (2,848,134)	\$ 704,935



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT**

Schedule of Employer Paid Contributions and Investment Returns

GASB 67 and 68 Schedule of Contributions

Year	Actuarially Determined Employer Contributions	Actual Employer Contributions	Contribution Deficiency/(Excess)	Covered Payroll	Contributions as percentage of Covered Payroll
2010	625,291	1,154,608	(529,317)	5,093,871	22.67%
2011	545,411	1,059,709	(514,298)	5,146,723	20.59%
2012	549,263	1,082,988	(533,725)	5,169,208	20.95%
2013	407,902	937,825	(529,923)	5,149,341	18.21%
2014	541,432	1,077,034	(535,602)	5,055,375	21.30%
2015	558,541	922,861	(364,320)	4,958,031	18.61%
2016	894,256	2,512,515	(1,618,259)	5,133,405	48.94%
2017	759,769	1,011,345	(251,576)	5,655,045	17.88%
2018	700,334	1,035,888	(335,554)	5,462,812	18.96%
2019	926,844	3,078,762	(2,151,918)	5,908,068	52.11%

GASB 67 and 68 Schedule of Investment Returns

Year	Annual Dollar-Weighted Rate of Return Net Expenses
2010	not available
2011	not available
2012	not available
2013	not available
2014	not available
2015	not available
2016	not available
2017	not available
2018	-2.68%
2019	9.08%



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
GASB 67 and 68 Historical Net Pension Liability**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Pension Liability										
Discount Rate	6.50%	6.50%	NA	NA	NA	NA	NA	NA	NA	NA
Total Pension Liability (Beg. Of Year)	\$ 34,676,721	\$ 33,376,719	NA	NA	NA	NA	NA	NA	NA	NA
Service Cost	583,323	547,295	NA	NA	NA	NA	NA	NA	NA	NA
Interest Cost	2,215,090	2,140,469	NA	NA	NA	NA	NA	NA	NA	NA
Plan Amendments	0	0	NA	NA	NA	NA	NA	NA	NA	NA
Assumption Changes	510,739	0	NA	NA	NA	NA	NA	NA	NA	NA
Actuarial Losses/(Gains)	(826,890)	(563,576)	NA	NA	NA	NA	NA	NA	NA	NA
Administrative Expenses	(16,776)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benefit Payments	<u>(1,104,773)</u>	<u>(824,186)</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Total Pension Liability (End Of Year)	\$36,037,434	\$34,676,721	NA	NA	NA	NA	NA	NA	NA	NA
Total Liability Loss/(Gain) to be Amortized	-826,890	(563,576)	NA	NA	NA	NA	NA	NA	NA	NA
Plan Fiduciary Net Position										
Fiduciary Net Position (Beg. Of Year)	\$ 29,962,373	\$ 30,365,075	NA	NA	NA	NA	NA	NA	NA	NA
Employer Contributions	3,078,762	1,035,888	NA	NA	NA	NA	NA	NA	NA	NA
Employee Contributions	57,093	56,679	NA	NA	NA	NA	NA	NA	NA	NA
Net Investment Income	2,812,017	(665,297)	NA	NA	NA	NA	NA	NA	NA	NA
Benefit Payments	(1,104,773)	(824,186)	NA	NA	NA	NA	NA	NA	NA	NA
Administrative Expenses	<u>(16,776)</u>	<u>(5,786)</u>	NA	NA	NA	NA	NA	NA	NA	NA
Change in Fiduciary Net Position	4,826,323	(402,702)	NA	NA	NA	NA	NA	NA	NA	NA
Fiduciary Net Position (End Of Year)	\$ 34,788,696	\$ 29,962,373	NA	NA	NA	NA	NA	NA	NA	NA
Net Pension Liability	\$ 1,248,738	\$ 4,714,348	NA	NA	NA	NA	NA	NA	NA	NA
Fiduciary Net Position as % of Total Pension Liability	96.53%	86.40%	NA	NA	NA	NA	NA	NA	NA	NA
Covered Payroll	5,908,068	5,462,812	NA	NA	NA	NA	NA	NA	NA	NA
Net Pension Liability as % of Covered Payroll	21.14%	86.30%	NA	NA	NA	NA	NA	NA	NA	NA



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
GASB 68 2018 Pension Expense**

	12/31/2019	12/31/2018
1. Service Cost	\$ 583,323	\$ 547,295
2. Interest Cost		
Total Pension Liability	34,676,721	33,376,719
Benefit Payments	(1,104,773)	(824,186)
Discount Rate	6.50%	6.50%
Total Interest Cost	\$ 2,215,090	\$ 2,140,469
3. Administrative Expenses	\$ 16,776	\$ 5,786
4. Employee Contributions	\$ 57,093	\$ 56,679
5. Expected Rate of Return		
Plan Fiduciary Net Position	29,962,373	30,365,075
Benefit Payments	(1,104,773)	(824,186)
Employer and Employee Contributions	3,135,855	1,092,567
Administrative Expenses	(16,776)	(5,786)
Long-term Rate of Return	6.50%	6.50%
Expected Return on Assets	\$ 2,010,714	\$ 1,977,073
6. Increase/(Decrease) in Total Pension Liability due to Plan Amendments	\$ 0	\$ 0
7. Amortizations		
Liability (Gain)/Loss	\$ (114,461)	\$ (37,968)
Assumption Changes	288,509	241,262
Investment Return (Gain)/Loss	506,926	667,187
Total Amortizations	\$ 680,974	\$ 870,481
8. Pension Expense	\$ 1,428,356	1,530,279
(1)+(2)+(3)-(4)-(5)+(6)+(7)		



**RETIREMENT PLAN FOR EMPLOYEES OF
FLORISSANT VALLEY FIRE PROTECTION DISTRICT
GASB 68 Statement of Deferred Outflows Inflows of Resources**

as of December 31, 2019

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 101,965	\$ (1,239,383)
Changes of Assumptions	\$ 2,192,002	\$ -
Net difference between projected and actual earnings on pension plan investments	\$ 396,389	\$ -
Total	\$ 2,690,356	\$ (1,239,383)

Amounts Reported as Deferred Outflows of Resources and Deferred Inflows of Resources
will be recognized in Pension Expense as Follows:

Year Ended December 31:	
2020	234,703
2021	301,828
2022	542,261
2023	13,789
2024	174,048
Thereafter	184,344



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Statement of Actuarial Methods and Assumptions

Funding Method for Determination of the Recommended Contribution

Entry Age Normal Cost Method - A method under which the actuarial present value of the projected benefits of each active participant is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to the valuation year is called the Normal Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the Actuarial Accrued Liability. Under this method, the actuarial gains (losses) are reflected as they occur in a decrease (increase) in the unfunded actuarial accrued liability.

Funding Method for GASB 67/68 Purposes

Entry Age Normal Cost Method

Valuation of Assets

The actuarial value of assets equals the Market Value

Mortality Rates

Pre-Retirement:	Males: PRI-2012 Employee Table for males, with projected mortality improvement based on Scale MP 2019.
	Females: PRI-2012 Employee Table for females, with projected mortality improvement based on Scale MP 2019.
Post-Retirement:	Males: PRI-2012 Annuitant Table for males, with projected mortality improvement based on Scale MP 2019.
	Females: PRI-2012 Annuitant Table for females, with projected mortality improvement based on Scale MP 2019.

Long Term Rate of Return on Plan Assets

6.50% per annum: compounded annually

GASB 67/68 Discount Rate

6.50% per annum.

Inflation

2.50% per annum

Salary Appreciation

Salary Table Increase Rate: Average of 1.9% per annum, which reflects the \$125 per month annual increase plus an assumed additional increase of 0.5% for promotions.



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Statement of Actuarial Methods and Assumptions (Continued)

Assumed Retirement Age

The earlier of Age 60 or the completion of 30 Years of Service

Termination prior to Retirement other than Death

50% blend of the T-1 and T-2 Tables

Administrative Expense Load

\$10,000 per year

Assumptions Used to Determine Discount Rate

- Level Employee Population
- Employer contributions increase 2.50% per year from 2019 estimated level
- Municipal Bond Rate of 3.10% is based on approximate 20 year average yield to maturity of AA rated bonds as of December 2019.
- Long-term return assumption applies to all projected cash flows.

Amortization Methods For Contribution Alternatives

The Recommended Contribution is based on the Entry Age Normal Cost Method, with experience gains and losses (changes in the unfunded accrued liability which result from causes other than contributions and the accrual of interest and additional normal costs) amortized over 15 years. Liability changes due to plan amendments are also amortized over 15 years. Increases and decreases resulting from changes in assumptions or funding method are amortized over 20 years. The total amortization amount is adjusted by the proportion of current Unfunded Accrued Liability to the total current balance. In addition, the total contribution is reduced by expected employee contributions.

The other contribution alternatives shown (10 year, 20 year and 30 year amortizations) are also based on open amortization periods. As such, under these methods the Unfunded Accrued Liability is not expected to be fully amortized.



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Summary of Plan Provisions

Credited Service	Full years of continuous service from date of hire, rounded to the nearest month.
Normal Pension	<ul style="list-style-type: none">a) Eligibility Requirements: The earlier of age 60 or 30 years of credited service.b) Accrued Benefit: A monthly benefit of 2.5% times Average Monthly Earnings for each year of credited service, limited to 30 years. Benefit is limited to 75% of actual Average Monthly Earnings (base pay plus normal overtime) based on the highest consecutive 24 months of actual earnings.
Average Monthly Earnings	Based on a table by employee classification effective January 1, 2013, increased by \$125 per month for each subsequent year.
Early Pension	<ul style="list-style-type: none">a) Eligibility Requirements: Age 50 or the completion of 20 years of credited service.b) Benefit: The monthly benefit is equal to the Monthly Accrued Benefit determined as of such Participant's Early Retirement Date and reduced 0.3% for each month prior to Normal Retirement Date.
Deferred Pension	<ul style="list-style-type: none">a) Eligibility Requirements: At the election of the participant.b) Benefit: Based on the accrued benefit at the late retirement date using pay and service at that date.



RETIREMENT PLAN FOR EMPLOYEES OF FLORISSANT VALLEY FIRE PROTECTION DISTRICT

Summary of Plan Provisions (Continued)

Death Benefit	<ul style="list-style-type: none">a) Eligibility requirements: Participant must be vested.b) Benefit: If married at death, the surviving spouse receives a benefit as if the participant had retired, elected the 100% Joint and Survivor option, and then died. If not married at death, the survivor receives the Return of Employee Contributions with interest.
Disability Pension	None. Participant is treated as a terminated participant.
Normal Form of Benefit	The Normal Form of payment of the Normal Pension Benefit is a Single Life Annuity with Return of Contributions.
Optional Forms of Benefit	<ul style="list-style-type: none">a) 5-Year and 10-Year Certain & Life Annuitiesb) Contingent Annuitant Optionsc) Period Certain Optionsc) Lump Sum of Employee Contributions plus interest
Vesting	<ul style="list-style-type: none">a) If hired prior to 11/1/1999, 0% vesting through 4 years of service, 100% vesting at 5 years of service.b) If hired after 11/1/1999, 0% vesting through 9 years of service, 50% vesting for 10 to 14 years of service, 100% vesting at 15 years of service.
Employee Contributions	1% of Monthly Earnings. Employee contributions are credited at 3.75% per annum.