



# **JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT**

**2020 ANNUAL REPORT  
TO THE  
MISSOURI  
GENERAL ASSEMBLY**



STATE OF MISSOURI  
JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

STATE CAPITOL, ROOM 219-A  
JEFFERSON CITY, MO 65101  
PHONE (573) 751-1280  
FAX (573) 526-6459

February, 2020

Dear Colleague:

The Joint Committee on Public Employee Retirement (JCPER) respectfully submits its 2020 Annual Report for Plan Year 2018 to the General Assembly. This report is designed to comply with the requirements of Section 21.563, RSMo and includes data relating to Missouri's state and local public employee retirement systems. The JCPER hopes this information assists in the transparency of the financial and actuarial condition of Missouri's public employee retirement systems.

This report is the result of the combined efforts of the Joint Committee staff, the Senate's Computer Information Systems staff, and the Senate's Print Shop staff. The JCPER hopes the information contained in this report is helpful to members of the General Assembly in making legislative decisions relating to Missouri's public employee retirement systems.

As policymakers in Missouri and across the country continue to evaluate appropriate retirement benefit levels and work to maintain retirement security for public employees and benefit recipients, the JCPER will continue in its clearinghouse role for comprehensive public pension plan information. This role enables the JCPER to continue in its founding principles of facilitating transparency and providing assistance to the Missouri General Assembly and Missouri taxpayers.

Sincerely,

A handwritten signature in cursive script that reads "Patricia Pike".

Representative Patricia Pike  
Chair

## **Foreword**

This 2020 Annual Report is a compilation of statistics for the 126 state and local public employee retirement systems in the state of Missouri for plan year 2018.

In measuring the funded status and progress for each individual plan, the assets are stated using a market value, and if adopted by a plan, a “smoothed” or actuarial value of assets. Plan liabilities are stated using actuarial accrued liability. The JCPER staff obtained this information from the annual surveys, actuarial valuations, financial statements, and Comprehensive Annual Financial Reports for plan year 2018. Although the focus of the report is on plan year 2018, to avoid viewing one plan year in isolation, the report includes four years of data, where available, in the appendices to better provide for looking at a trend.

In the defined benefit plan section, the term “interest” under actuarial assumptions refers to the assumed rate of return for investments. The term “inactive” for membership includes terminated vested members, retired members, surviving beneficiary members, disabled members, and if applicable, terminated nonvested members who have not withdrawn employee contributions.

## **Note of Appreciation**

The JCPER would like to thank the staff of Senate Computer Information Systems and the Senate Print Shop for their assistance in completing this annual report and each individual plan for its reporting and cooperation with JCPER staff.



**Joint Committee on Public Employee Retirement  
100th General Assembly, First Regular Session**



Rep. Pike,  
Chair



Rep. Paula  
Brown



Rep. Richard  
Brown



Rep.  
Runions



Rep. Shull



Rep. Walsh



Senator  
Koenig, Vice-  
Chair



Senator  
Bernskoetter



Senator  
Rizzo



Senator  
Wallingford



Senator  
Walsh



Senator  
Williams

**JCPER Staff**

Michael Ruff, Executive Director

Robert A. Coleman, Pension Analyst

Tanya Pleus, Office Assistant

**State Capitol, Room 219-A**

**Jefferson City, MO 65101**

**573-751-1280 (Phone)**

**573-526-6459 (Fax)**

<https://jcper.org/>

This page intentionally left blank

# TABLE OF CONTENTS

	Page
TRANSMITTAL LETTER.....	1
EXECUTIVE SUMMARY.....	5
BACKGROUND & RESPONSIBILITIES .....	6-7
MISSOURI'S PERS AND TYPES OF PLANS .....	7-11
RETIREMENT PLAN MEMBERSHIP .....	11
RETIREMENT PLAN FUNDING & CONTRIBUTION RATES .....	12-16
ACTUARIAL ASSUMPTIONS/INVESTMENT REQUIREMENTS.....	16-20
PENSION REFORMS.....	21
NATIONAL ISSUES .....	21-22
STATE ISSUES.....	22-23
CONCLUSION.....	24
DEFINED BENEFIT PLANS.....	25
LEGACY PLANS.....	111
DEFINED CONTRIBUTION PLANS .....	115

**Executive Summary:** In 1983, the Missouri General Assembly established the JCPER as a central reporting entity for Missouri's public pension plans and to provide an analysis function for the General Assembly and Missouri taxpayers. The JCPER is statutorily required to annually compile and submit a report to the General Assembly. In the more than thirty years since collecting its first year of public pension plan data in 1984, the JCPER has served as a resource to the General Assembly. This 2020 annual report reflects pension plan data for plan year 2018.

- The total net assets for Missouri's public pension plans were approximately \$78.25 billion in plan year 2018, increasing by 4.75% from approximately \$74.7 billion in plan year 2017.
- Total plans reporting to the JCPER equaled 126 plans for plan year 2018. Of these, seventy-nine were defined benefit plans, thirty-eight were defined contribution, and nine were a combination of defined benefit and defined contribution.
- Total membership of Missouri's public pension plans was 635,228, an increase from 627,042 in 2017. Both active membership and inactive membership increased. The number of inactive members continued to exceed active members.
- Net investment income equaled approximately \$5.72 billion, a decrease from plan year 2017's net investment income of approximately \$7.54 billion.
- Of the 126 public pension plans in Missouri, sixteen are "statutory" plans meaning that the General Assembly has established the plan in state statute. Because the plan document is contained in state statute, future changes must be made by an act of the General Assembly unless authority has been granted to the plan's board of trustees. The remaining plans are governed locally by a plan sponsor. It is important to note that the statutory pension provisions in Chapter 105 apply to all public pension plans regardless of the sponsoring entities.

## **BACKGROUND OF THE JCPER**

In 1983, during the First Regular Session of the 82nd General Assembly, Missouri lawmakers established the Joint Committee on Public Employee Retirement (JCPER). The General Assembly took this action in response to the growing concern regarding the fiscal integrity of Missouri's state and local public employee retirement systems. Previously, no centralized reporting agency existed that was charged with maintaining information regarding these public plans. This permanent pension review and oversight body consists of six senators and six representatives. Section 21.553, RSMo, mandates that the committee be bipartisan in nature by stating that "no political party shall be represented on the committee by more than three members from the Senate nor more than three members from the House." The JCPER is governed by provisions in both Chapters 21 and 105 of the Missouri Revised Statutes. Provisions in Chapter 105 apply to all state and local public employee retirement systems.

### **Responsibilities of the JCPER established by Chapter 21:**

- Make a continuing study and analysis of all state and local government retirement systems;
- Devise a standard reporting system to obtain data on each public employee retirement system that will provide information on each system's financial and actuarial status at least biennially;
- Determine from its study and analysis the need for changes in statutory law;
- Make any other recommendations to the General Assembly necessary to provide adequate retirement benefits to state and local government employees within the ability of the taxpayers to support their future costs.

### **Provisions in Chapter 105 establish the following requirements for public retirement plans:**

- Funds are to be held in trust and shall not be commingled with any other funds;
- Are considered fiduciaries and may invest according to the prudent person standard;
- Submit to the JCPER an actuarial cost statement prior to taking final action on a substantial proposed change in plan benefits;
- May participate in cooperative agreements providing portability of public employee retirement benefits;
- Perform an actuarial valuation at least biennially in compliance with recommended standards of the Governmental Accounting Standards Board (GASB);
- File proposed rules with the JCPER;
- For defined benefit plans, submit investment performance to the JCPER on a quarterly basis;
- Notify the JCPER within seven calendar days when a plan's governing board takes final action providing a cost-of-living increase or new or additional payments beyond plan provisions of the prior plan year;
- Establish a program of board member education for annual education of board members.

### **Activities of the JCPER:**

During calendar year 2019, the JCPER engaged in the following activities:

- **PERS Annual Reporting.** The JCPER conducted an annual survey of Missouri's state and local public employee retirement systems for plan year 2018 and collected information for analysis, including asset

- values, liabilities, benefit levels, membership, asset allocation, advisors, composition of board of trustees, and fees for professional services such as actuary, investment custodian, investment consultants, and third party administrators. The JCPER reviewed this information, along with actuarial valuations and financial statements, and compiled it into the appendices to this report. It is the policy of the JCPER to examine multiple years of information rather than look at one year in isolation.
- **Assistance to the General Assembly.** The JCPER staff monitored twenty-seven retirement-related bills during the 2019 regular legislative session. The General Assembly passed three retirement-related bills. The Governor signed all three bills into law. (See State Legislation section.)
- **Assistance to the Senate’s MODOT & Patrol Employees’ Retirement System Study Committee.** The JCPER staff provided informational testimony and historical information to the Study Committee during the 2019 legislative interim.
- **Assistance to Local PERS.** The JCPER continues to provide assistance to local PERS throughout the state. This assistance may range from individual plan analysis, plan comparisons, and outlining statewide trends. The JCPER continues to advocate this very important function and encourages local PERS to contact it.
- **Internet Resource.** Information relating to the JCPER is available on the JCPER’s website, <https://jcper.org/>. Maintained by the Senate Computer Information Systems staff, the website provides access to information regarding the JCPER Annual Report and Annual Watch List, JCPER committee meetings, statutes governing the JCPER and public employee retirement systems, actuarial cost statements, a PERS directory, and current and historical state retirement legislation monitored by JCPER staff.

## Statutory Governance of Missouri’s Public Pension Plans

Section 21.563, RSMo requires that the JCPER annual report “...include an analysis and statement of the manner in which statutory provisions relating to public employee retirement programs are being executed.” Multiple statutory provisions apply to Missouri’s state and local public employee retirement systems. Missouri statutes govern public pension plans in two ways. First, sixteen public pension plans are created by statute. Specific statutory provisions govern these plans’ boards of trustees, funding and investment requirements, and benefit structure. Second, statutes in Chapter 105 contain provisions that govern all Missouri public pension plans, including provisions relating to fiduciary responsibility, financial reporting, filing of administrative rules, time frame and public availability of actuarial cost statements for certain benefit changes, requirements for actuarial valuations and cost statements, and education requirements for board member education. Public pension plans are required to notify the JCPER of cost-of-living adjustments, and submit quarterly investment reporting to the JCPER, which reviews this information at its quarterly meetings.

## Missouri’s Public Employee Retirement Systems

At the close of plan year 2018, 126 public pension plans reported to the JCPER.

The charts on the next page provide a breakdown of Missouri’s public retirement plans in terms of plan sponsors, showing the various public entity categories that sponsor public retirement plans. Plan sponsors include the state, municipalities, public hospitals, and political subdivisions, including public library districts, public safety entities, and public utility districts. Information for individual plans is included in the Appendices to this report.



For comparison purposes, information for two plan years is included to show the changes that have occurred from year to year regarding plan membership and asset levels.

### Plan Year 2018

PERS	TOTAL # PLANS	ACTIVE MEM-BERS	NON-ACTIVE MEMBERS	ASSETS
Municipalities	50	16,818	19,005	\$ 6,267,495,466
Fire Protection Districts	34	1,612	645	\$ 481,175,918
Hospitals & Health Centers	9	7,423	3,757	\$ 546,918,626
Statewide	7	110,505	114,185	\$ 18,880,696,041
Transit Authorities	5	2,391	2,144	\$ 282,246,681
Public Schools & Universities	6	165,393	175,220	\$ 50,431,629,714
Counties	3	5,005	7,268	\$ 932,771,688
Public Libraries	1	362	349	\$ 44,716,678
Drainage & Levee Districts	1	14	9	\$ 1,497,360
Public Water Supply Districts	3	43	2	\$ 5,300,523
Sewer Districts	1	944	989	\$ 269,130,031
Ambulance Districts	3	252	31	\$ 28,727,035
Other	3	756	106	\$ 79,087,706
<b>TOTALS</b>	<b>126</b>	<b>311,518</b>	<b>323,710</b>	<b>\$ 78,251,393,467</b>

The data listed for plan year 2018 shows an increase in both active and inactive members and an increase in overall asset values from plan year 2017.

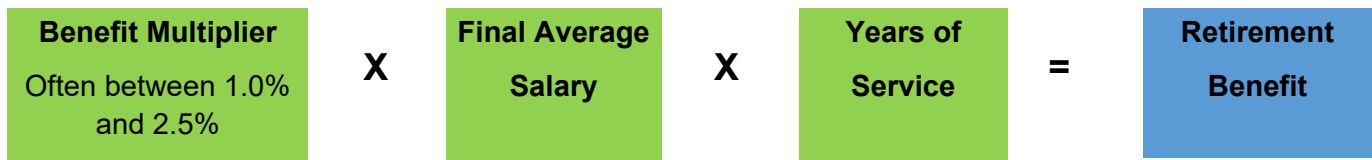
### Plan Year 2017

PERS	TOTAL # PLANS	ACTIVE MEM-BERS	INACTIVE MEM-BERS	ASSETS
Municipalities	50	17,039	19,001	\$ 6,044,049,871
Fire Protection Districts	35	1,625	608	\$ 525,942,032
Hospitals & Health Centers	9	7,290	4,548	\$ 589,005,863
Statewide	7	110,556	114,937	\$ 17,881,929,126
Transit Authorities	5	2,340	2,151	\$ 264,597,329
Public Schools & Universities	6	163,160	168,128	\$ 48,057,127,530
Counties	3	5,095	7,048	\$ 978,696,088
Public Libraries	1	375	339	\$ 48,706,238
Drainage & Levee Districts	1	15	6	\$ 1,433,754
Public Water Supply Districts	3	37	2	\$ 5,414,410
Sewer Districts	1	979	924	\$ 285,420,340
Ambulance Districts	2	38	7	\$ 2,370,386
Other	3	703	91	\$ 71,748,173
<b>TOTALS</b>	<b>126</b>	<b>309,252</b>	<b>317,790</b>	<b>\$ 74,756,441,140</b>

## Types of Public Employee Retirement Plans

Two common types of public sector retirement plans exist: Defined Benefit and Defined Contribution.

**Defined Benefit (DB):** The defined benefit plan is the most common type of plan covering Missouri public employees in seventy-nine of the 126 plans. A defined benefit plan is funded by employer contributions, and in some cases, employee contributions. Generally, defined benefit plans specify that a retirement benefit is based on years of creditable service and a final average salary calculation. Most plans calculate the average of a member's salary for three or five years prior to retirement. The most common benefit formula provides that a member will receive a certain percentage of his or her final average salary calculation, known as the benefit multiplier. Typical benefit multipliers range from 1.0% to 2.5%. The selection of a benefit multiplier is often influenced by whether plan members participate in Social Security.



Alternatively, a few Missouri defined benefit plans calculate the retirement benefit using a flat dollar amount for each year of service. In a defined benefit plan, a member's retirement benefit is payable for the member's lifetime. Depending on the option chosen and plan structure, the plan may also provide disability and/or survivor benefits. It is important to note that the employer bears the investment risk. This report focuses primarily on defined benefit plans.

**Defined Contribution (DC):** A defined contribution plan consists of employer and/or employee contributions into an individual account with the accumulated account balance available at retirement age including any investment gains or losses. With a defined contribution plan, no minimum benefit is guaranteed or specified for members.



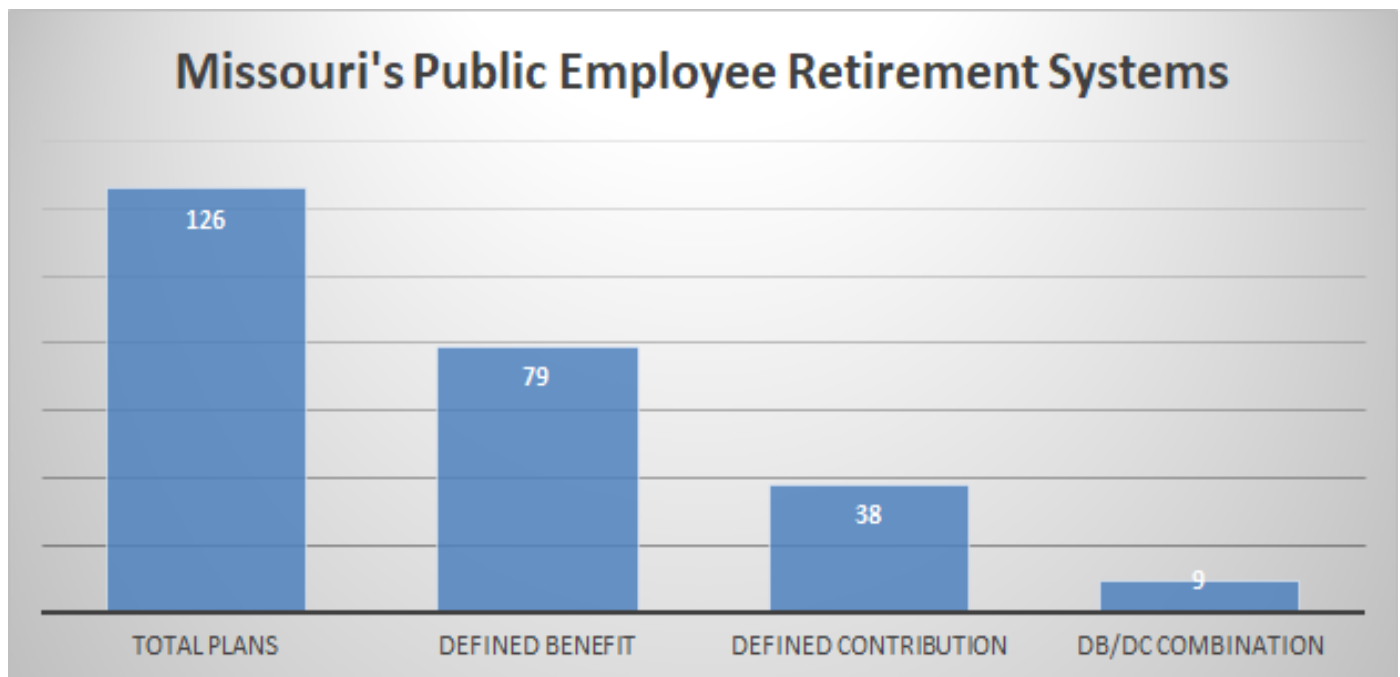
The employee bears the investment risk and is often responsible for making investment decisions. Investment options may include mutual funds, target date retirement funds, or stable value funds. For plan year 2018, thirty-eight defined contribution plans reported to the JCPER.

**Hybrid Plan Design:** Some plan sponsors offer a retirement plan that incorporates both a DB and a DC component with a minimal lifetime defined benefit accompanied by an individual employee DC account.

**Cash Balance Plan Design:** Another plan type is a cash balance plan. In contrast to a defined benefit plan, a cash balance plan's promised benefit is in terms of a member's stated account balance. A member's benefit is based on employee contributions, employer pay credits, and an interest credit. However, unlike a defined contribution plan, the plan's funds are invested and managed by the retirement plan/investment manager. The employer/plan sponsor bears the investment risk. One Missouri public employee retirement system has adopted a cash balance plan for certain members beginning in plan year 2019.

**Other:** Some plan sponsors have closed a defined benefit plan to new hires or frozen benefit accruals and established a defined contribution plan while maintaining the closed or frozen defined benefit plan.

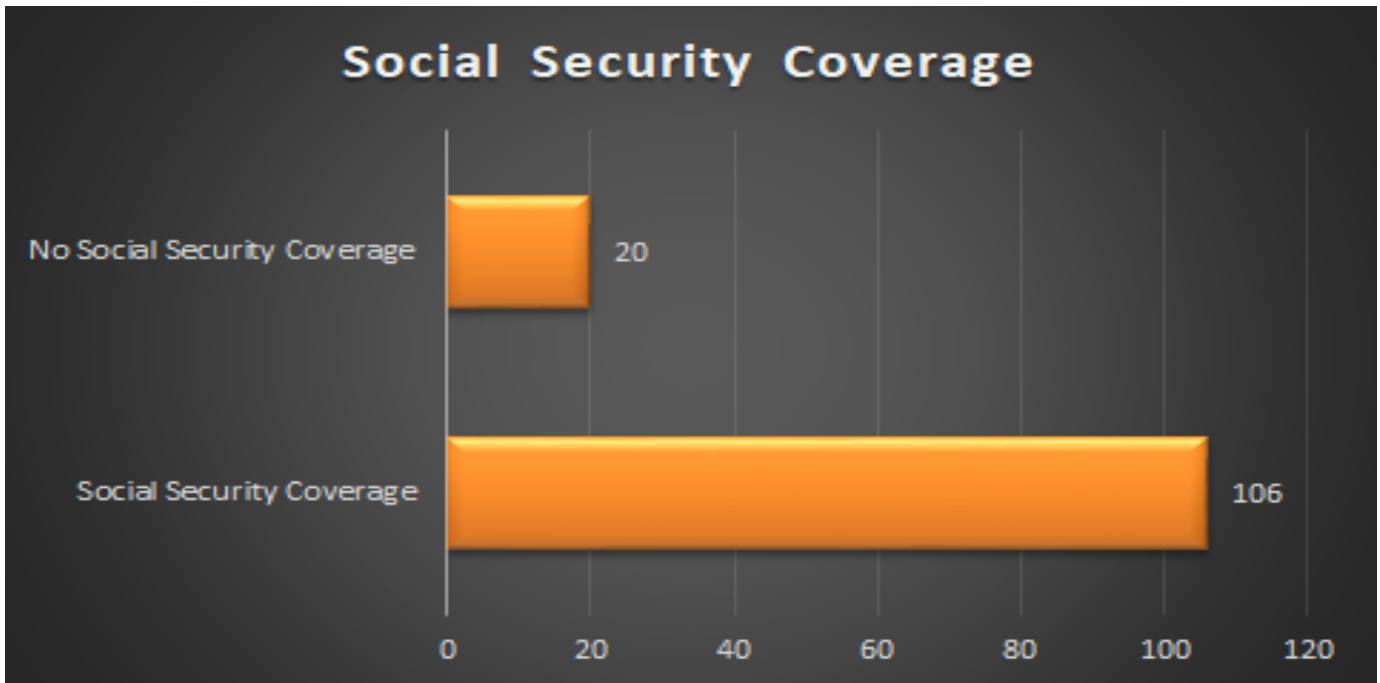
The chart below shows the number of plans by type in Missouri:



For plan year 2018, there were three fewer DB/DC combination plans because three plan sponsors chose to terminate their DC plan components in plan year 2017 (High Ridge Fire Protection District, Saline Valley Fire Protection District, and City of Creve Coeur). They continue to operate the defined benefit component of these plans. At the same time, one plan sponsor terminated its defined benefit plan (Cedar Hill Fire Protection District Length of Service Awards Plan for volunteer firefighters). As a result, the number of DB/DC combination plans decreased while the number of defined benefit plans increased. In addition, a plan sponsor began re-reporting its defined contribution plan to the JCPER for the first time (St. Charles County Ambulance District).

## Social Security Coverage

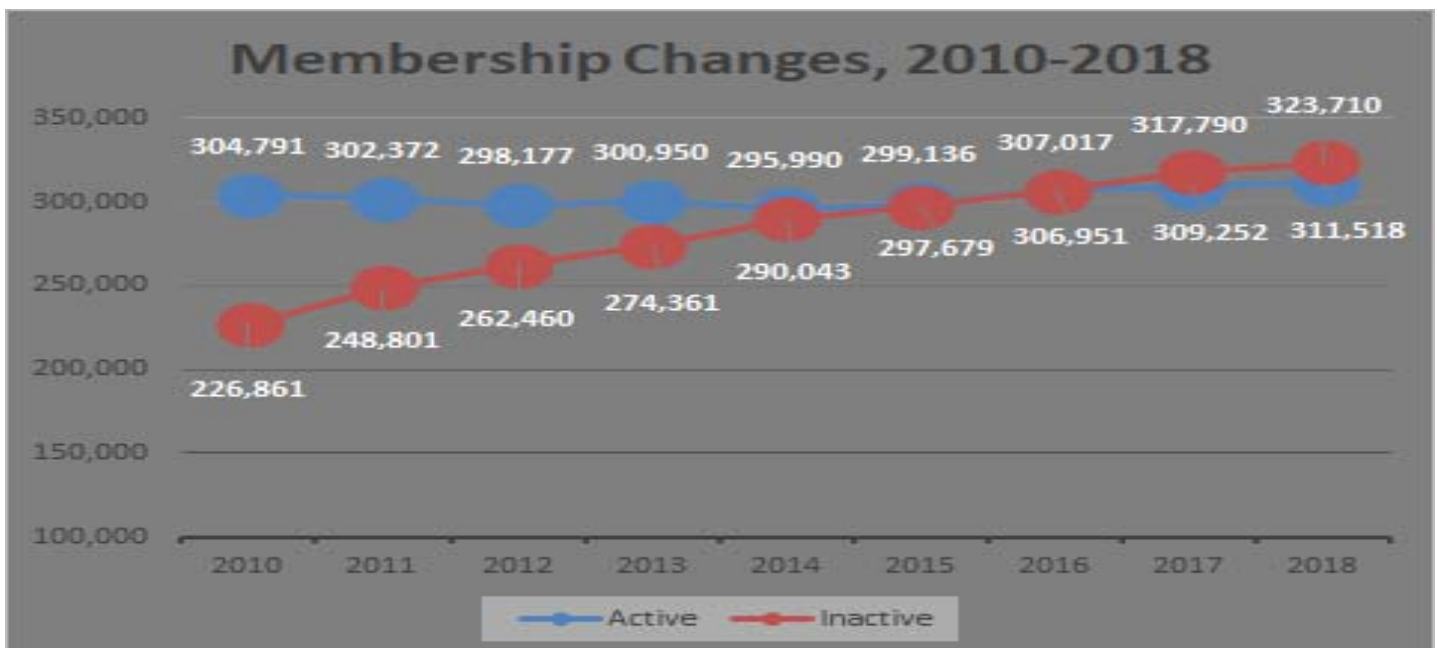
Social Security coverage is mandatory for the majority of Missouri's public employee retirement plans. Social Security coverage is established and governed by a Section 218 agreement between the employer political subdivision and the Social Security Administration. Plans whose members are not covered by Social Security generally provide a higher benefit formula and may have lower age and service requirements. The chart at the top of the next page illustrates the Social Security coverage for Missouri's public plans.



Twenty plans are not covered by Social Security, including 84,305 active members and 67,936 inactive members. Eighteen of these plans are defined benefit and two are defined contribution.

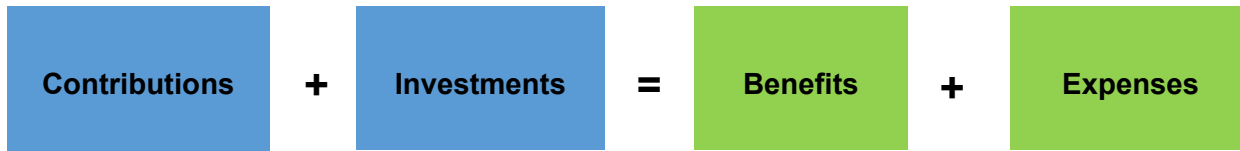
## Membership in Missouri's Public Employee Retirement Systems

In plan year 2018, total public plan membership in Missouri increased by 8,186 members from plan year 2017. This number of members is the highest for the past ten years. Both active and inactive membership increased from plan year 2017. Inactive membership continued to experience substantial growth, a trend beginning in 2010. In plan year 2018, inactive membership increased by 5,920 members. Plan year 2018 was the second plan year in which the number of inactive members exceeded active members. It is interesting to note that when the JCPER first began reporting plan data, inactive members composed approximately 22% of total plan membership. In contrast, in plan year 2018, inactive members compose approximately 50.96% of total membership.



## Funding of Missouri's Public Employee Retirement Systems

Defined benefit pension plans are composed of two primary sources of income and two primary expenditure categories, commonly referred to as the pension funding equation:



These categories must be adjusted if the income sources do not equal the expenditure categories long-term.

### Contributory Plans and Non-Contributory Plans:

**Contributory Plans:** A contributory plan requires the employee to contribute a portion of earnings to the plan. The contribution rate varies by plan and is in addition to the employer's contribution. For plans whose members do not participate in Social Security, the contribution rate tends to be higher, in part because, as previously noted, the benefit level tends to be higher. The lowest employee contribution rate is 1%. Out of plans whose members do not participate in Social Security, the highest contribution rate is 18.08%. For plans whose members do participate in Social Security, the highest employee contribution rate is 9%. In addition, at least four plans require employee contributions that are calculated as flat dollar amounts per pay period rather than as a percent of compensation.

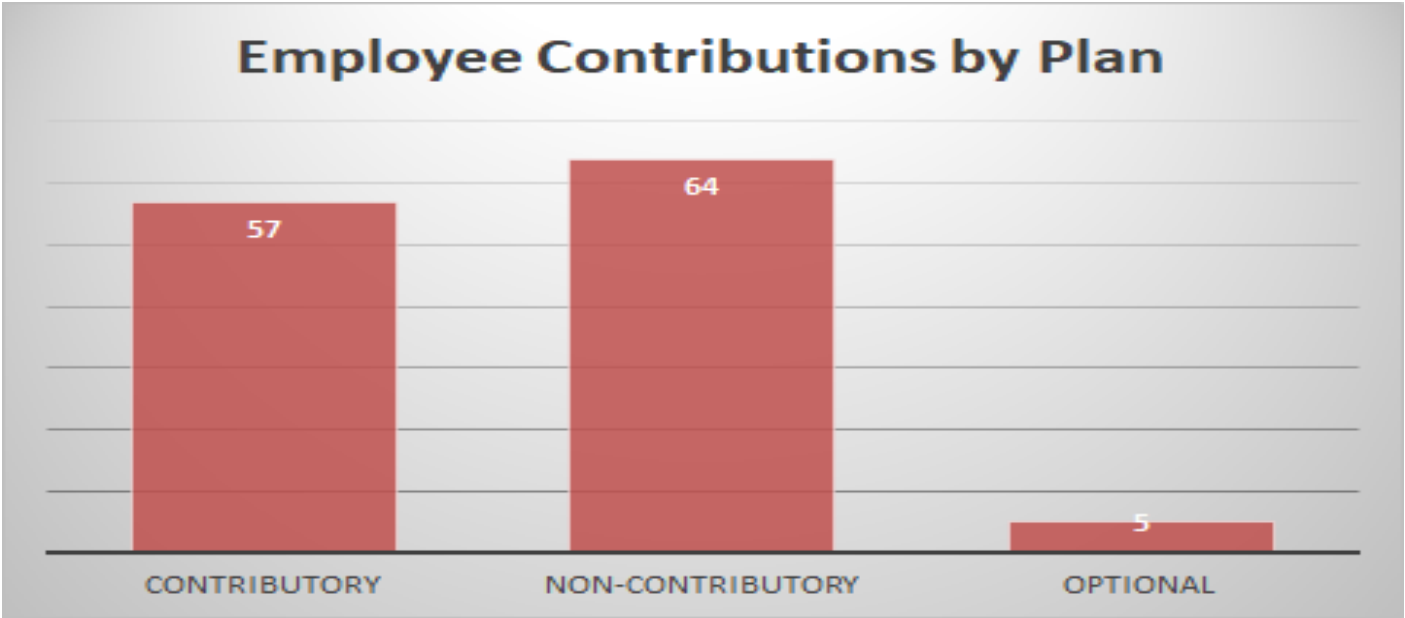
For purposes of this report, the Judicial Retirement System, Missouri State Employees' Retirement System, the MoDOT & Highway Patrol Employees' Retirement System, and St. Louis County Employees Retirement Plan have been included as contributory even though some employees are required to contribute and some are not; the General Assembly passed legislation requiring employees hired on or after January 1, 2011 to contribute 4% of pay to the three state plans and St. Louis County requires employees hired on or after February 1, 2018 to contribute 4% to its plan.

**Non-Contributory Plans:** In a non-contributory plan, employees do not contribute. As a result, for a defined benefit plan, the employer is responsible for making the full contribution as determined by the plan's actuary. For defined contribution plans that are non-contributory, in many cases, the plan sponsor offers a deferred compensation plan into which its employees may defer their compensation for an additional retirement savings vehicle.

**Optional:** Five plans permit, but do not require, employee contributions: one defined benefit plan and four defined contribution plans. First, the Local Government Employees' Retirement System (LAGERS) permits each member political subdivision, as part of its benefit package election, to choose whether to require employees to contribute 4%. Some LAGERS-covered employers require employee contributions while others do not. Second, four defined contribution plans provide that employee contributions are optional. As a result, some employees choose to contribute while others do not.

The chart at the top of the next page breaks down the plans in terms of employee contribution requirements.

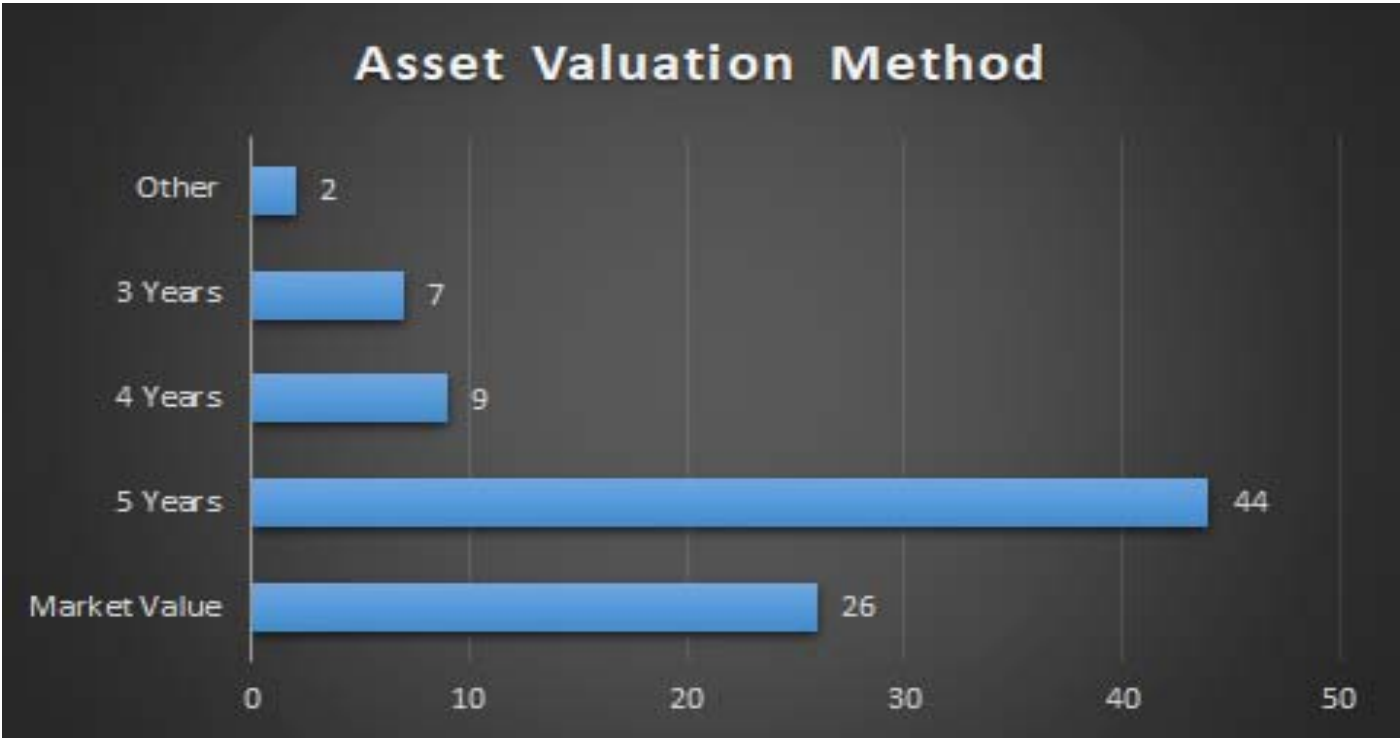




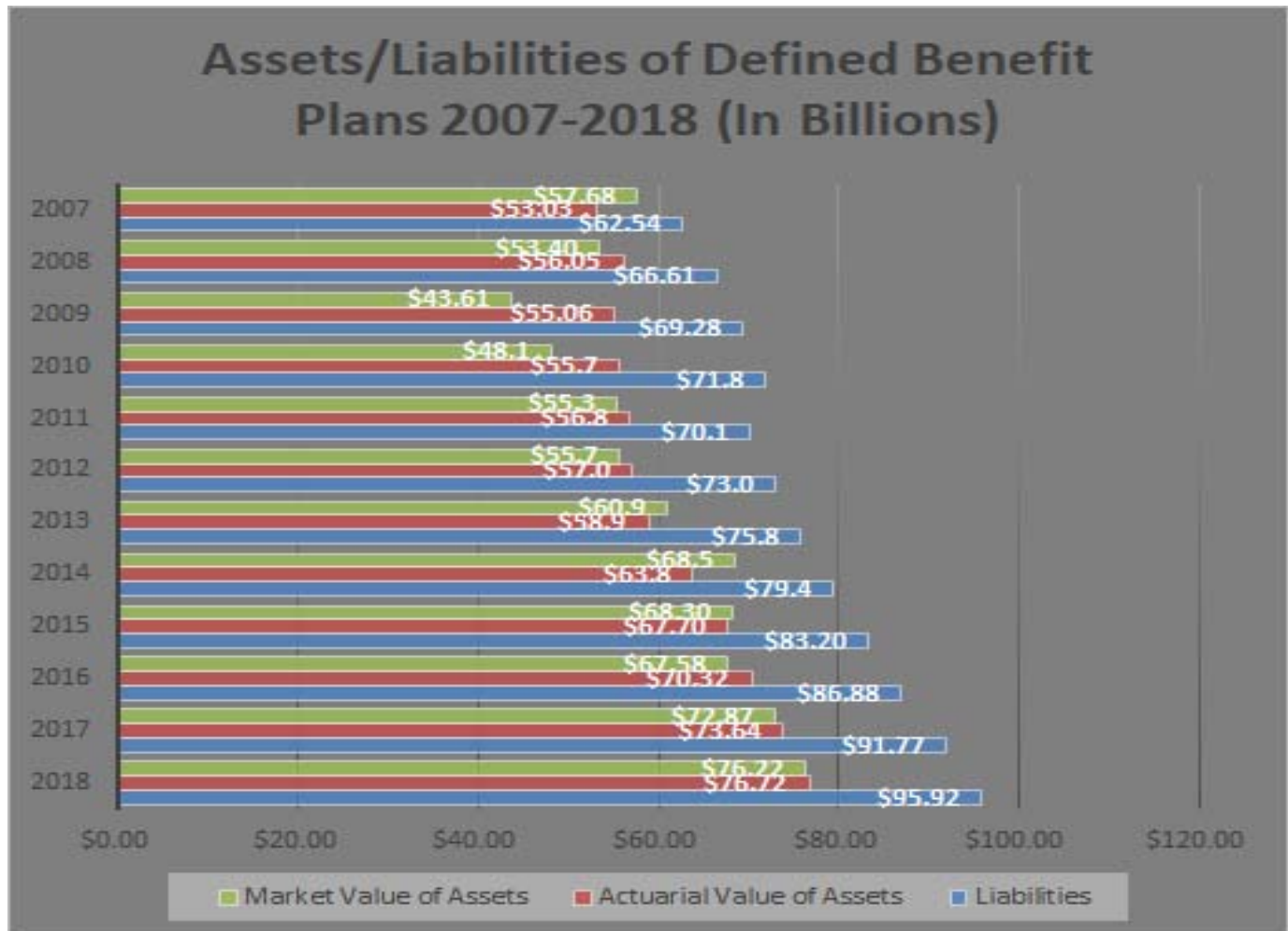
**Assets & Liabilities:**

To determine the ongoing nature of Missouri’s defined benefit plans, the JCPER must examine each plan’s assets and liabilities.

**Valuation of Assets:** Missouri’s defined benefit plans value their assets for funding purposes in one of two ways: market or actuarial. First, some plans value their assets at market value, or the true value of assets. Second, some plans use an asset smoothing process where investment gains and losses are recognized over a set period of time to mitigate the effect of investment market fluctuations. This smoothing of investment gains and losses may help to reduce volatility in asset values and the contribution rate. Due to a smoothing method, actuarial values may differ considerably from market values. The chart below lists the number of plans that use a particular asset valuation method.



**Trend of Assets & Liabilities of Defined Benefit Plans:** Because of the long-term nature of most plans, a one-year snapshot is not particularly useful. As such, the JCPER maintains plan data that enables a trend analysis to be produced over a period of years. The chart below shows a recent history of the assets and liabilities of the defined benefit plans, beginning with values in 2007, immediately prior to the financial market downturn of 2008-2009. For plan year 2018, actuarial value of assets increased by approximately \$3.07 billion and liabilities increased by approximately \$4.14 billion. Market value of assets increased from plan year 2017 by approximately \$3.36 billion. In addition, this chart shows the decline in asset values experienced in 2008 and 2009 and the amount of time that passed before asset levels recovered to prior levels.

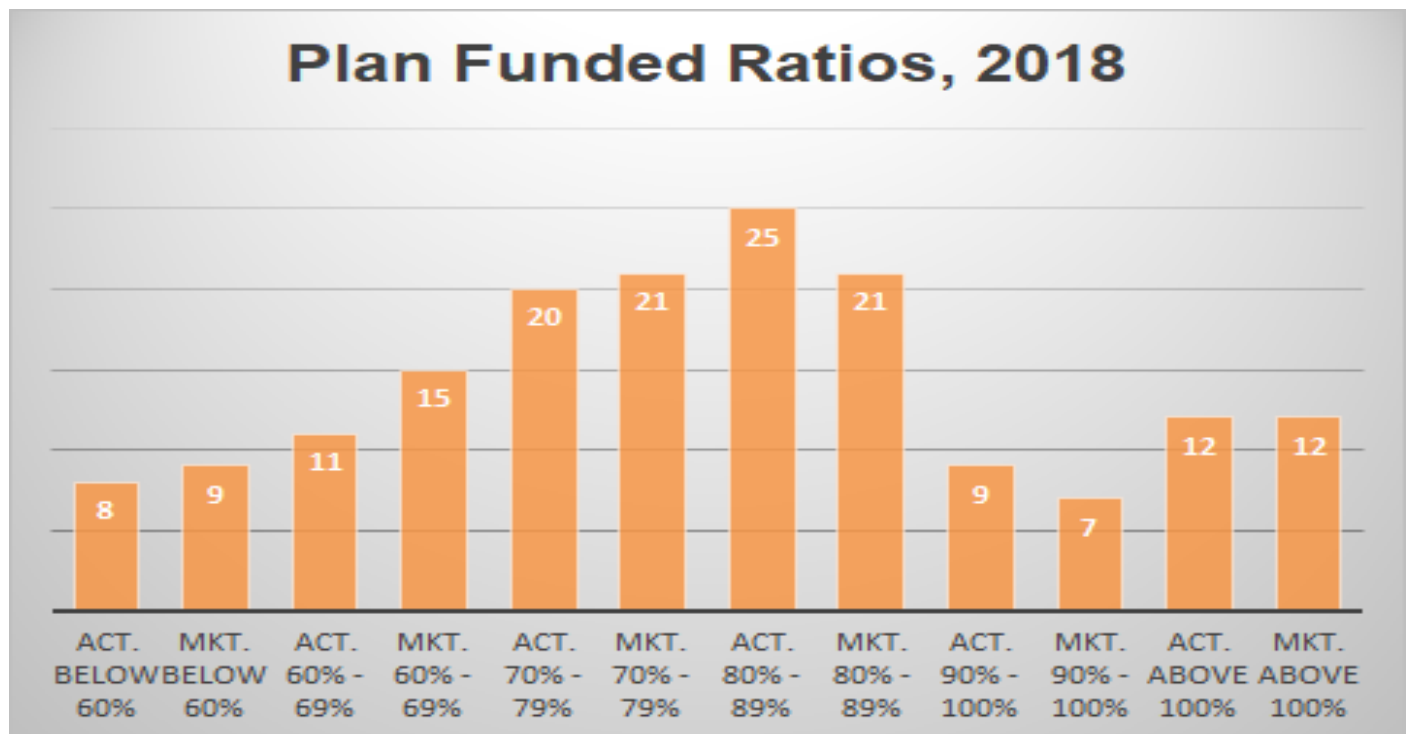


This chart also shows the difference between market value of assets and actuarial value of assets and the effectiveness of smoothing to mitigate volatility. For example, market value of assets decreased by approximately \$9.79 billion between plan years 2008 and 2009 in contrast to a decrease in the actuarial value of assets of approximately \$0.99 billion. Conversely, this chart also shows how the smoothing of investment gains may result in slower asset growth when compared to market value; for example, between plan year 2013 and plan year 2014, market value of assets increased by approximately \$7.6 billion whereas actuarial value of assets increased by approximately \$4.9 billion.

**Funded Ratio:** While many factors must be considered when analyzing a pension plan, one measurement tool is the plan's funded ratio. A funded ratio is a measurement of the plan's assets to liabilities. A plan's funded ratio is calculated in the following manner:

$$\begin{array}{|c|} \hline \text{Asset} \\ \hline \text{Value} \\ \hline \end{array} \div \begin{array}{|c|} \hline \text{Actuarial Accrued} \\ \hline \text{Liability} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Funded Ratio} \\ \hline \end{array}$$

A funded ratio may be calculated using either market value of assets or actuarial value of assets. Missouri statutes use a plan's funded ratio as a benchmark in three situations. First, section 105.685, RSMo requires a pension plan to have a funded ratio of 80%, based on actuarial value of assets, before adopting or implementing an additional benefit increase or cost-of-living adjustment which would increase the plan's actuarial accrued liability.<sup>1</sup> Second, section 105.684 requires any plan with a funded ratio of less than 60% to have the plan's actuary prepare an accelerated contribution schedule.<sup>2</sup> Third, section 105.683 uses a plan's funded ratio to determine whether a plan is deemed delinquent in contribution payments.<sup>3</sup> In addition, the JCPER publishes an annual watch list that uses a funded ratio of less than 70%, based on market value of assets, as the threshold for inclusion. As shown in the chart below, due to some plans using a smoothing method for investment gains and losses, a funded ratio on an actuarial basis may differ considerably from a funded ratio on a market value basis.



**Footnotes:**

1. Mo. Ann. Stat. § 105.685 (West 2015).
2. Mo. Ann. Stat. § 105.684 (West 2015).
3. Mo. Ann. Stat. § 105.683 (West 2015).

The median funded ratio on an actuarial basis is 81%. The median funded ratio on a market value basis is 78%. The average funded ratio on an actuarial basis is 81%. The average funded ratio on a market value basis is 80%. When examining Missouri Defined Benefit plans as a whole, the funded ratio in the aggregate is 79.4% on a market value basis and 79.98% on an actuarial basis.

**Amortization of Unfunded Actuarial Accrued Liability (UAAL):** When a pension plan has an actuarial accrued liability figure that exceeds its asset values, an unfunded actuarial accrued liability exists. Depending on the actuarial cost method used by the plan, the UAAL may be amortized over a time period as part of an overall plan to reduce, and eventually eliminate, the UAAL. In recent years, the JCPER has requested that each plan provide information relating to the type of amortization method. Plans reporting to the JCPER use one of three amortization approaches: an open period, a closed period, or a closed period with layers. For example, a plan may amortize its UAAL over a thirty-year period. A plan using an open thirty-year period would mean that the thirty year amortization period is reset every year to a new thirty-year period. For an open policy, the UAAL is generally not expected to be fully amortized. In contrast, a closed period reduces the amortization period by one year annually until the UAAL is fully amortized, similar to a home mortgage. A layered approach uses an initial base of a period of years with each additional year's gains or losses amortized separately over a period of years. For example, a plan might set up an initial base to be amortized over thirty years with each subsequent year's investment gains or losses set up as a separate layer to be amortized over a period of twenty years.

Nine plans use the Aggregate cost method, under which an amortization period is not established because the cost method does not provide for an unfunded past service liability. Thirteen plans use an open amortization period. Twenty-three plans use a closed amortization period. Thirty-four plans use a closed amortization period with additional layers.

**Actuarial Assumptions:** Because predicting the future is a difficult proposition, each plan's actuary must provide recommendations of assumptions to be used and decided on by governing boards. These assumptions are key in determining the value of future liability, possible future behavior of plan participants, and as a result, plan contributions or costs. Generally, actuarial assumptions fall into two broad categories. First, economic assumptions are tied to financial "behavior." Second, demographic assumptions are tied to plan member "behavior." These assumptions assist in projecting future behaviors and benefit obligations.

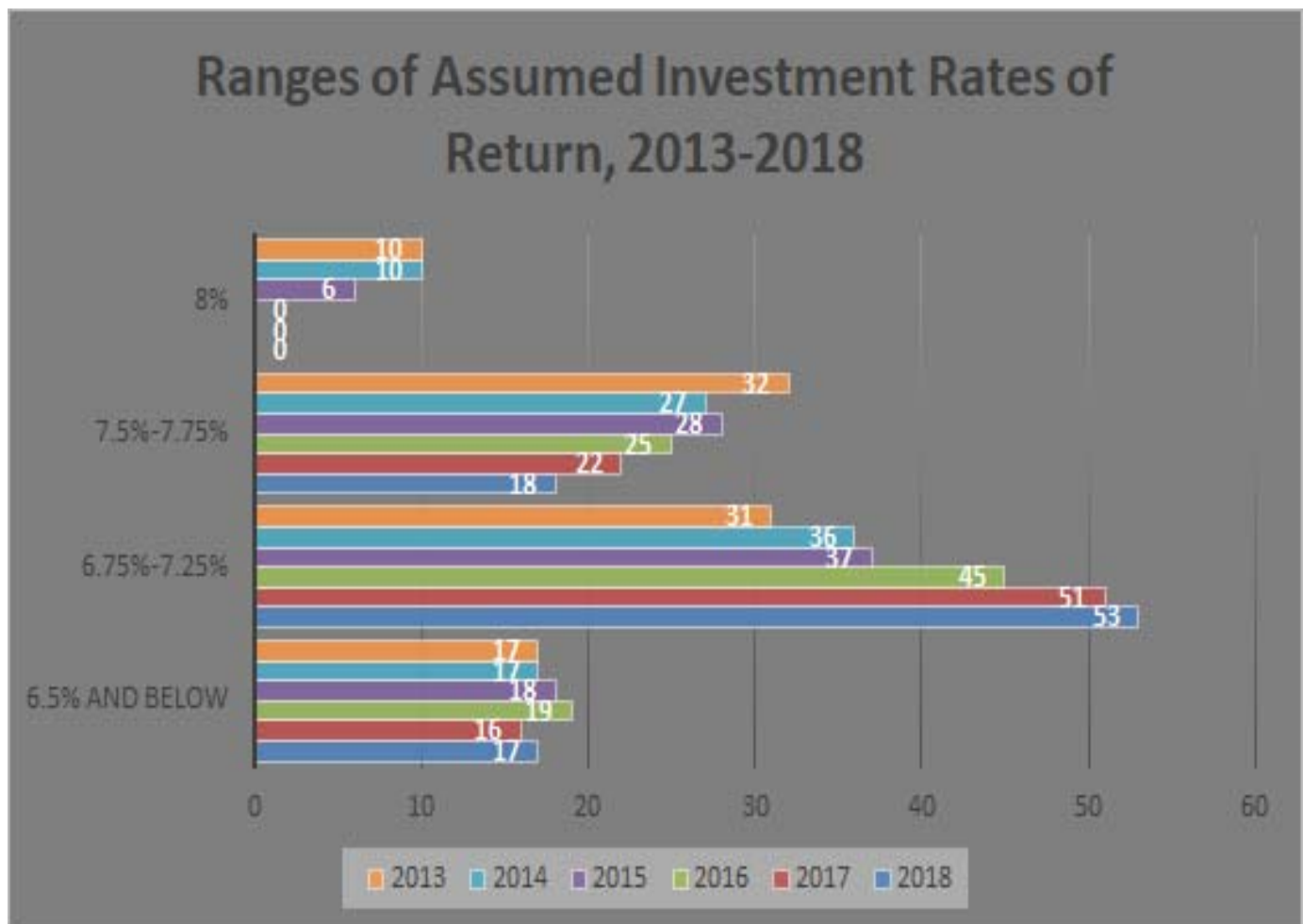
**Primary Economic Assumptions include:** Investment Rate of Return, Price Inflation, Salary Increases, Payroll Growth.

**Primary Demographic Assumptions include:** Mortality, Retirement Rate, Turnover/Withdrawal Rate

**Investment Rate of Return:** With the investment markets boom in the 1990s, many plan investment strategies were modified, and in some cases, plan investment rate of return assumptions were increased accordingly. However, investment markets have changed since the early 2000s, particularly after the financial downturn of 2008-2009. This change has resulted in many plans reevaluating capital market expectations and the reasonableness of their investment rate of return assumptions. In February 2019, the National Association of State Retirement Administrators (NASRA) has described how low interest rates and inflation since the economic downturn of 2008-2009 has resulted in lower expectations for returns in most asset

classes.<sup>4</sup> As a result, many plans have reduced their assumptions for investment rate of return. Of 129 plans surveyed nationwide, NASRA found that 30% reduced their assumed rate of return since February 2018. In addition, more than 90% have reduced their assumed rate of return since fiscal year 2010; NASRA notes that the average assumption has been reduced from 7.91 to 7.27. NASRA also describes the difficulty plans are encountering when setting an assumed rate of return because projections are showing lower investment returns in the near-term (five to ten years) versus the long-term (twenty to thirty years).

Missouri's plans continue to adjust the assumed rate of return. Since 2009, some pension plan governing boards have decreased the investment rate of return assumption. This trend of decreasing the assumption increased in plan years 2015—2017. Furthermore, by the close of plan year 2016, no Missouri plan was using an 8% investment rate of return assumption. By the end of plan year 2018, at least six plans lowered the assumed rate of return while at least one increased it. In plan year 2018, the investment rate of return assumption used by Missouri plans ranged from 4.75 to 7.75. The median is 7.0. The average is 6.93. This chart shows the distribution of investment rate of return assumptions from plan year 2013 through plan year 2018. Please note that the values on the Y axis are ranges of numbers and do not denote an increase from the lower value to the higher value.



4 National Association of State Retirement Administrators, Issue Brief, "NASRA Issue Brief: Public Pension Plan Investment Return Assumption," February 2019, <https://www.nasra.org/files/Issue%20Briefs/NASRAInvReturnAssumptBrief.pdf>



**Looking Ahead:** Between the close of plan year 2018 and the time of this report’s publication, the JCPER staff is aware of at least two plans that have decreased their investment rate of return assumption based on an existing reduction schedule.

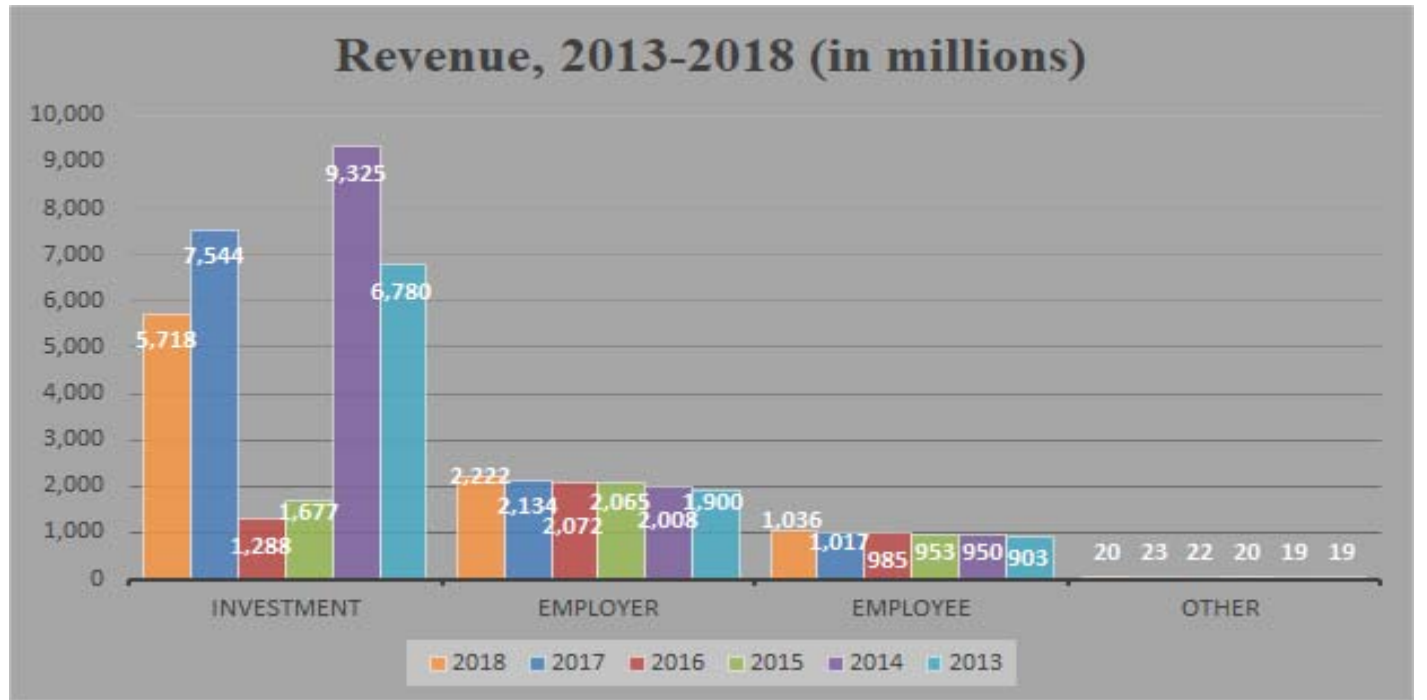
**Mortality Tables:** In 2019, the Society of Actuaries released the Pub-2010 Public Retirement Plans mortality tables. Pub-2010 is the first set of mortality tables based exclusively on public sector data. Furthermore, the Society prepared a table, specific to job categories: teachers, public safety, and general employees. At least four Missouri public employee retirement systems have adopted Pub-2010 tables.

**Contribution Rates:** Public pension plans serve many purposes, which may include recruiting and retaining quality employees, being a part of a comprehensive compensation package, ensuring a dynamic and changing workforce, and facilitating retirement security. Inherently, the payment of benefits earned by membership is the primary obligation and purpose of a public pension plan. A plan’s ability to meet this obligation is necessarily correlated to receiving plan revenues and adhering to the previously noted pension funding equation. Plan revenues are comprised of employer/employee contributions and investment returns.

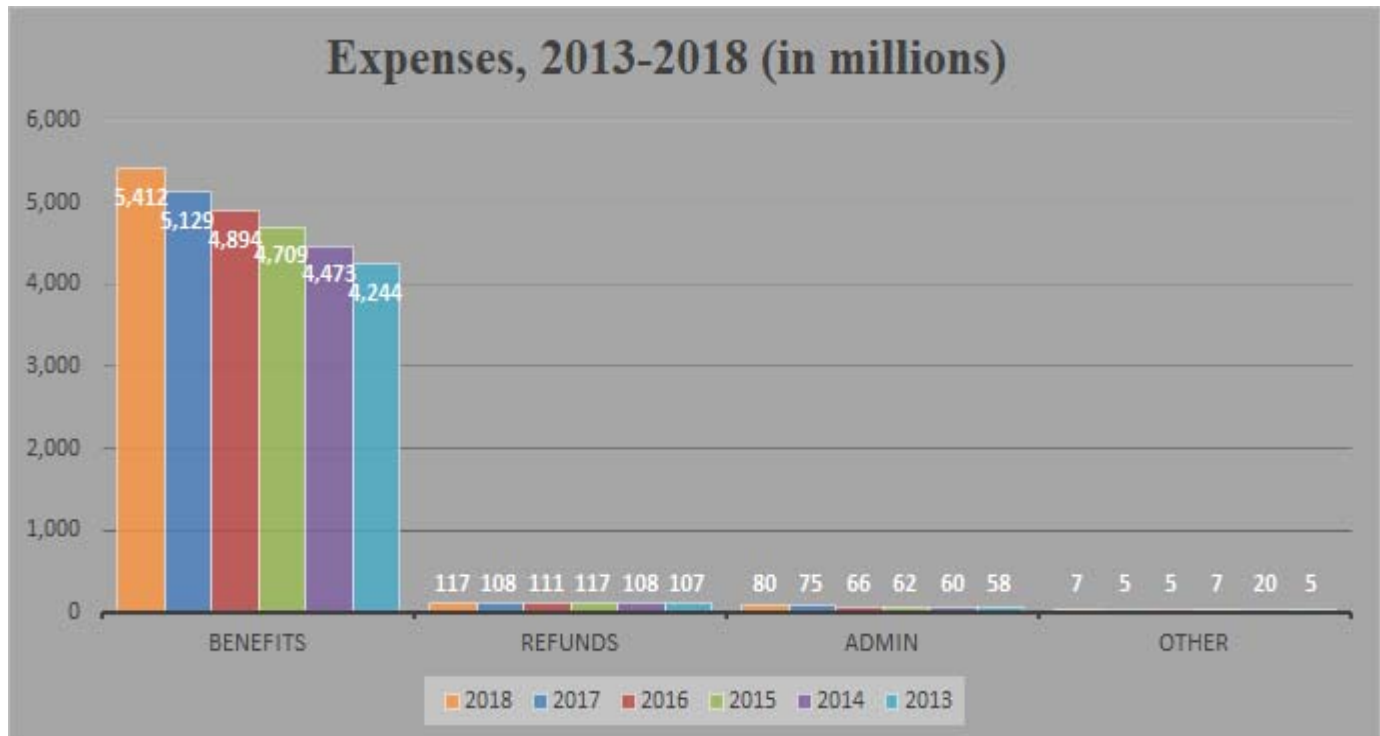
The investment market environment of the last decade has resulted in higher recommended contribution levels. In addition, as plan governing boards have modified plan assumptions in an effort to reflect the changing demographic and financial experience, plan contribution rates have been affected. Although public pension plans are viewed as long-term entities due to the perpetual nature of government, the necessity to meet annual budgetary requirements with increased plan contribution rates may be challenging for plan sponsors. In October 2009, the Government Finance Officers Association (GFOA) recommended that government employers contribute the full annual required contribution to assist in pension plan sustainability. In plan year 2018, approximately 78% of Missouri’s plans either met or exceeded the full contribution.

**Revenues**

Plan year 2018 aggregate employer contributions increased to approximately \$2.22 billion, an increase of



approximately \$88 million from plan year 2017's aggregate employer contributions of approximately \$2.13 billion. Aggregate employee contributions in plan year 2018 were approximately \$1.03 billion, an increase of approximately \$18.8 million from 2017's \$1.01 billion. Investment income was approximately \$5.7 billion, a decrease of approximately \$1.8 billion from 2017's investment income of approximately \$7.5 billion. This decrease, relative to plan year 2017, reflected the increased volatility of the investment markets in 2018, and specifically, negative returns in investment markets in December 2018.



**Expenses:** Expenses in plan year 2018 increased from plan year 2017 with benefit payments constituting the largest increase. Benefit payments increased from approximately \$5.12 billion in 2017 to approximately \$5.4 billion in 2018. Refunds of contributions increased to \$117 million but did not exceed the previous high mark of \$117 million of 2015.

## Investments & Asset Allocation

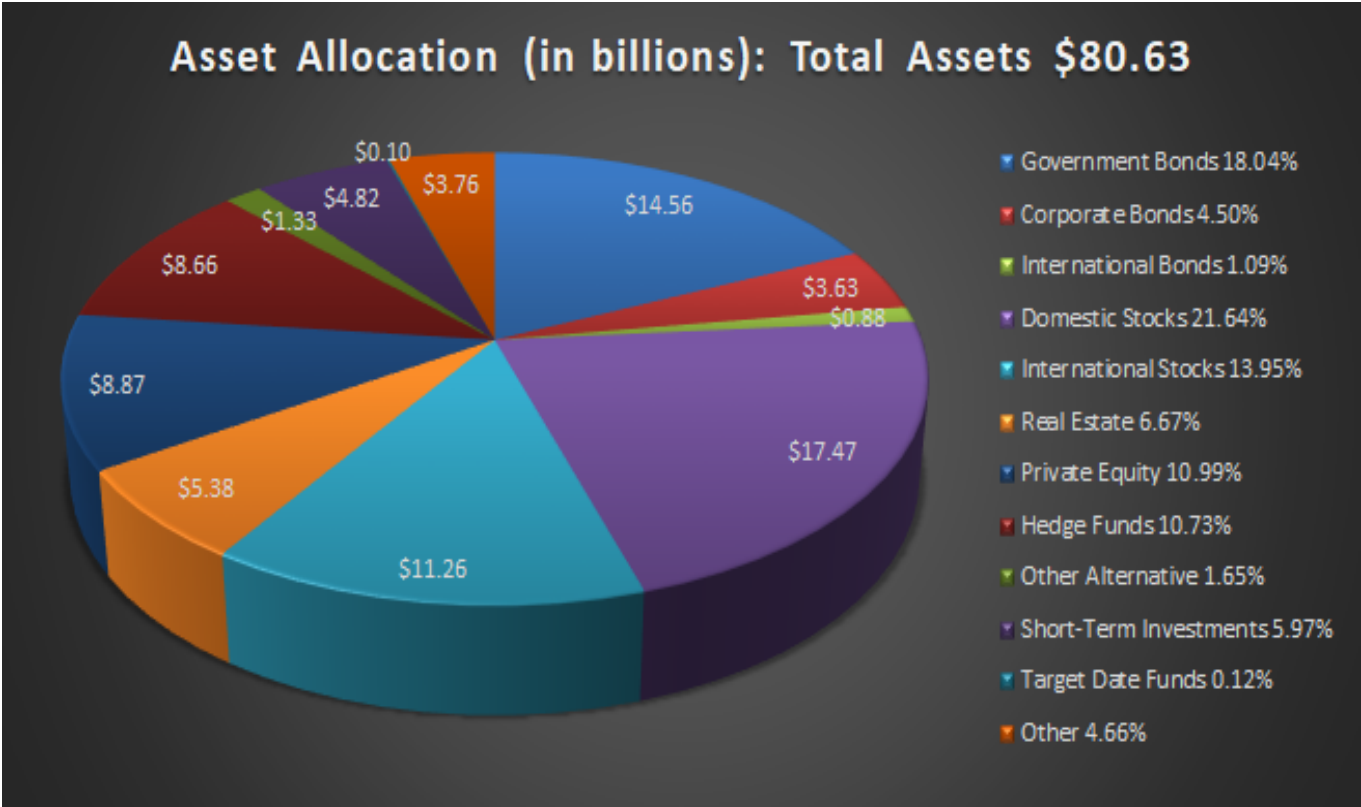
**Statutory Investment Requirements:** Chapter 105 of the Revised Statutes of Missouri governs Missouri's public pension plans, including provisions relating to plan investments and pension plan boards of trustees fiduciary responsibilities. Specifically, section 105.688 mandates the use of the Prudent Person Rule, which requires a plan investment fiduciary to "discharge his or her duties in the interest of the participants in the system and their beneficiaries and shall...act with the same care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a similar capacity and familiar with those matters would use in the conduct of a similar enterprise with similar aims..."<sup>5</sup> In addition, this statute further requires plan investment fiduciaries to make "...investments for the purposes of providing benefits to participants and participants' beneficiaries, and of defraying reasonable expenses of investing the assets of the system..."<sup>6</sup>

5 Mo. Ann. Stat. § 105.688 (West 2015).

6 Mo. Ann. Stat. § 105.688 (West 2015).

Given that investment income is one of two sources of income in the pension funding equation, it is critical that fiduciaries develop and review investment policies, strategies, and asset allocation. Each plan board of trustees sets an investment policy based on the fiduciary standards previously mentioned.

**Asset Allocation:** Section 105.688 also requires that plan fiduciaries give appropriate consideration to the diversification of the investments of the system. The chart below shows aggregate plan year 2018 asset allocation used by Missouri’s plans. The level of diversification and variety of asset classes often varies based on the size of the plan; the larger plans have opportunities to invest in alternative asset classes such as private equity, hedge funds, and commodities unlike smaller plans. Smaller plans are more likely to invest in mutual funds or exchange traded funds. Plan members in DC plans may have options to self-direct their investments with options such as mutual funds, target date funds, or stable value funds.



This is the first year that target date retirement funds have been included as a separate category in the JCPER annual survey and report. Used as investment options in some defined contribution plans, target date funds contain a mixture of equities and fixed income holdings based on an individual’s retirement date that adjusts the asset allocation based on risk the closer the individual is to retirement. The “Other” category includes some plan investments that do not fit under one of the other categories. Examples include mutual funds that contain exposure to more than one asset class, such as fixed income funds that include government and corporate bonds. The “Other Alternative” category may include commodities, timber, and infrastructure investments.

The total amount of assets identified in the asset allocation chart does not necessarily equal the aggregate market value of assets at the end of plan year 2018 due to different portfolio structures and investments.

## Pension Reforms

Based on data analyzed from a survey of approximately 246 state and local government retirement plans between 2009 and 2014, the Center for State & Local Government Excellence found that 74% of state plans and 57% of large local plans have adopted pension reforms to address rising costs.<sup>7</sup> In addition, a December 2018 report from NASRA found that the events of the economic recession of 2007-2009 resulted in nearly all states pursuing some form of pension reform.<sup>8</sup> The NASRA report indicated that the number of changes was unprecedented and due to different state pension structures, budgets, costs, and legal frameworks, no single change or reform could apply to each situation. On the whole, the majority of pension reforms have included requiring greater employee contributions, reductions in cost of living adjustments, increasing employee age and service requirements, and in some cases, decreasing benefits. Additionally, some states increased the vesting requirement from five years to ten years. Missouri is no exception. Since 2009, at least twenty-seven Missouri defined benefit plans have implemented structural changes in an effort to address cost containment concerns. Examples include reducing a benefit multiplier, reducing or eliminating a COLA, increasing employee contributions, increasing age and service requirements, and reducing the amount of employee contributions refunded upon retirement. Some plan sponsors have enacted a new benefit tier for employees hired on or after a certain date, often including some of the previously mentioned changes. Other plan sponsors have closed or frozen a defined benefit plan and either established a new defined contribution plan or joined Missouri LAGERS.

## National Issues

Public pension issues continue to be highlighted across the country. The role of the federal government relative to pensions has been a source of discussion for many decades since the passage of the Employee Retirement Income Security Act (ERISA) in 1974. The issue of retirement plan availability continues to be discussed.

The SECURE Act (Setting Every Community Up for Retirement Act of 2019) was passed into law on December 20, 2019 as part of the Further Consolidation Appropriations Act, 2020. The bill became effective January 1, 2020. The SECURE Act made numerous changes impacting retirement plans. Key changes include, but are not limited to, the following areas:

- Makes changes to the laws governing multiple employer plans. The SECURE Act allows for the creation of “pooled employer plans” that are to be administered by a “pooled plan provider.” This change in law would permit smaller unrelated companies to band together under a centrally administered retirement plan with the potential for lower costs and fees. Applies to defined contribution plans only.
- IRAs: Repeals a restriction on contributions to traditional IRAs after age 70 1/2. Increases the age at

7 Jean-Pierre Aubry and Caroline V. Crawford, Issue Brief, “State and Local Pension Reform Since the Financial Crisis,” Center for State & Local Government Excellence, December 2016, <http://slge.org/wp-content/uploads/2016/12/State-and-Local-Pension-Reform-Since-the-Financial-Crisis.pdf>

8 Keith Brainard and Alex Brown, “Spotlight on Significant Reforms to State Retirement Systems,” National Association of State Retirement Administrators, December 2018, <https://www.nasra.org/files/Spotlight/Significant%20Reforms.pdf>

which IRA distributions are required from age 70 1/2 to age 72;

- Distributions from certain plans after death: Shortens the period of time during which certain beneficiaries of IRAs and defined contribution accounts must take distributions of inherited account balances. Establishes three different classes of beneficiary for inherited IRAs;
- Annuity Options in DC Accounts: Requires DC plans to provide estimates to participants of monthly income if a participant's account were to be annuitized.

It is important to note that the federal SECURE Act is different from legislation of the same name that has been filed in numerous state legislatures in recent years.

## State Issues

As the Second Regular Session of the Missouri 100th General Assembly convenes, legislators will face numerous topics, with budgetary issues likely being the most difficult. While the State appropriations process may not directly affect most of Missouri's public pension plans, a primary source of revenue for all plans is the Missouri taxpayer. This fundamental concept continues to be paramount when the General Assembly sets public policy. To monitor pension related legislation during the 2020 legislative session, weekly updates are posted to the JCPER's website: <https://jcper.org/weekly-pension-legislation/>

**State Legislation:** During the 2019 regular session, legislators introduced twenty-seven pension-related bills. At the end of session, three pension-related bills were truly agreed to and finally passed. The Governor signed all three into law.

### HB 77

- **Public School Retirement System (PSRS) & Public Education Employee Retirement System (PEERS):** Exempts retired members of PSRS employed by a community college from working after retirement provisions of law passed by the General Assembly in SB 892 (2018). Retired members of PSRS employed by a community college will instead be subject to the 550 hour limit and 50% provision for annual compensation;
- The bill contained an emergency clause, which caused it to become effective upon signature of the Governor. Signed by the Governor on April 16, 2019.

### SB 185

- **Missouri State Employees' Retirement System (MOSERS).** Provides statutory authorization for the Missouri Housing Development Commission and Environmental Improvement and Energy Resources Authority to have MOSERS coverage for their employees.

**CCS/SB 17:** Bill relating to public employee retirement systems:

- **LAGERS (Local Government Employees' Retirement System):** Authorizes political subdivisions located in a third class county or in Cape Girardeau County to elect to cover certain employee classes as public safety members. Those that can elect to be covered as public safety members are emergency telecommunications, jailors and emergency medical service personnel;



- **Public School Retirement System (PSRS) & Public Education Employee Retirement System (PEERS):** Modifies the divorce pop-up provision passed in 2017 to apply to marriages that were dissolved prior to September 1, 2017 provided that certain criteria are met;
- **Public School Retirement System & Public Education Employee Retirement System:** Exempts retired members of PSRS employed by a community college from working after retirement provisions of law passed by the General Assembly in SB 892 (2018). Retired members of PSRS employed by a community college will instead be subject to the 550 hour limit and 50% provision for annual compensation;
- **Missouri State Employees' Retirement System (MOSERS).** Provides statutory authorization for the Missouri Housing Development Commission and Environmental Improvement and Energy Resources Authority to have MOSERS coverage for their employees.

### **Legislative Interim Study**

In May 2019, the Senate President Pro Tem established the MODOT and Patrol Employees' Retirement System Study Committee to study and make recommendations regarding the system. Consisting of five members appointed by the President Pro Tem, the committee met during the 2019 legislative interim and heard testimony at two meetings. The President Pro Tem dissolved the committee on November 13, 2019 with no report or recommendations issued.

### **Continued Implementation of House Bill 1443 (2016)**

Calendar years 2017, 2018, and 2019 saw the implementation of House Bill 1443 (2016). Section 70.621, RSMO permits the LAGERS board of trustees to enter into an agreement with the board of trustees of a LAGERS-member political subdivision for LAGERS to assume the duties and responsibilities of operating a prior closed or frozen pension plan. In calendar year 2017, LAGERS assumed the operation of both Jefferson City Firemen's Retirement System and Jennings Police & Firemen's Retirement Fund. Both plans had been closed to new entrants for a number of years; plan sponsors had previously testified in legislative committee in favor of the legislation. On January 1, 2019, Antonia Fire Protection District transferred its frozen defined benefit plan to LAGERS under this provision of law. In June 2019, after the close of plan year 2018, the City of Sedalia transferred its Police Retirement Fund to LAGERS. Additional plan sponsors have contacted LAGERS and may consider transferring a prior closed or frozen pension plan to LAGERS.

### **Actuarial Standard of Practice 51**

In September 2017, the Actuarial Standards Board (ASB) released a finalized version of ASOP 51 (Actuarial Standard of Practice) titled "Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Plan Contributions."<sup>9</sup> ASOP 51 is binding on credentialed actuaries in the United States. It became effective for actuarial work product with a measurement date on or after November 1, 2018. The ASB developed ASOP 51 to help plan sponsors better understand and manage risk. ASOP 51 requires actuaries to identify risks that, in professional judgment, may reasonably be anticipated to affect the plan's future financial status. The ASOP lists examples of risks that include, but are not limited to,

9 Actuarial Standards Board, "Actuarial Standard of Practice No. 51," September 2017, <http://www.actuarialstandardsboard.org/asops/assessment-disclosure-risk-associated-measuring-pension-obligations-determining-pension-plan-contributions-3/>

investment risk, asset/liability mismatch risk, interest rate risk, demographic risks, and contribution risk. In addition, actuaries are encouraged to calculate and disclose maturity measures as ratios, such as market value of assets to payroll, retired member liabilities to total plan liabilities, and duration of liabilities. As a result, those actuarial valuations with measurement dates of November 1, 2018 and later that were submitted to the JCPER for plan year 2018 contain ASOP 51 risk measure analysis.

## **Looking Forward & Conclusion**

This annual report contains information from the JCPER's annual survey for plan year 2018. However, since the end of plan year 2018 on December 31, 2018, and through this report's publication in February 2020, significant changes have occurred in the investment markets. In contrast to much of 2015 and 2016, beginning after the November 2016 presidential election, the investment markets experienced strong performance with equities, in particular, reaching record high levels. Nevertheless, this strong performance in the investment markets has been met with increasing volatility throughout calendar year 2018. Most notably, in December 2018, stock market indices dropped significantly with some indices experiencing a double-digit decline. However, markets rebounded in calendar year 2019 with stock market indices reaching double-digit returns. The technology sector, in particular, performed well. At the time of this report's publication in February 2020, additional factors impacting investment markets include tariffs and trade tensions and the corona-virus in Asia that has disrupted manufacturing and supply chains.

As these challenges for public pension plans and state and local governments continue to exist, the mission of the JCPER has never been more important. The existence of the JCPER was a direct response to the very public concerns of the stability of public pension plans in the early 1980s. Established in 1983, the JCPER continues to serve as the centralized reporting entity for Missouri's public pension plans. In light of the continued response to public plan experience, it is essential that the General Assembly insist on proper disclosure to ensure transparency of plan information.



## **DEFINED BENEFIT PLANS**

**Data included  
in this appendix reflects  
PERS information from plan year 2018.**

# AFFTON FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 39 Inactive: 29

## CONTRIBUTIONS:

Employer: \$1,278,428 Employee: \$244,016

## BENEFITS:

### Normal Retirement Formula:

1.7333% of compensation x years of creditable service

Temporary Benefit: Supplemental Benefit: \$500 monthly to Medicare eligibility

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

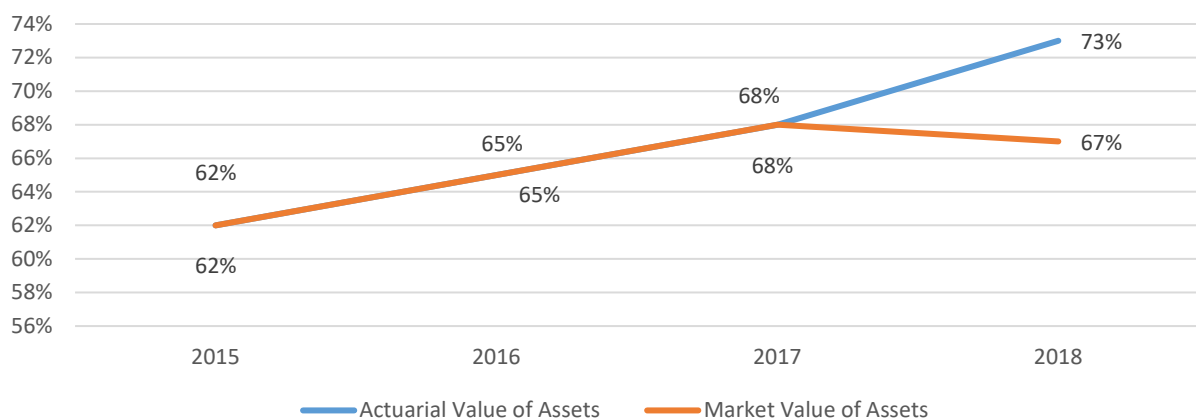
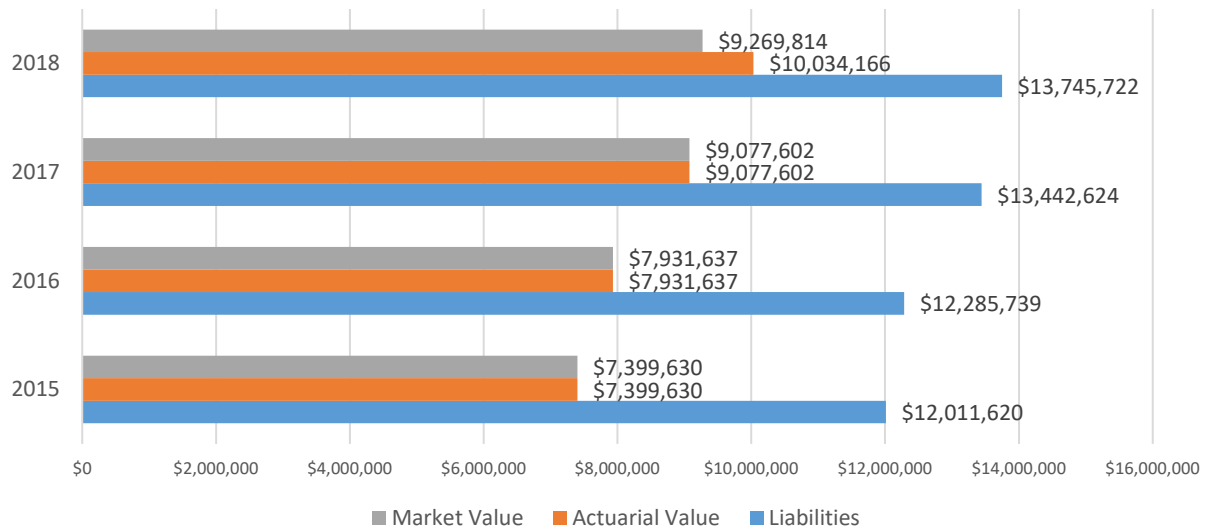
Mortality Table: PubS-2010 Public Safety with Generational Improvements from 2010 based on MP-2018

Vesting: Partial 3 / Full 7

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6.5% Salary: 2.5-6.5%



# ARNOLD POLICE PENSION PLAN

## MEMBERSHIP:

Active: 52 Inactive: 15

## CONTRIBUTIONS:

Employer: \$379,796 Employee: \$269,023

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service  
Maximum: 75% of compensation

### Normal Retirement Eligibility:

Age 55 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

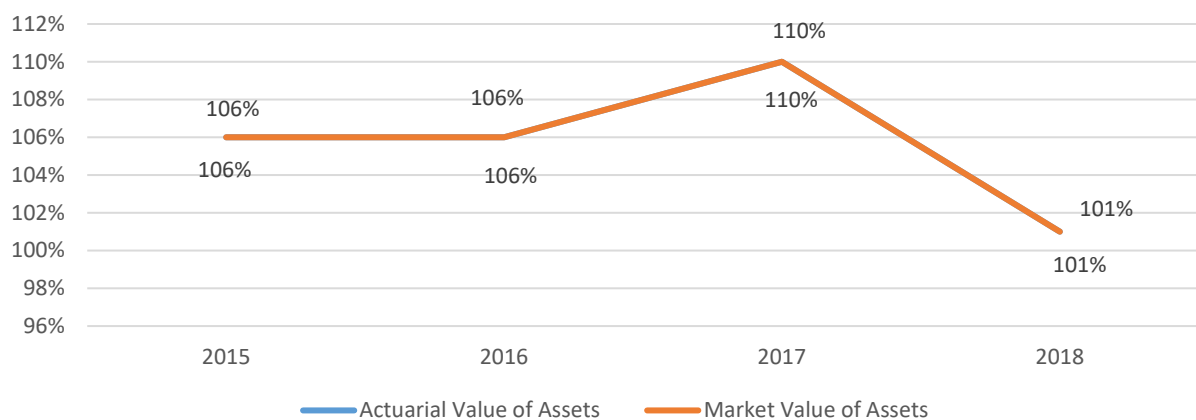
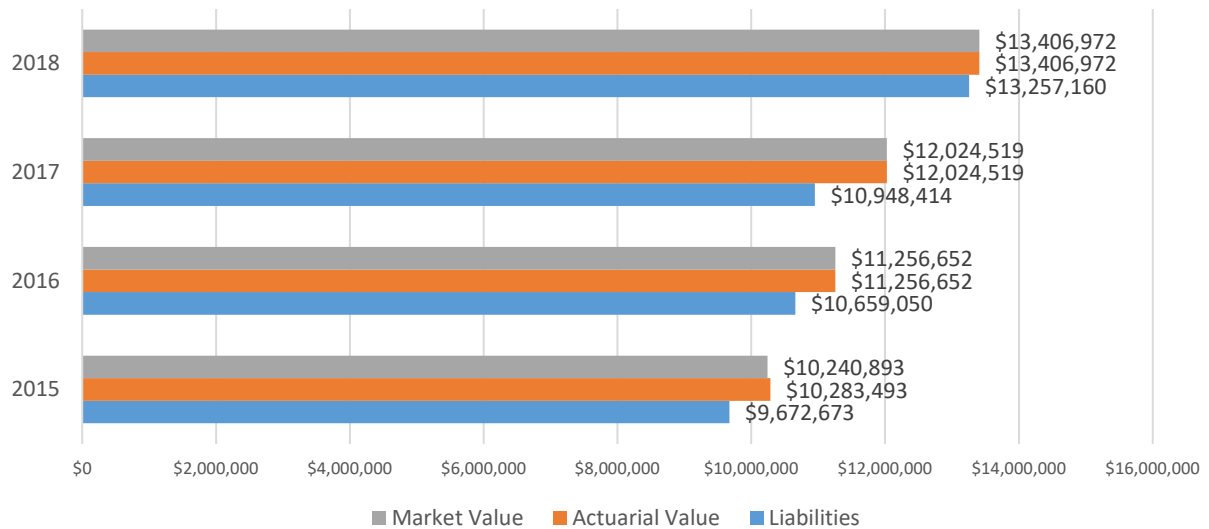
Mortality Table: 2018 Combined Current Liability Mortality Table, Male and Female Rates

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6% Salary: 4.5%





# BERKELEY POLICE & FIRE PENSION FUND

## MEMBERSHIP:

Active: 41 Inactive: 60

## CONTRIBUTIONS:

Employer: \$655,697 Employee: \$144,018

## BENEFITS:

### Normal Retirement Formula:

For members with 20 or more years of service: 2.5% of compensation for the first 20 years of service + 1% for the next 5 years of service  
Maximum: 55% of compensation

For members with less than 20 years of service: 2.5% of compensation for service earned before 1/1/17 plus 2% of compensation for service earned after 12/31/16  
Maximum: 55% of compensation

### Normal Retirement Eligibility:

Age 55 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

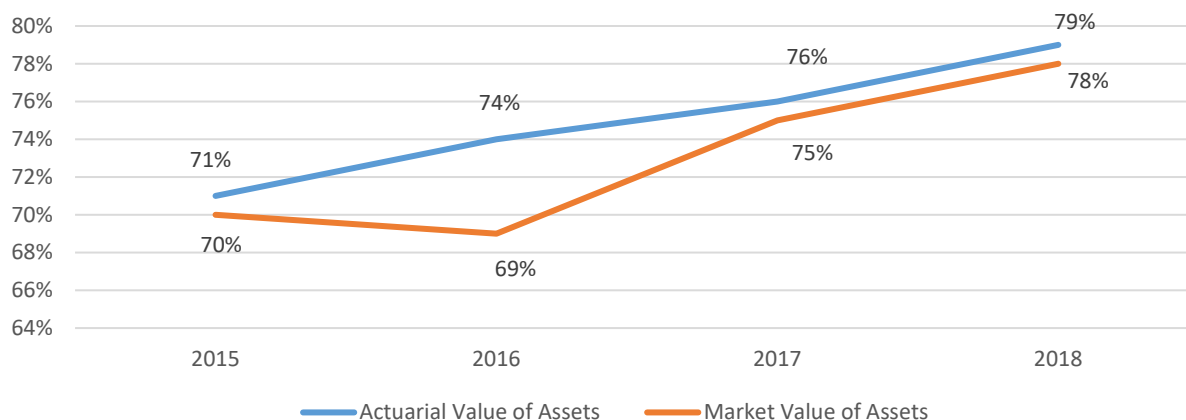
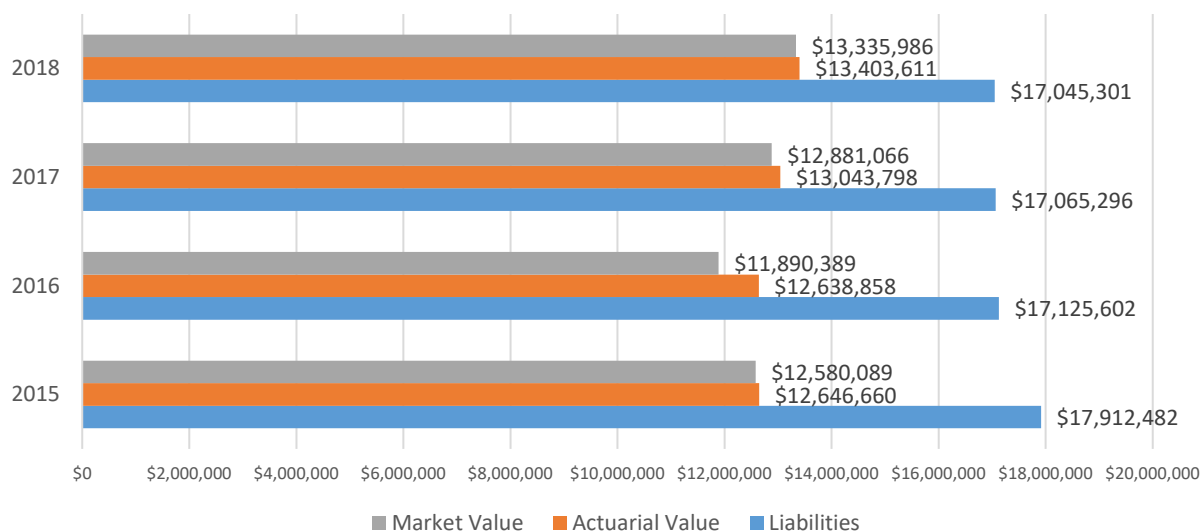
Mortality Table: RP-2000 with generational projection using Scale AA

Vesting: 10 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4%



# BI-STATE DEVELOPMENT AGENCY DIVISION 788, A.T.U.

## MEMBERSHIP:

Active: 1,414 Inactive: 1,322

## CONTRIBUTIONS:

Employer: \$9,659,264 Employee: \$3,861,995

## BENEFITS:

### Normal Retirement Formula:

\$40 x years of Credited Service for those retiring with less than 25 years of Credited Service, \$55 x years of Credited Service for those retiring with 25 or more years of Credited Service

### Normal Retirement Eligibility:

Age 65  
Age 55 with 20 years of service  
25 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

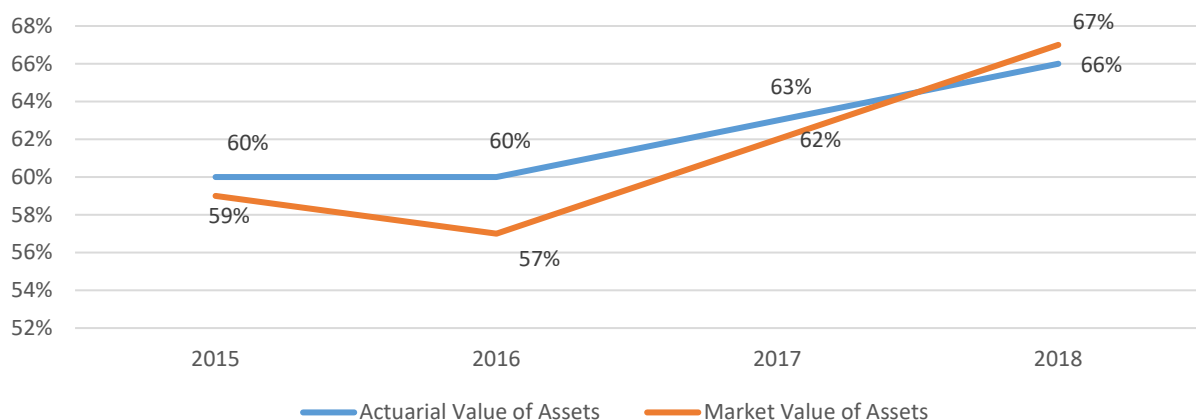
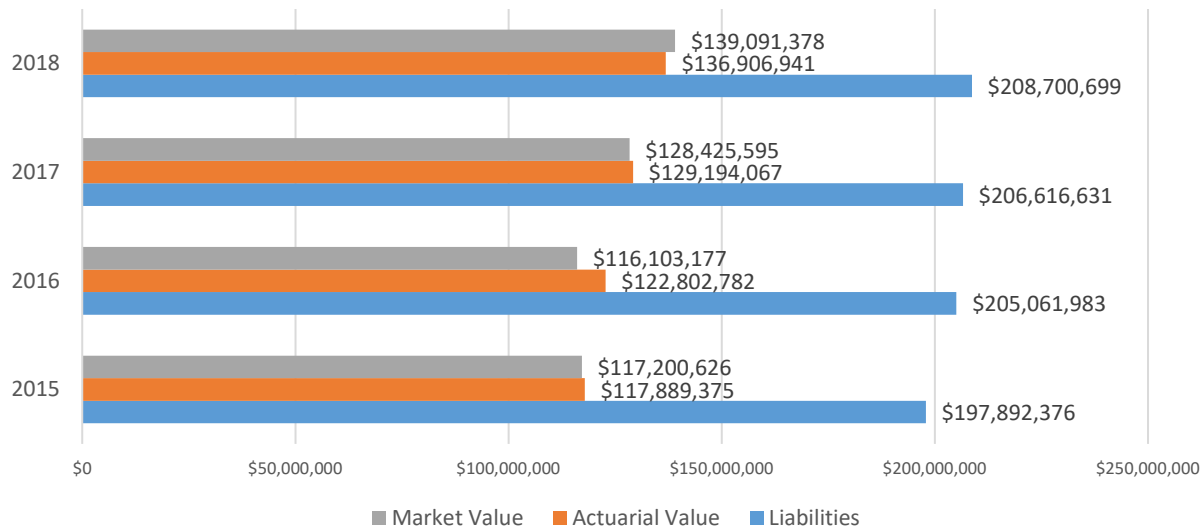
**Mortality Table:** RP-2014 Blue Collar adjustment Scale BB

**Vesting:** 10 years

**COLA:** Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: N/A



# BI-STATE DEVELOPMENT AGENCY LOCAL 2 I.B.E.W.

## MEMBERSHIP:

Active: 47 Inactive: 23

## CONTRIBUTIONS:

Employer: \$492,823 Employee: \$135,362

## BENEFITS:

**Normal Retirement Formula:**  
\$60 x years of credited service

**Normal Retirement Eligibility:**  
25 years of service  
Age 60 with 10 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2014 Blue Collar projected five years, Scale BB

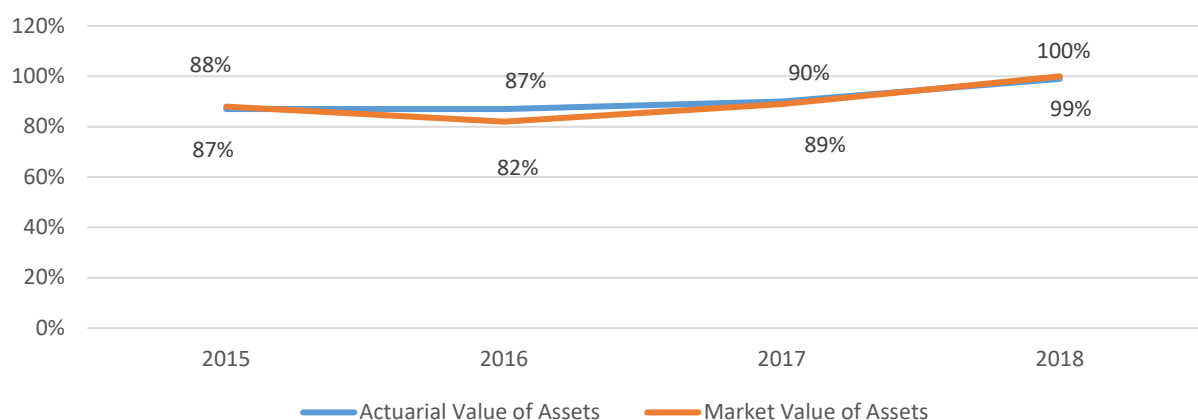
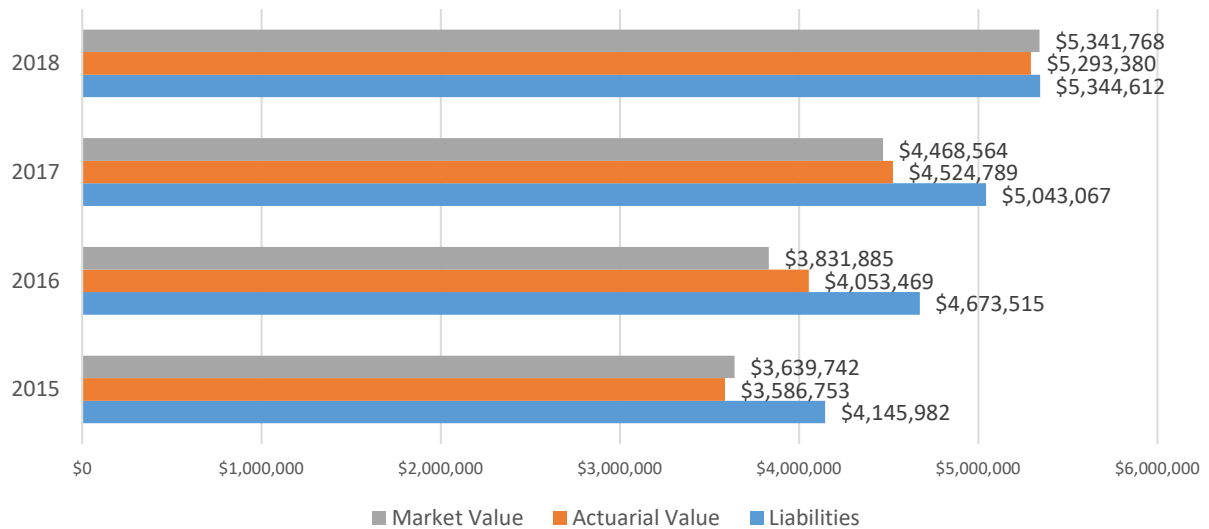
**Vesting:** 10 years

**COLA:** Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: N/A

**Plan closed 1/1/14**



# BI-STATE DEVELOPMENT AGENCY SALARIED EMPLOYEES

## MEMBERSHIP:

Active: 281 Inactive: 492

## CONTRIBUTIONS:

Employer: \$7,635,000 Employee: \$523,686

## BENEFITS:

### Normal Retirement Formula:

1.5% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2014 Healthy Annuitant with White Collar Adjustment projected five years using Scale BB

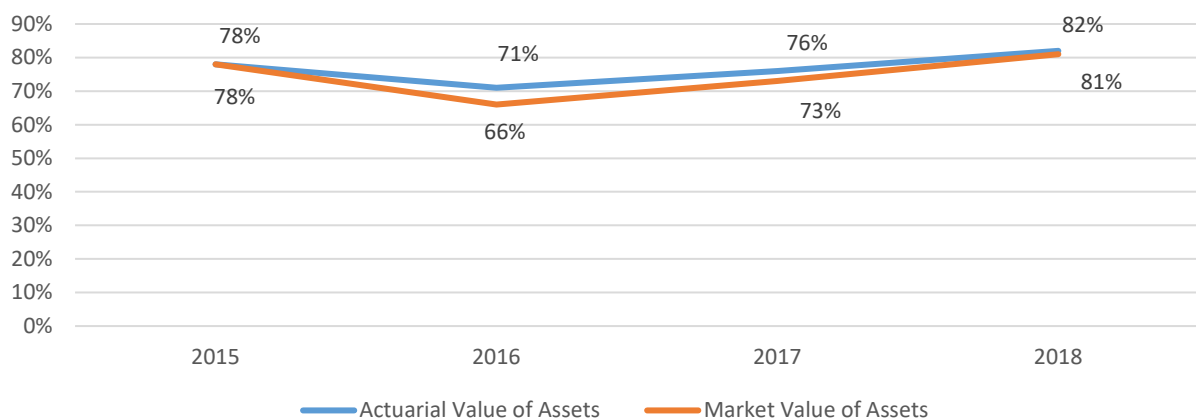
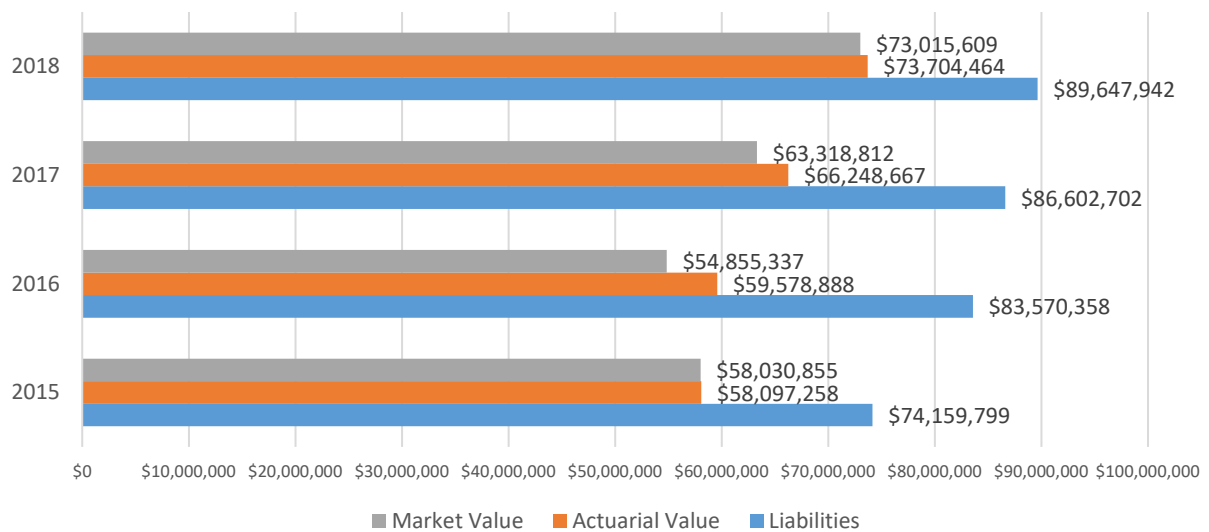
Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.5%

Plan Closed to new participants 7/1/13



# BLACK JACK FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 38 Inactive: 16

## CONTRIBUTIONS:

Employer: \$1,367,995 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

Non-Uniformed Employees: \$161 x years of credited service  
Uniformed Employees: \$216 x years of credited service

### Normal Retirement Eligibility:

The earlier of age 60 or 30 years service

Social Security Coverage: Yes

Valuation of Assets: Market Value

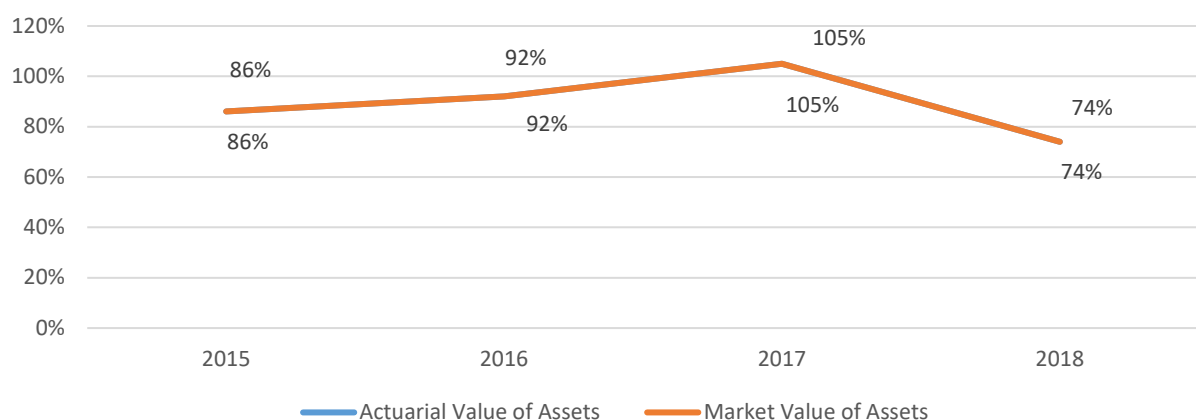
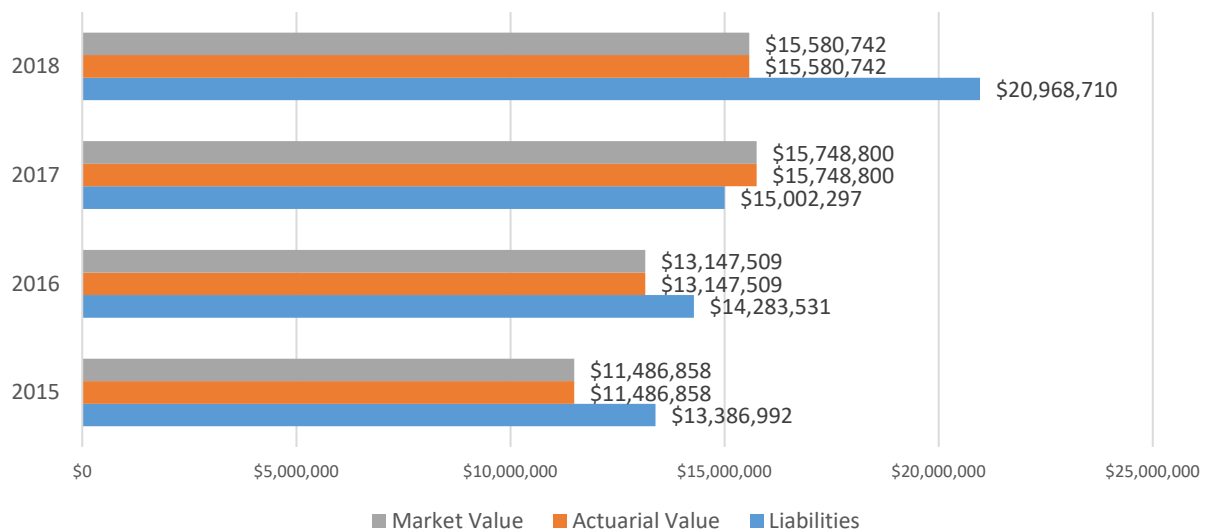
Mortality Table: RP-2014 Blue Collar Healthy Annuitant based on Scale MP-2018

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.5%



# BOTHWELL REGIONAL HEALTH CENTER RETIREMENT PLAN

## MEMBERSHIP:

Active: 220 Inactive: 577

## CONTRIBUTIONS:

Employer: \$1,901,998 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1.2% of compensation x years of creditable service  
1.35% for service prior to 10/01/98

### Normal Retirement Eligibility:

Age 65 with 5 years of service  
Rule of 85

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2014 Generational Scale MP-2017

Vesting: 5 years

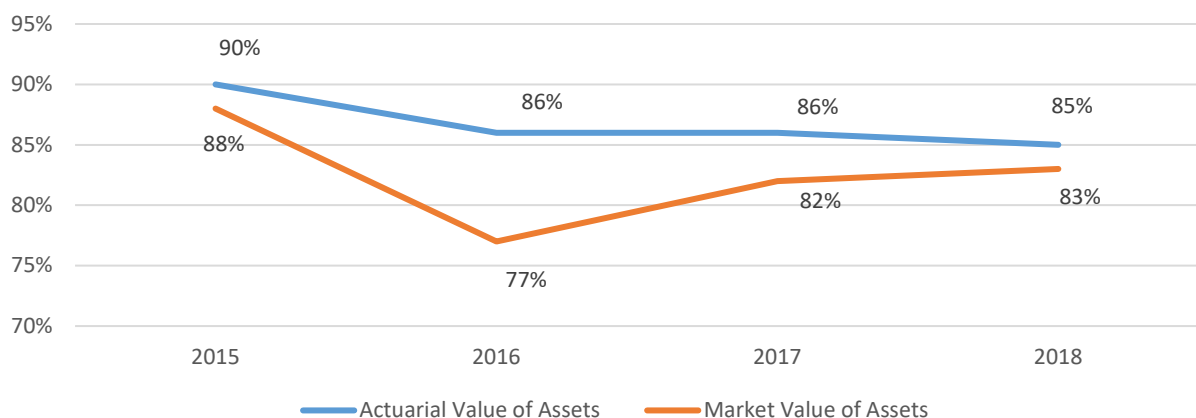
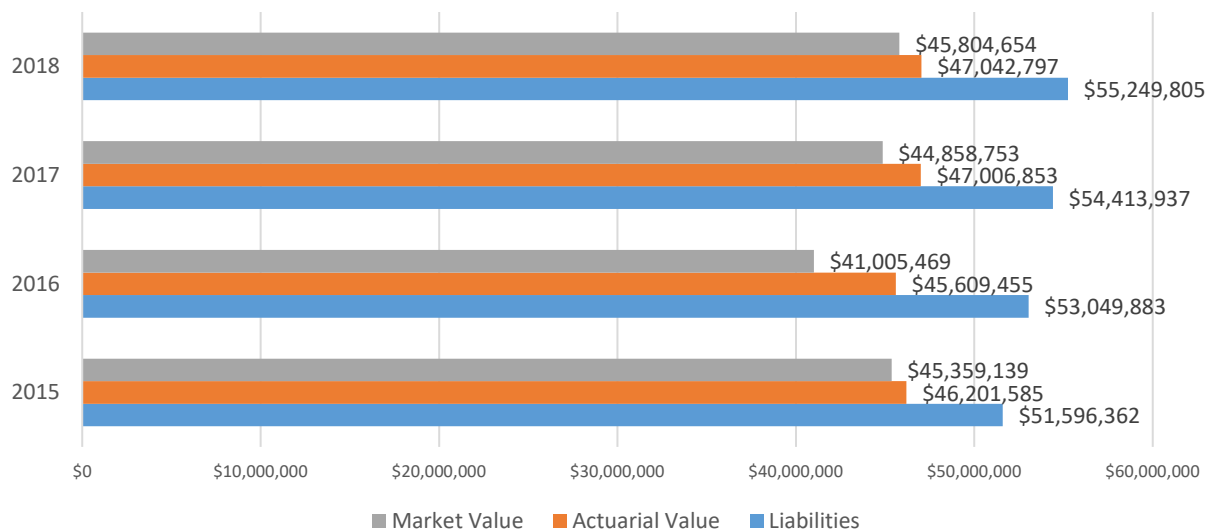
COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.75% Salary: 3%

Plan closed June 2006: Defined contribution plan.

See corresponding information in defined contribution section.





# BRENTWOOD POLICE & FIREMEN'S RETIREMENT FUND

## MEMBERSHIP:

Active: 51 Inactive: 41

## CONTRIBUTIONS:

Employer: \$1,343,602 Employee: \$243,273

## BENEFITS:

### Normal Retirement Formula:

3.5% of compensation for the first 20 years of service + 1% for the next 10 years of service

### Normal Retirement Eligibility:

Age 55 with 10 years of service

Social Security Coverage: No

Valuation of Assets: Market Value

Mortality Table: RP-2014 Healthy Annuitant Blue Collar with Scale MP-2018

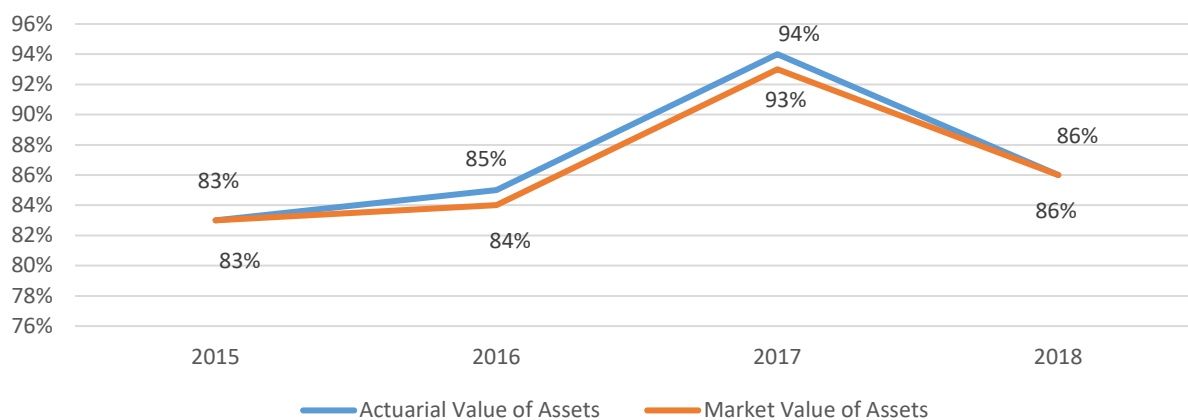
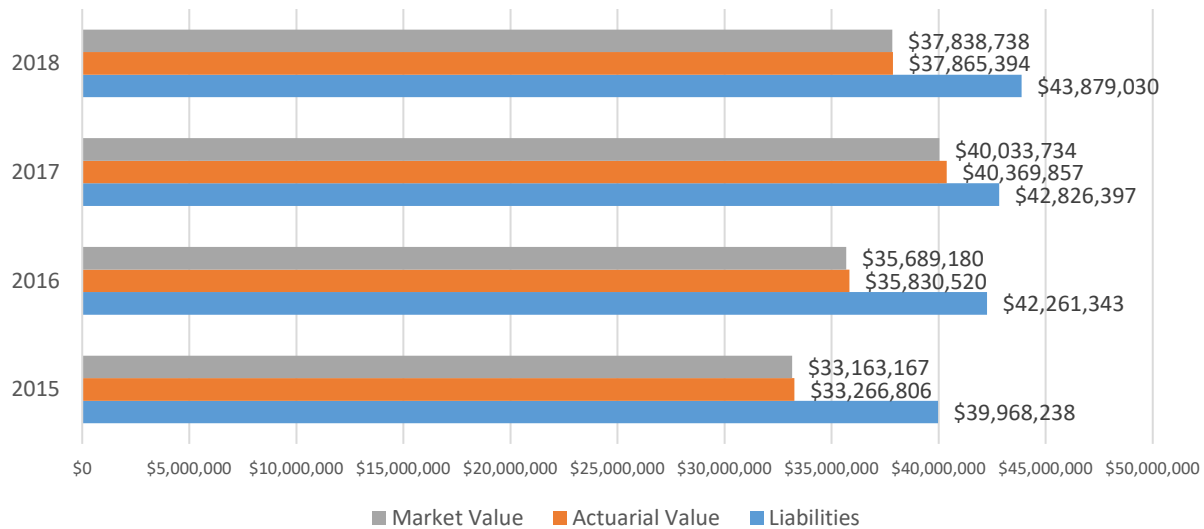
Vesting: 10 years

COLA: Annual Amount Maximum: 2%

Cap Total Max: 20%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.5%



# BRIDGETON EMPLOYEES RETIREMENT PLAN

## MEMBERSHIP:

Active: 79 Inactive: 170

## CONTRIBUTIONS:

Employer: \$1,700,000 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: 3 Years

Mortality Table: RP-2000 projected fully generationally using Scale BB

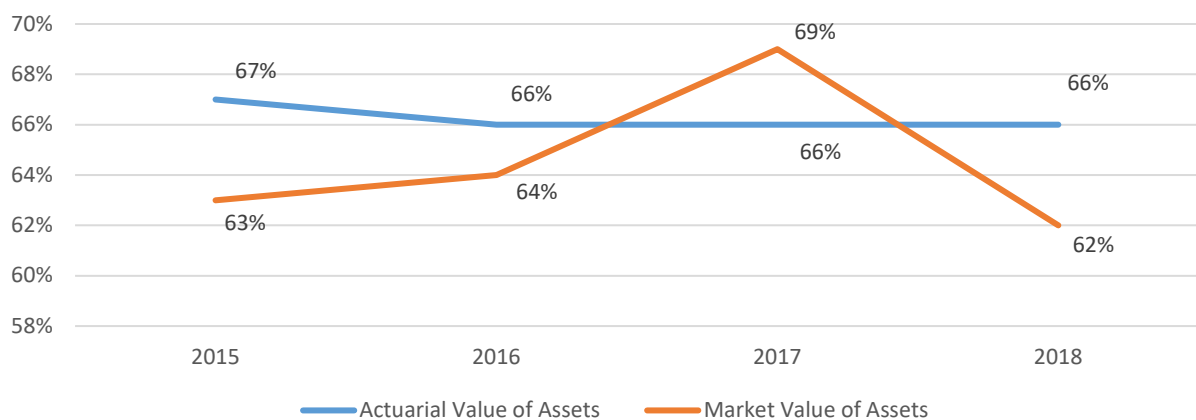
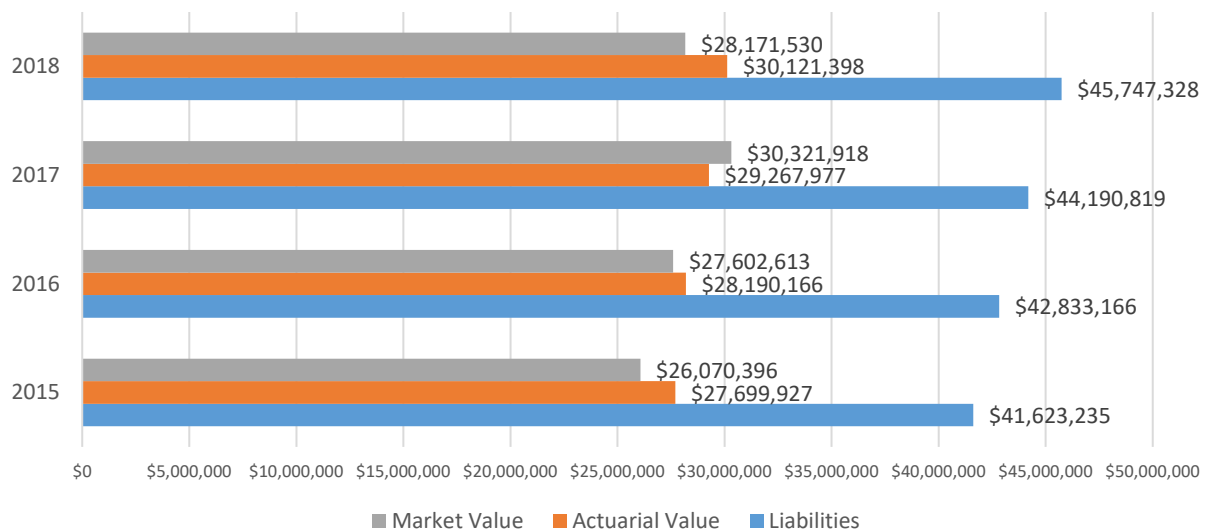
Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 4%

Plan frozen to new entrants effective January 1, 2012.



# CARTHAGE POLICEMEN'S & FIREMEN'S PENSION PLAN

## MEMBERSHIP:

Active: 49 Inactive: 59

## CONTRIBUTIONS:

Employer: \$448,502 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation for the first 20 years of service + 1% for the next 15 years of service

### Normal Retirement Eligibility:

Age 55 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 years

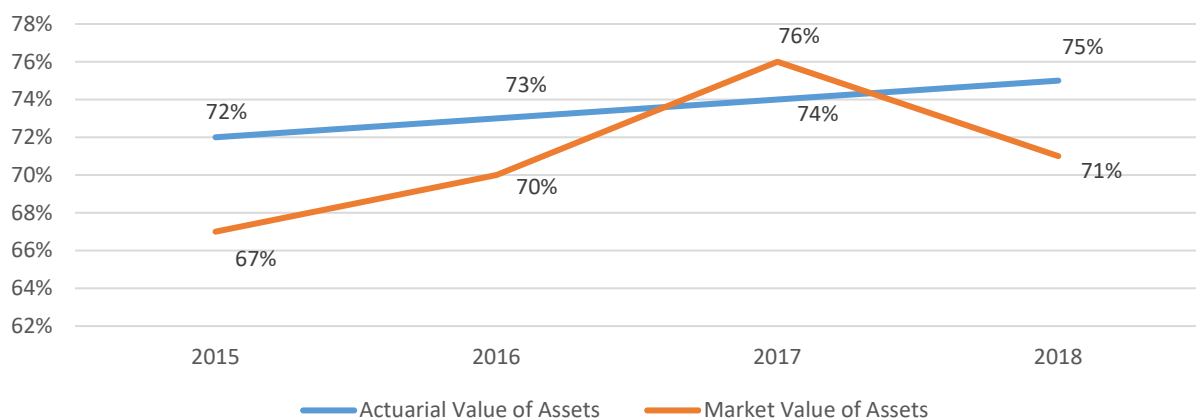
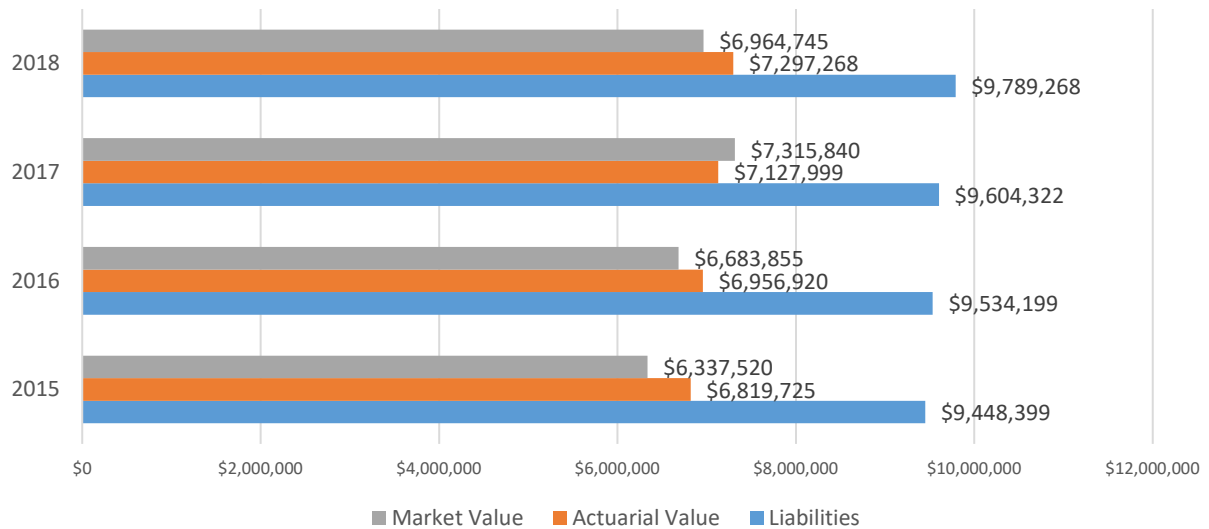
Mortality Table: RP-2014 Generational with Scale MP-2018

Vesting: Partial 5 / Full 10

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%



# CLAYTON NON-UNIFORMED EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 89 Inactive: 105

## CONTRIBUTIONS:

Employer: \$534,824 Employee: \$162,059

## BENEFITS:

### Normal Retirement Formula:

1.5% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Assumed yield, 20% adjustment to market

Mortality Table: RP-2000 Combined Healthy Generational Scale BB

Vesting: 5 years

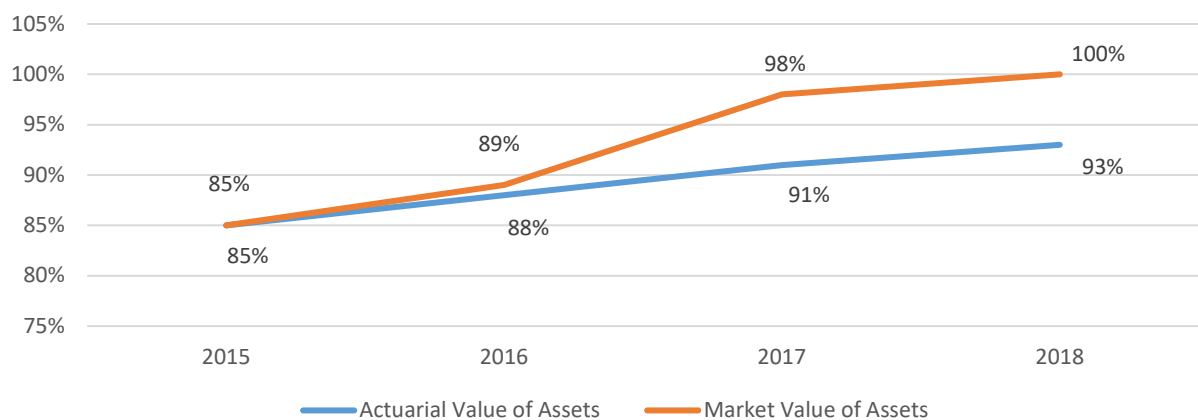
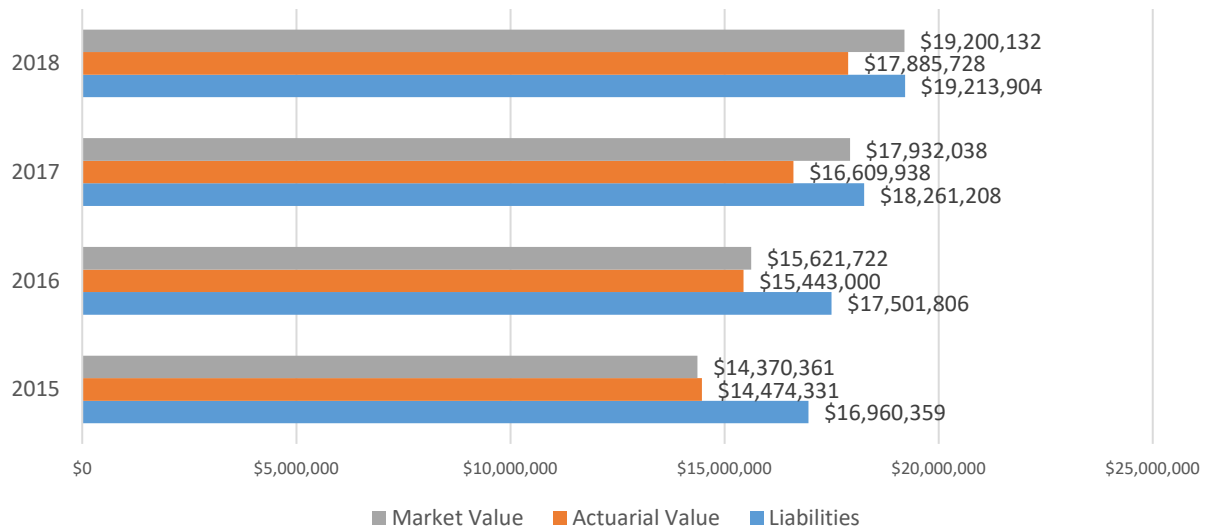
COLA: Annual Amount Maximum: 2%

Percent of CPI: 100%

Cap Total Maximum: 25%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4%



# CLAYTON UNIFORMED EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 83 Inactive: 75

## CONTRIBUTIONS:

Employer: \$1,109,879 Employee: \$324,520

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service  
Maximum: 60% of compensation

### Normal Retirement Eligibility:

Age 55 with 10 years of service  
Age 50 with 25 years of service  
Age 65 with 5 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 3 Years

**Mortality Table:** RP-2000 Blue Collar with Scale BB on a fully generational basis

**Vesting:** 10 years

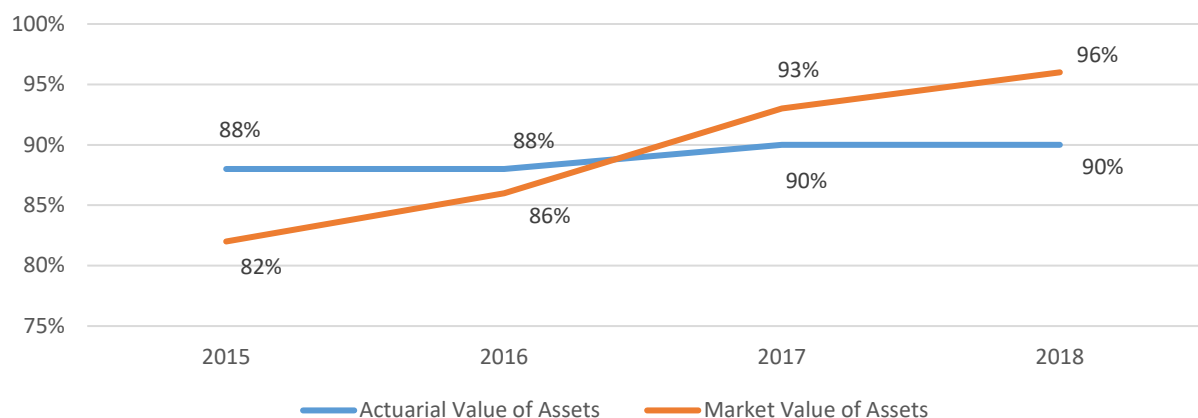
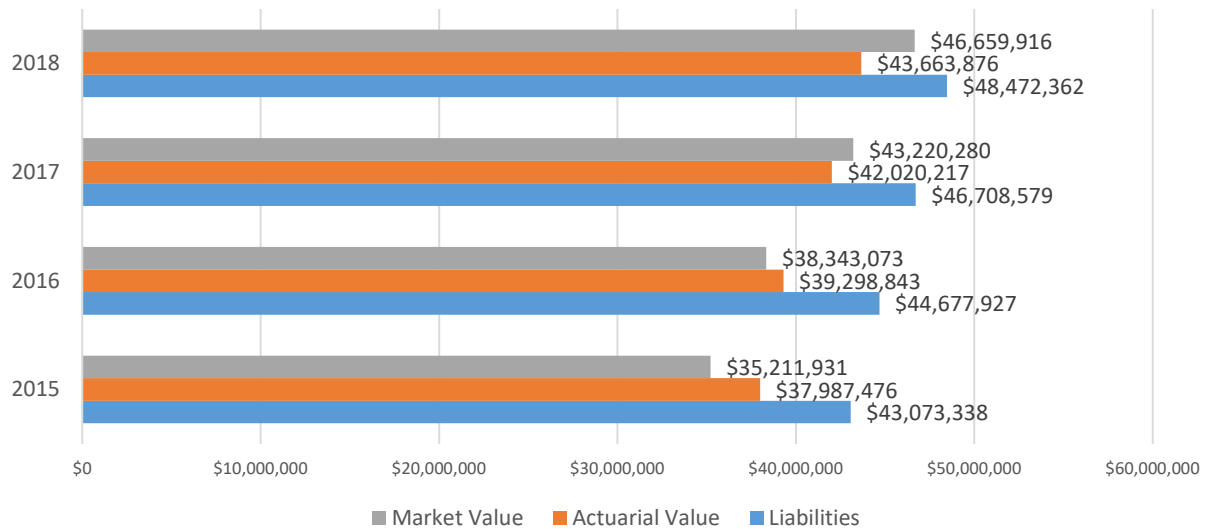
**COLA:** Annual Amount Maximum: 2%

**Percent of CPI:** 100%

**Cap Total Maximum:** 25%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%



# COLUMBIA FIREMEN'S RETIREMENT PLAN

## MEMBERSHIP:

Active: 141 Inactive: 160

## CONTRIBUTIONS:

Employer: \$5,426,042 Employee: \$1,103,253

## BENEFITS:

### Normal Retirement Formula:

Tier 1: 3.5% of compensation for the first 20 years of service + 2% for the next 5 years of service  
Maximum: 80% of compensation

Tier 2 (Hired on/after 10/1/12): 2.5% of compensation x years of service. No maximum benefit.

### Normal Retirement Eligibility:

Tier 1: Age 65 or 20 years of service

Tier 2 (Hired on/after 10/1/12): Age 55 with 1 year of service. Rule of 80.

**Social Security Coverage:** No

**Valuation of Assets:** 4 Years

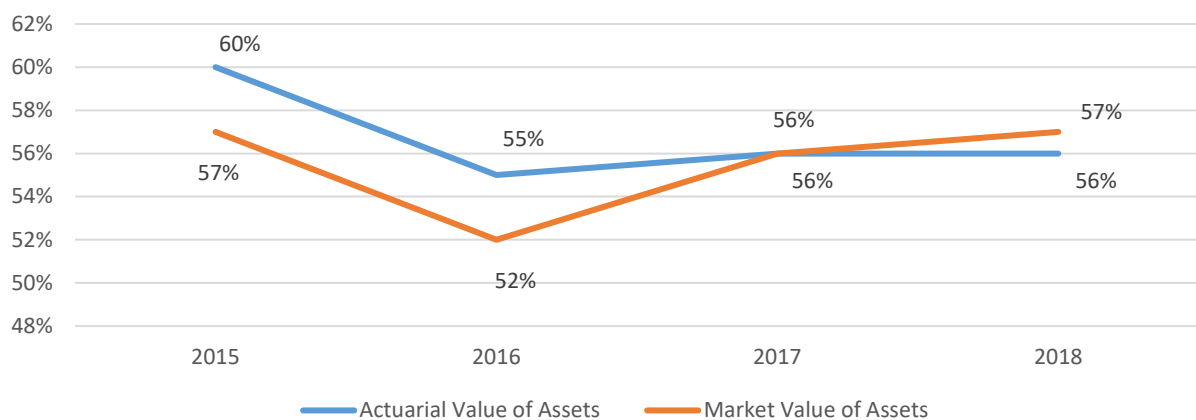
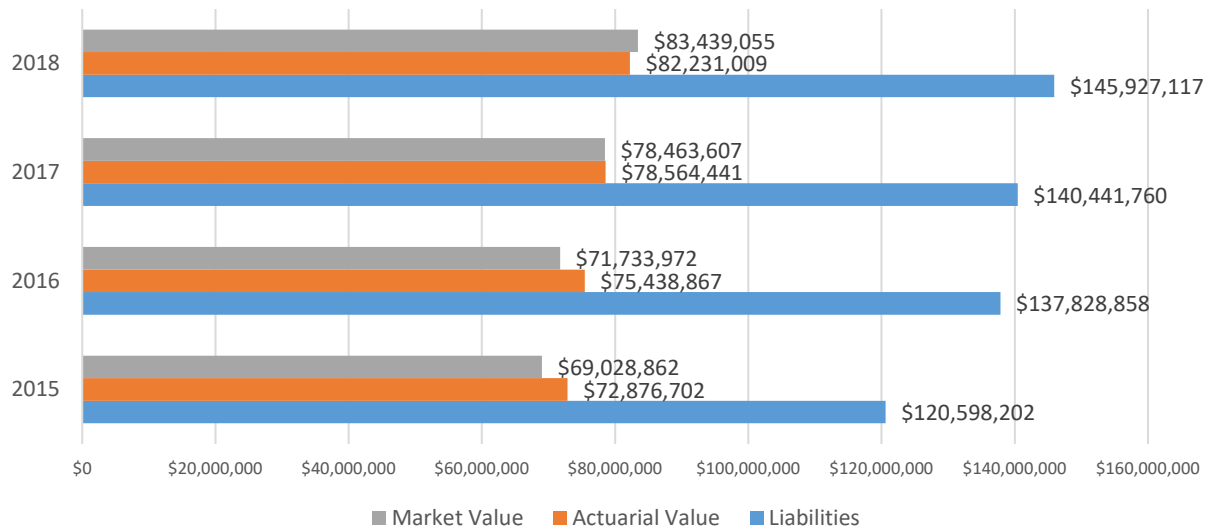
**Mortality Table:** RP-2014 with Scale MP-2015

**Vesting:** 1 year

**COLA:** Annual Amount Minimum: 2%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.25%





# COLUMBIA POLICE RETIREMENT PLAN

## MEMBERSHIP:

Active: 161 Inactive: 193

## CONTRIBUTIONS:

Employer: \$3,796,494 Employee: \$338,382

## BENEFITS:

### Normal Retirement Formula:

Tier 1: 3% of compensation for the first 20 years of service + 2% for the next 5 years of service

Maximum: 70% of compensation

Tier 2 (Hired on/after 10/1/12): 2% of compensation for the first 25 years of service + 1.5% for each year over 25.

Maximum: 57.5% of compensation

### Normal Retirement Eligibility:

Tier 1: Age 65 or 20 years of service

Tier 2 (Hired on/after 10/1/12): Age 65 or 25 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 4 Years

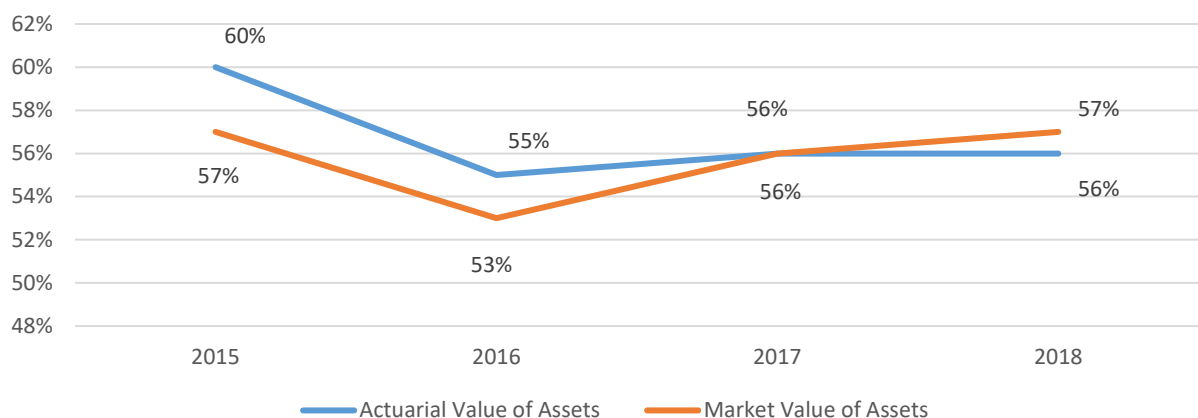
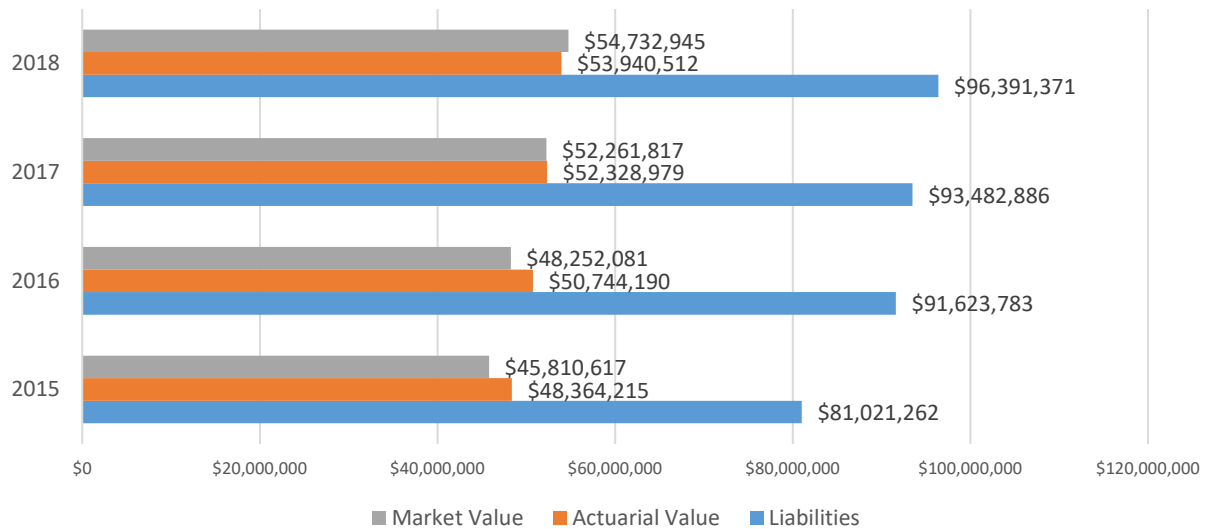
**Mortality Table:** RP-2014 with Scale MP-2015

**Vesting:** 1 year

**COLA:** Annual Amount Minimum: 0.6%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.25%



# COMMUNITY FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 60 Inactive: 20

## CONTRIBUTIONS:

Employer: \$862,771 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

60% of compensation  
or the actuarial equivalent of the participant's prior DC balance.

### Normal Retirement Eligibility:

Age 62  
Age 60 with 20 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

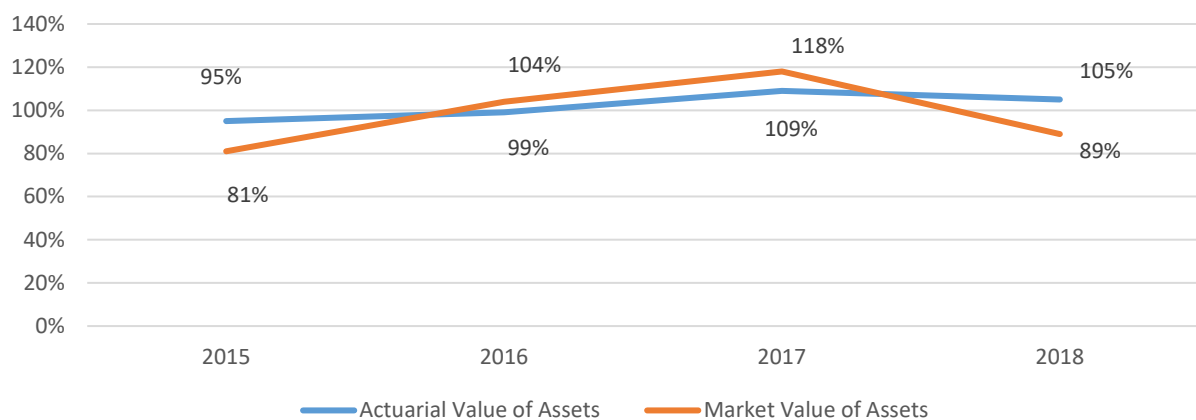
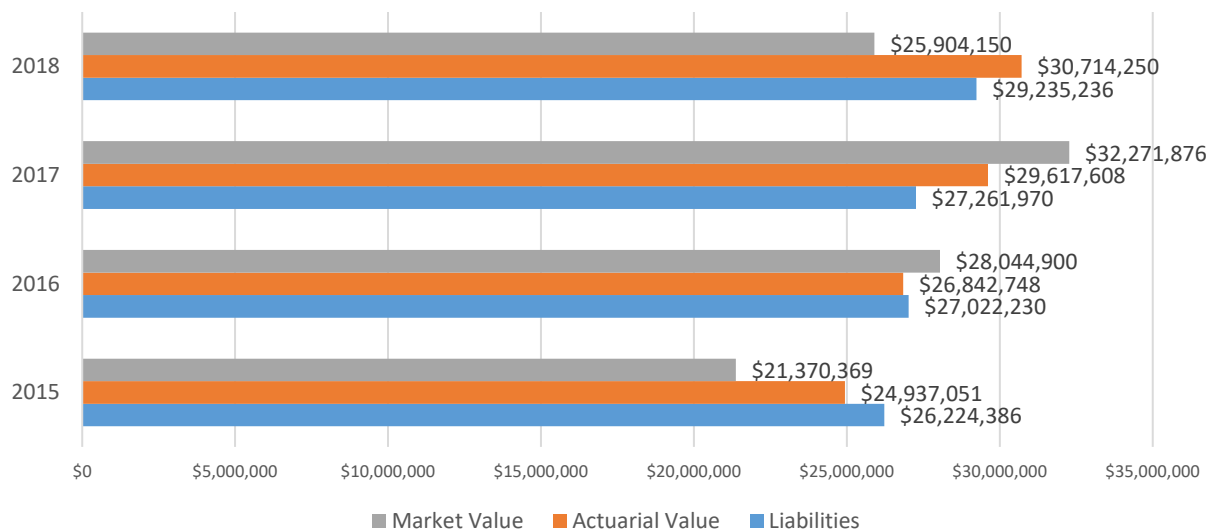
Mortality Table: RP-2014 Total Mortality Table with generational improvements from 2006 using Scale MP-2018

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4%



# COUNTY EMPLOYEES' RETIREMENT FUND

## MEMBERSHIP:

Active: 11,616 Inactive: 7,789

## CONTRIBUTIONS:

Employer: \$28,517,335 Employee: \$15,603,745

## BENEFITS:

### Normal Retirement Formula:

\$29 x years of credited service

Greater of Flat Dollar formula, TRR formula-Social Security offset, or Prior Plan formula.

### Normal Retirement Eligibility:

Age 62 with 8 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2000 projected to 2022 using Scale BB

Vesting: 8 years

COLA: Annual Amount Maximum: 1%

Percent of CPI: 100%

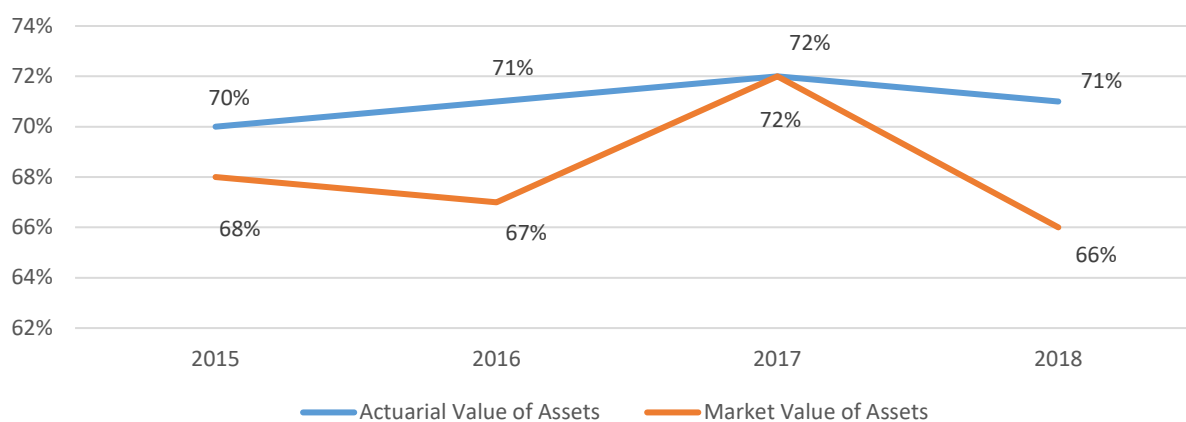
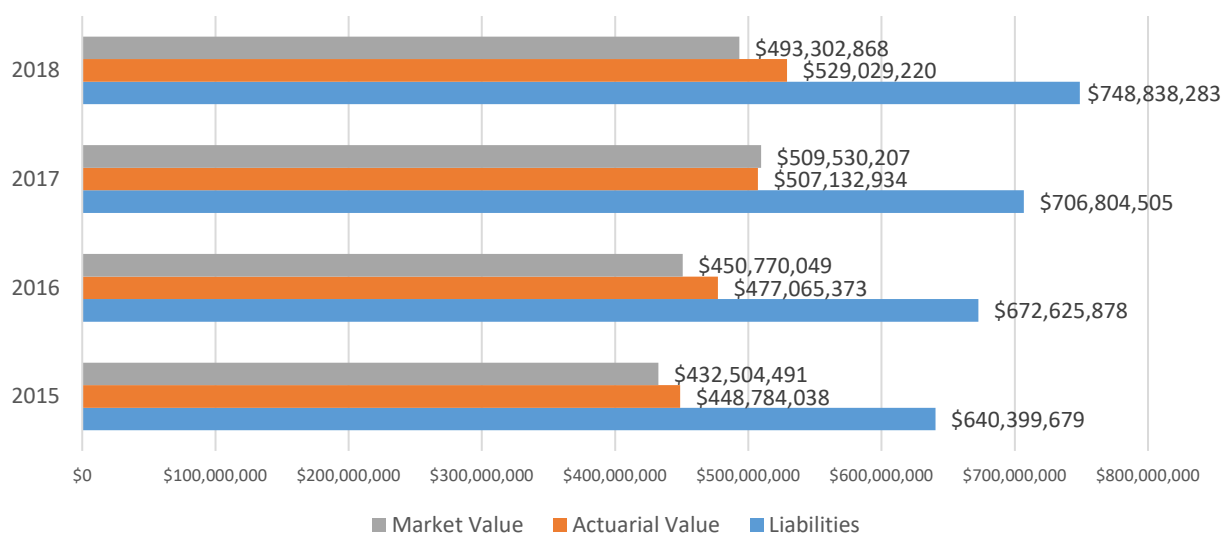
Cap Total Maximum: 50%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5%

Salary: 2.5%

Defined Contribution Plan: See corresponding information in Defined Contribution Section



# CREVE COEUR EMPLOYEES RETIREMENT PLAN

## MEMBERSHIP:

Active: 40 Inactive: 107

## CONTRIBUTIONS:

Employer: \$1,188,826 Employee: \$99,041

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service  
or 1.7% of compensation x years of service plus 3% Employer Contribution to DC Plan (if the member elected to join the DC Plan\*)  
Maximum: 30 years of service

### Normal Retirement Eligibility:

Age 65 with 8 years of service  
Rule of 85  
Uniformed: Age 55 with 8 years of service

Social Security Coverage: Yes

Valuation of Assets: 3 Years

Mortality Table: RP-2000 Combined Healthy, 70% Blue Collar adjustment, Generational projection, scale BB

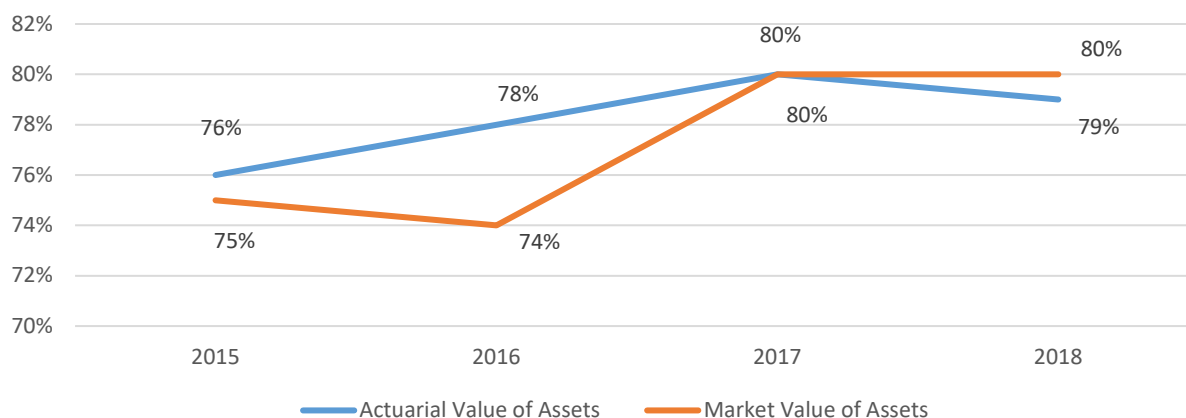
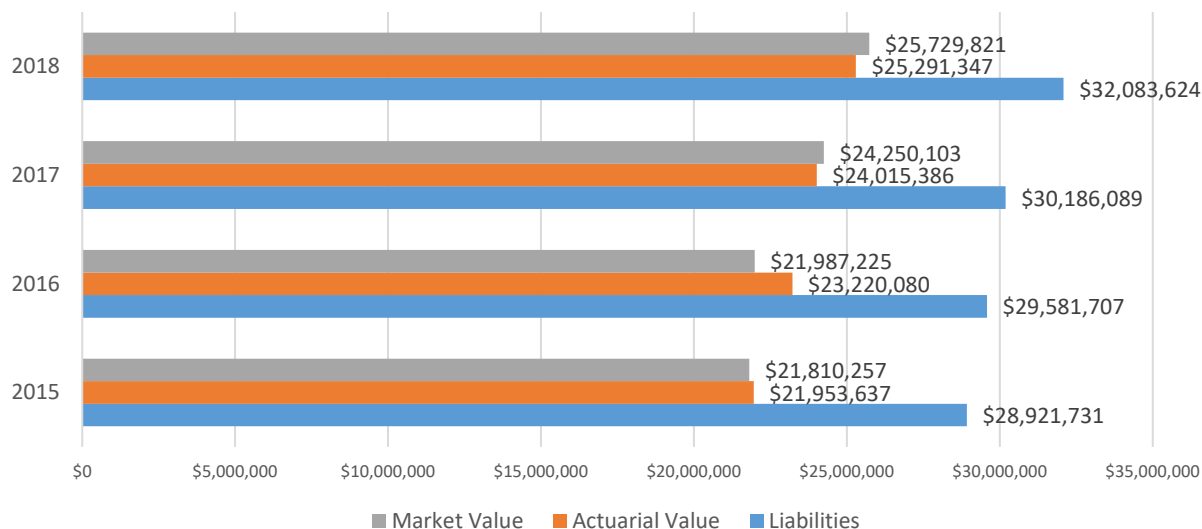
Vesting: 8 years

COLA: Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 6.75% Salary: 4%

Defined benefit plan closed June 2006. \*Defined contribution plan terminated 8/1/17 and assets disbursed.\* Joined LAGERS 8/1/17. All employees hired since June 2006 are enrolled in LAGERS.



# CREVE COEUR FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 55 Inactive: 38

## CONTRIBUTIONS:

Employer: \$184,071 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

70% of compensation offset by 50% of primary Social Security Benefits  
Also offset by actuarial equivalent of monthly defined contribution benefit

### Normal Retirement Eligibility:

Age 55 with 20 years of service  
Hired after 7/1/95: Age 55 with 25 years of service

Social Security Coverage: Yes

Valuation of Assets: 3 Years

Mortality Table: RP-2000 Blue Collar Generational with Scale BB

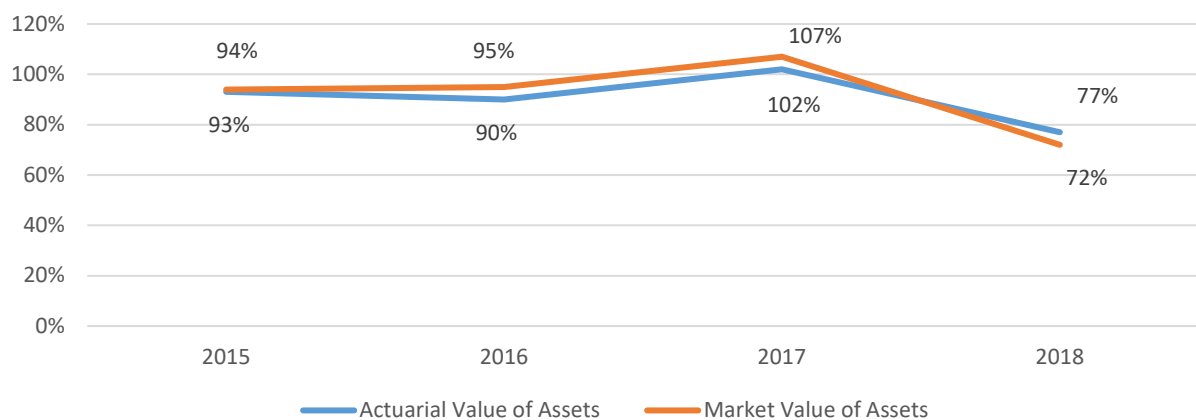
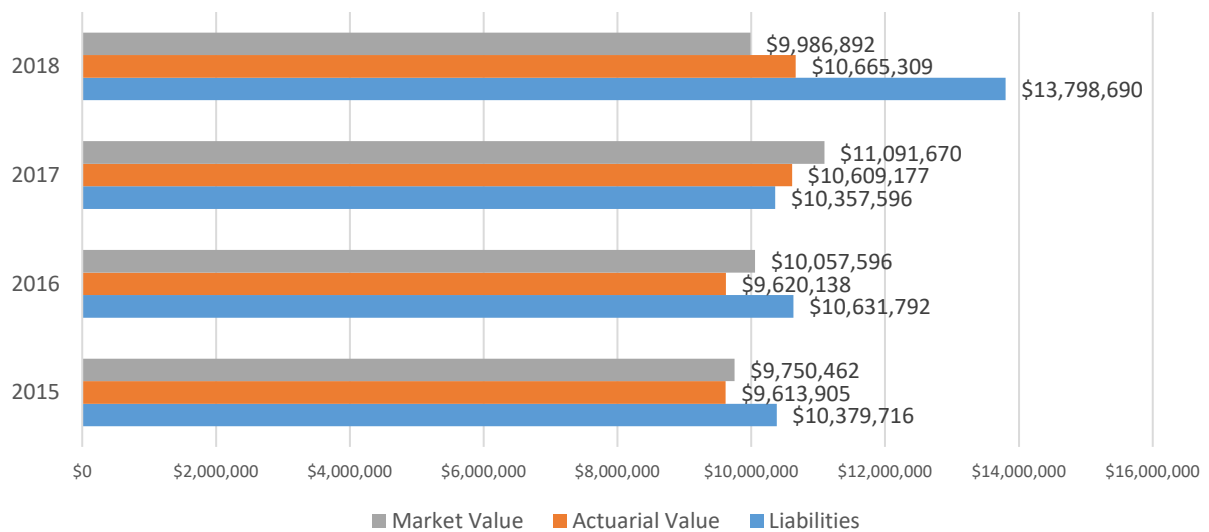
Vesting: 20 years, 25 years if hired after 7/1/95

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6.3% Salary: 4%

Defined Contribution Plan: See Corresponding Information in Defined Contribution section



# EUREKA FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 35 Inactive: 32

## CONTRIBUTIONS:

Employer: \$344,853 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service  
Service earned on or after 1/1/2014: 2% of average compensation x years of service  
Maximum: 30 years of service

### Normal Retirement Eligibility:

Age 55 with 5 years of service  
30 years of service  
Hired after June 11, 2013: Age 55 with 10 years of service  
30 years of service

Social Security Coverage: Yes

Valuation of Assets: 4 Years

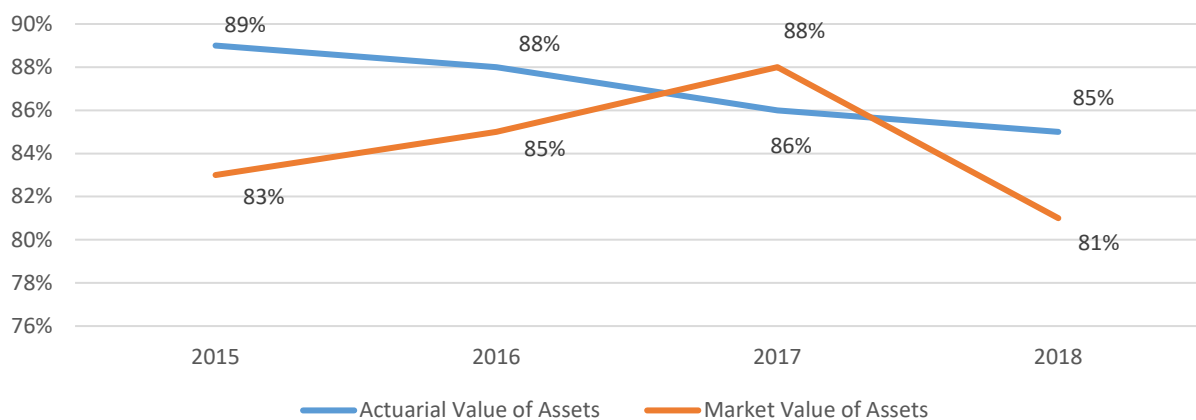
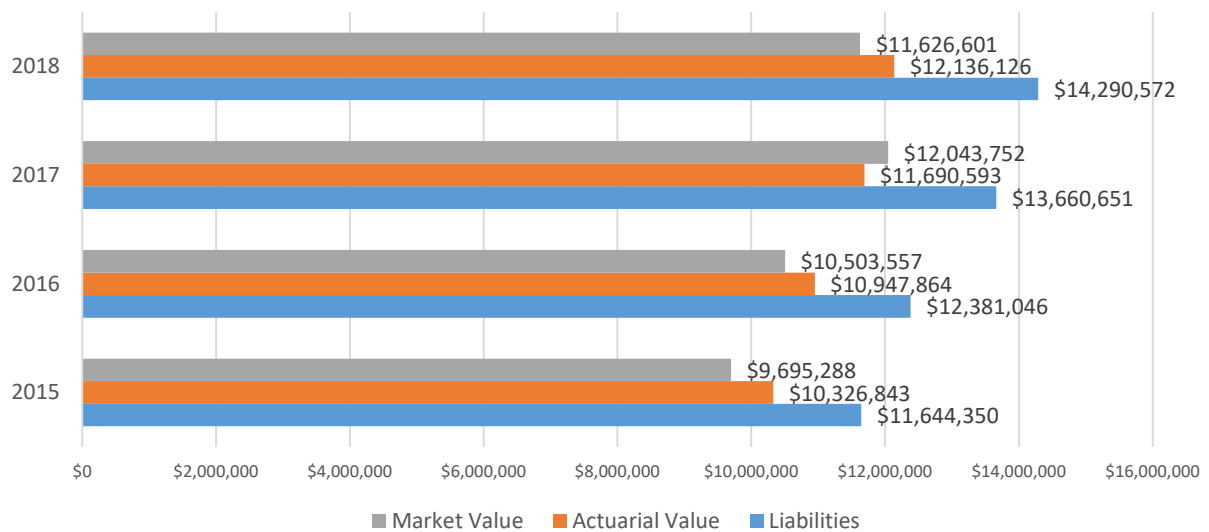
Mortality Table: RP-2014 Healthy Annuitant Table with Scale MP-2018

Vesting: 5 years; 10 years if hired on/after 6/11/13

COLA: Ad hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.5%





# FENTON FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 53 Inactive: 33

## CONTRIBUTIONS:

Employer: \$1,443,377 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service.

Maximum: 30 years of service.

Hired prior to 3/1/06: 3% of compensation x years of service + supplemental benefit from ages 55-65 of \$13 x years of service.

### Normal Retirement Eligibility:

Age 55 with 15 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

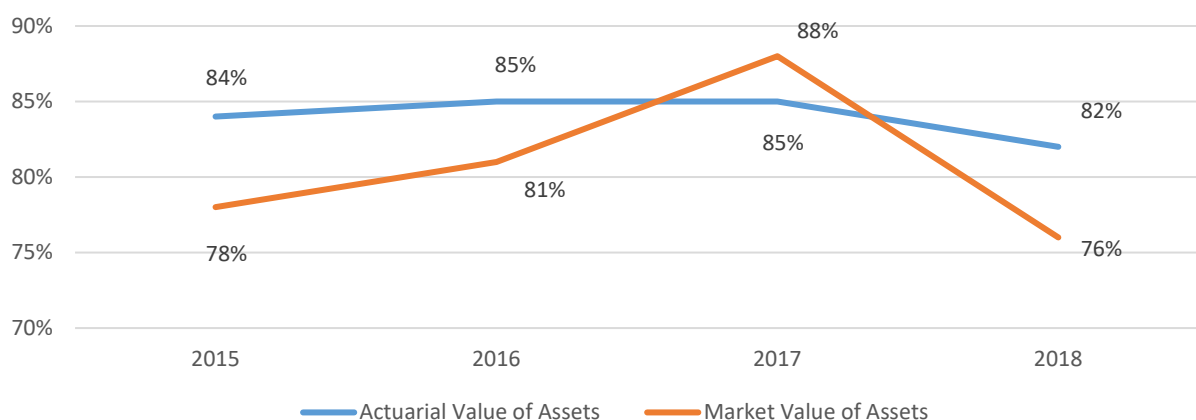
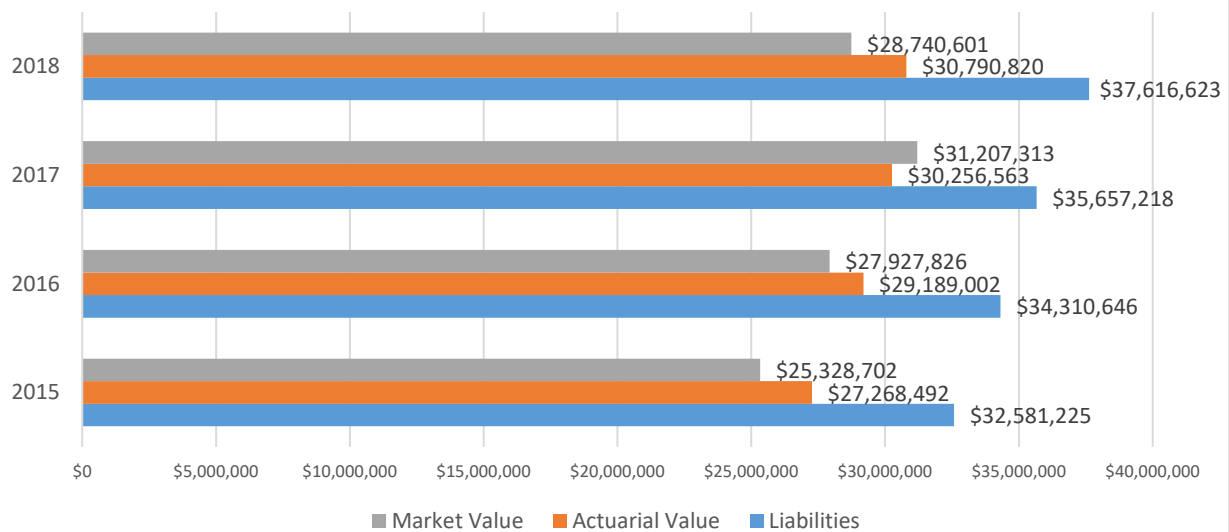
Mortality Table: Pub-2010 Public Retirement Plans General Mortality Table weighted by Headcount projected by MP-2018

Vesting: Partial 10 / Full 15

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.75%



# FERGUSON PENSION PLAN

## MEMBERSHIP:

Active: 113 Inactive: 135

## CONTRIBUTIONS:

Employer: \$363,471 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1.75% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 8 years of service  
Rule of 82.5 with minimum age of 55

Social Security Coverage: Yes

Valuation of Assets: 5 Years

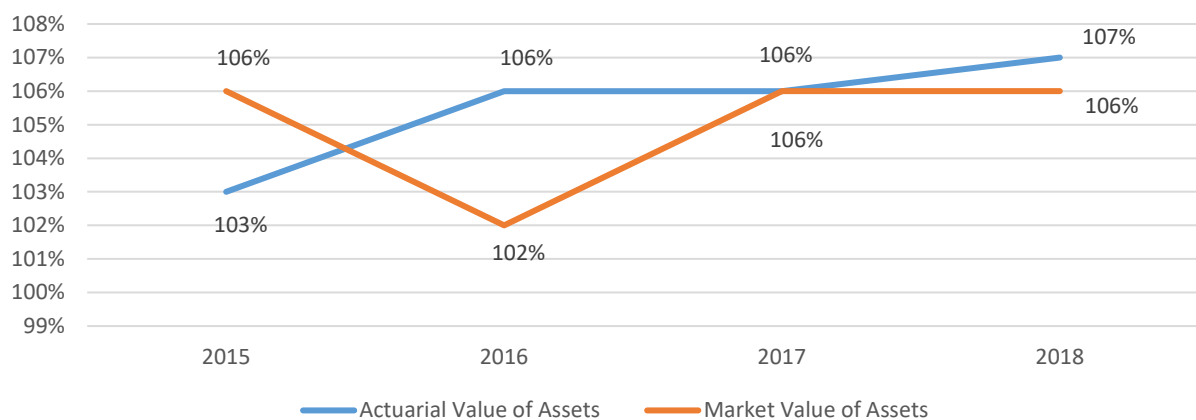
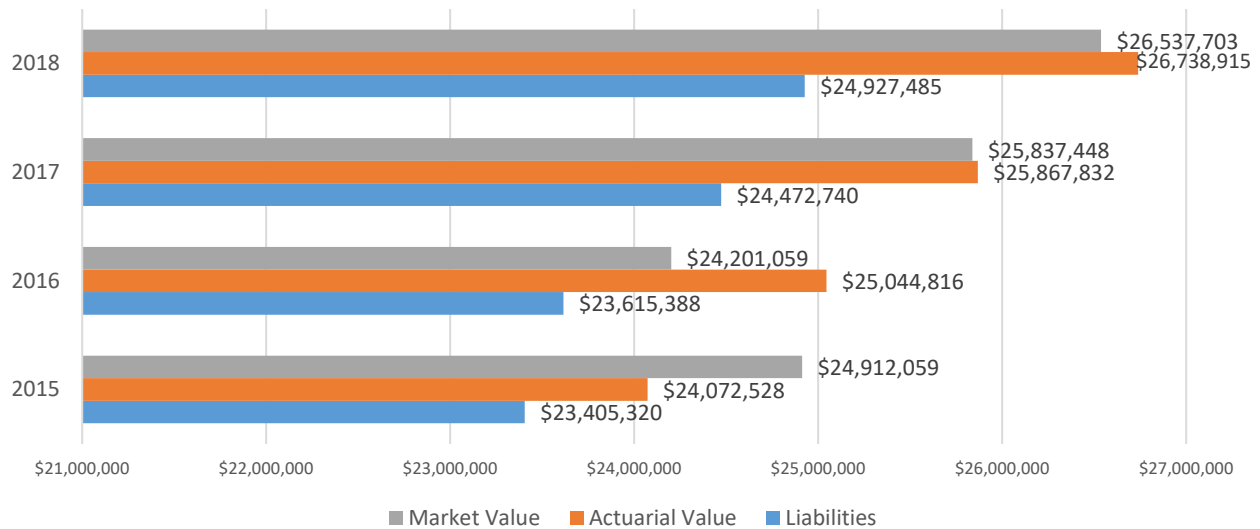
Mortality Table: RP-2000 Blue Collar, Scale BB, projected to 2020

Vesting: 8 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 3.25%



# FIREFIGHTERS' RETIREMENT PLAN OF ST. LOUIS CITY

## MEMBERSHIP:

Active: 648 Inactive: 78

## CONTRIBUTIONS:

Employer: \$8,022,799 Employee: \$3,172,039

## BENEFITS:

### Normal Retirement Formula:

2% of compensation for the first 25 years of service + 2.5% (5% for grandfathered participants) of compensation in excess of 25 years of service.  
Maximum benefit: 75%

### Normal Retirement Eligibility:

Age 55 with 20 years of service

### Social Security Coverage: No

### Valuation of Assets: 5 Years

**Mortality Table:** RP-2014 Blue Collar Generational adjusted to 2006, Scale MP-2017

### Vesting: Partial 10 / Full 20

**COLA:** Annual Amount Minimum: 1.5%

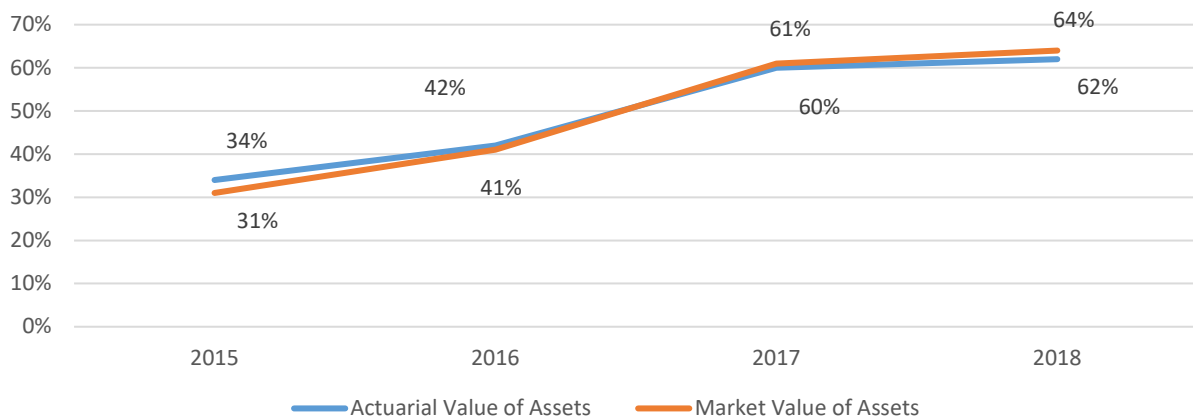
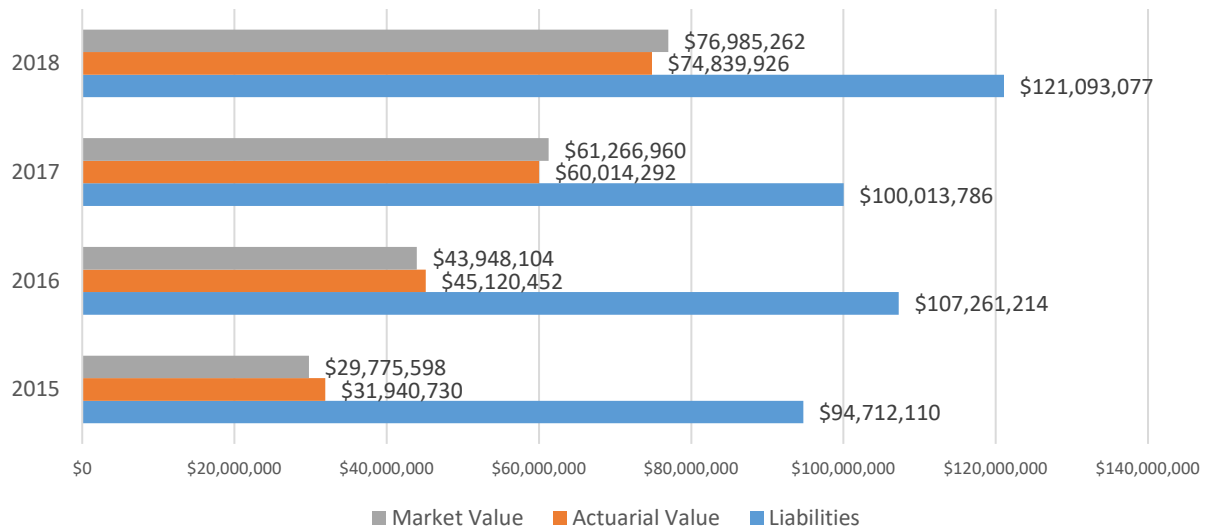
**Annual Amount Maximum:** 5%

**Cap Total Maximum:** 25%

COLA varies based on years of service and entry date to the plan

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 2.75%



# FLORISSANT EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 9 Inactive: 37

## CONTRIBUTIONS:

Employer: \$875,723 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 10 years of service

Rule of 85

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2014 Healthy Employee Table, Scale MP-2018

Vesting: Partial 5 / Full 15

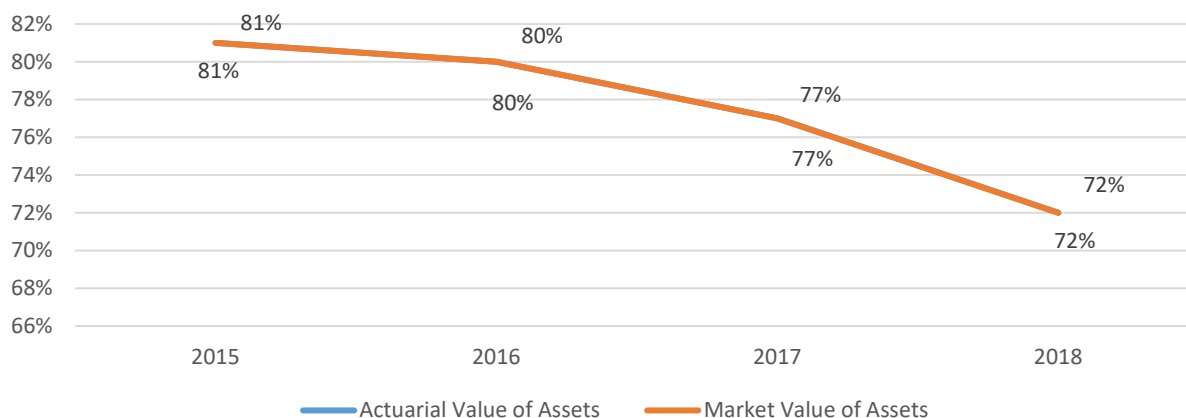
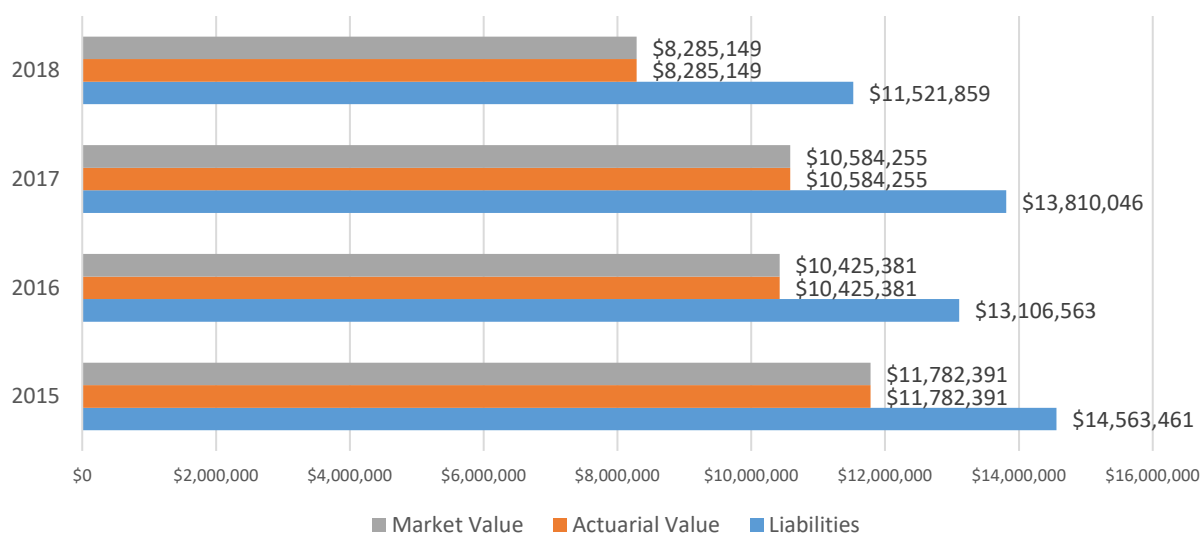
COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6% Salary: 3%

Plan closed December 2000

Defined Contribution Plan: See Corresponding Information in Defined Contribution Section.



# FLORISSANT VALLEY FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 61 Inactive: 24

## CONTRIBUTIONS:

Employer: \$1,035,888 Employee: \$56,679

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service  
Maximum: 30 years. Limited to 75% of average monthly earnings.

### Normal Retirement Eligibility:

Age 60 or 30 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

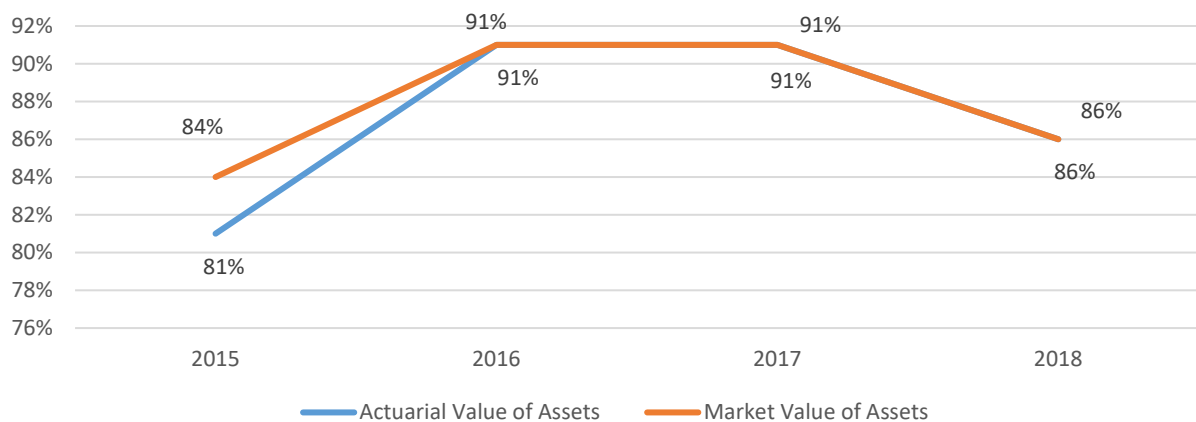
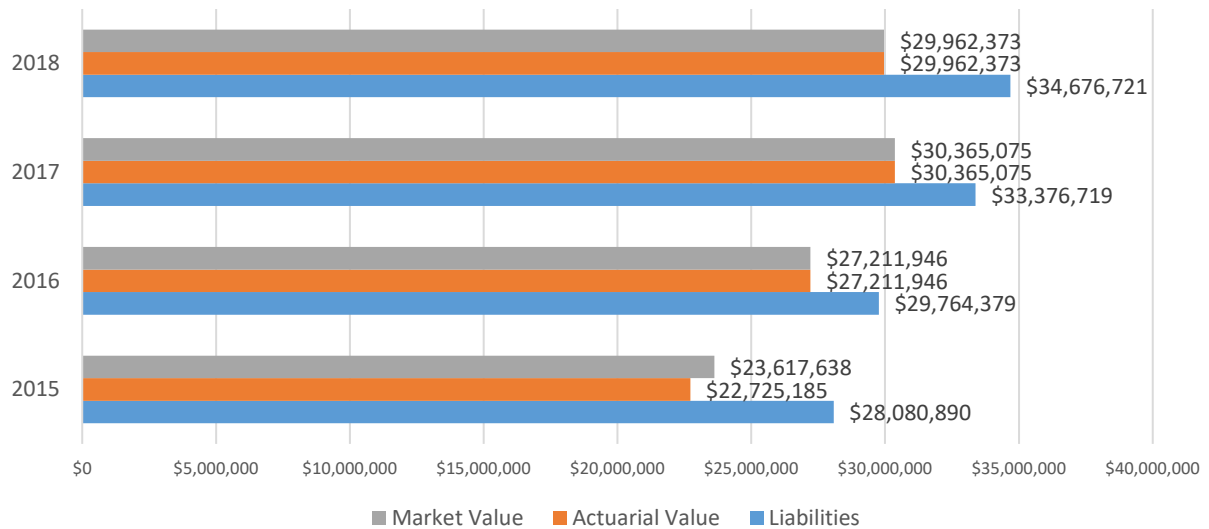
Mortality Table: RP-2014 for Males & Females

Vesting: Partial 10 / Full 15

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6.5% Salary: 3.5%



# **GLENDALE POLICE & FIRE PENSION PLAN**

## **MEMBERSHIP:**

**Active:** 25      **Inactive:** 21

## **CONTRIBUTIONS:**

**Employer:** \$132,195      **Employee:** \$51,046

## **BENEFITS:**

### **Normal Retirement Formula:**

50% of compensation for the first 20 years of service + 1% for each year of service in excess of 20

### **Normal Retirement Eligibility:**

Age 55 with 15 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

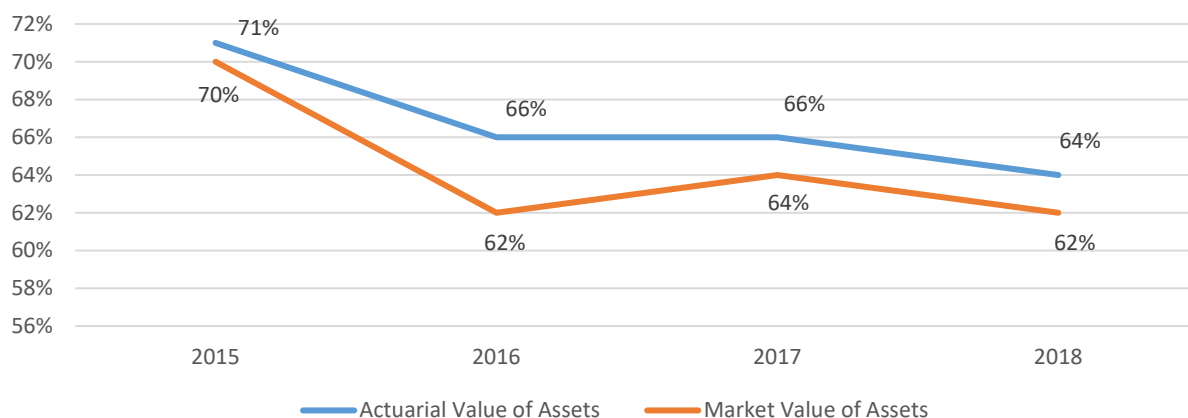
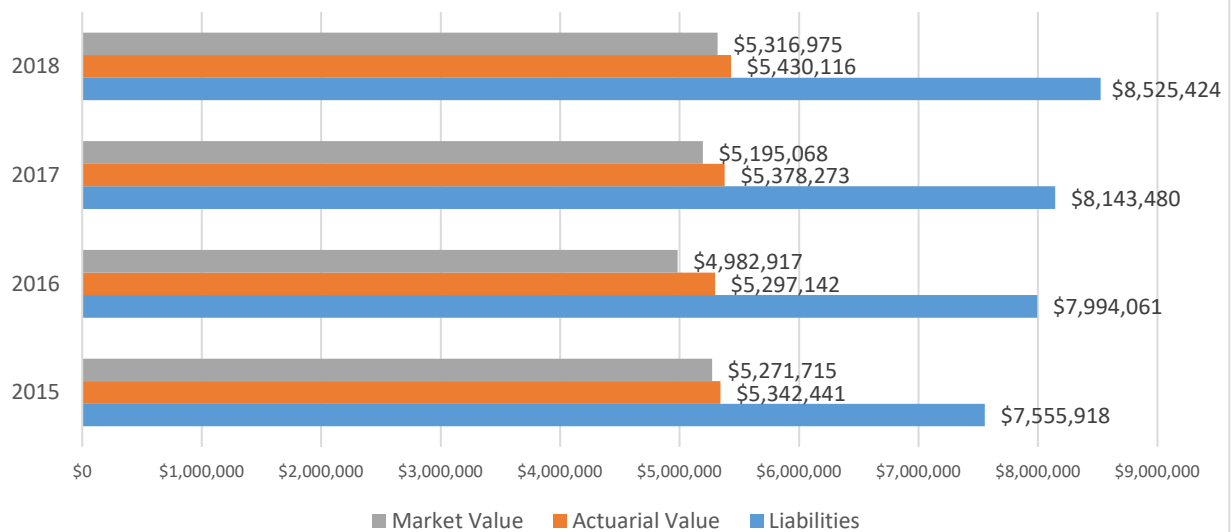
**Mortality Table:** RP-2006, Scale MP-2017

**Vesting:** Partial 5 / Full 15

**COLA:** No COLA

## **ACTUARIAL ASSUMPTIONS:**

**Interest:** 7%      **Salary:** 3.5%





# HANNIBAL POLICE & FIRE RETIREMENT PLAN

## MEMBERSHIP:

Active: 74 Inactive: 67

## CONTRIBUTIONS:

Employer: \$1,298,013\* Employee: \$491,567

## BENEFITS:

### Normal Retirement Formula:

65% of compensation for the first 25 years of service + 1% for each of the next 5 years of service  
Maximum: 70% of compensation.

### Normal Retirement Eligibility:

25 years of service  
Hired on/after 7/1/07: 25 years of service. Minimum age of 55 before receiving a benefit.

Social Security Coverage: No

Valuation of Assets: Market Value

Mortality Table: RP-2014 Blue Collar at 2006, generational, scale MP-2018

Vesting: Partial 12 / Full 20

COLA: Ad Hoc

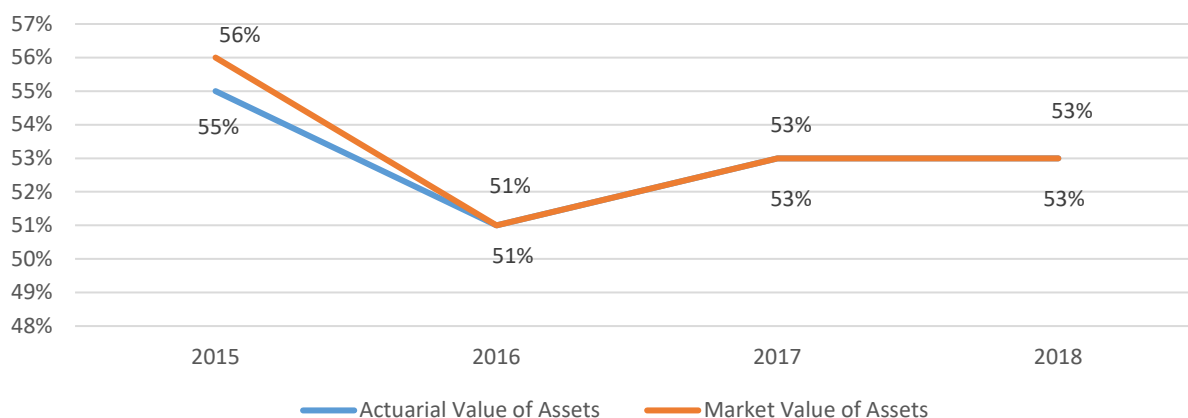
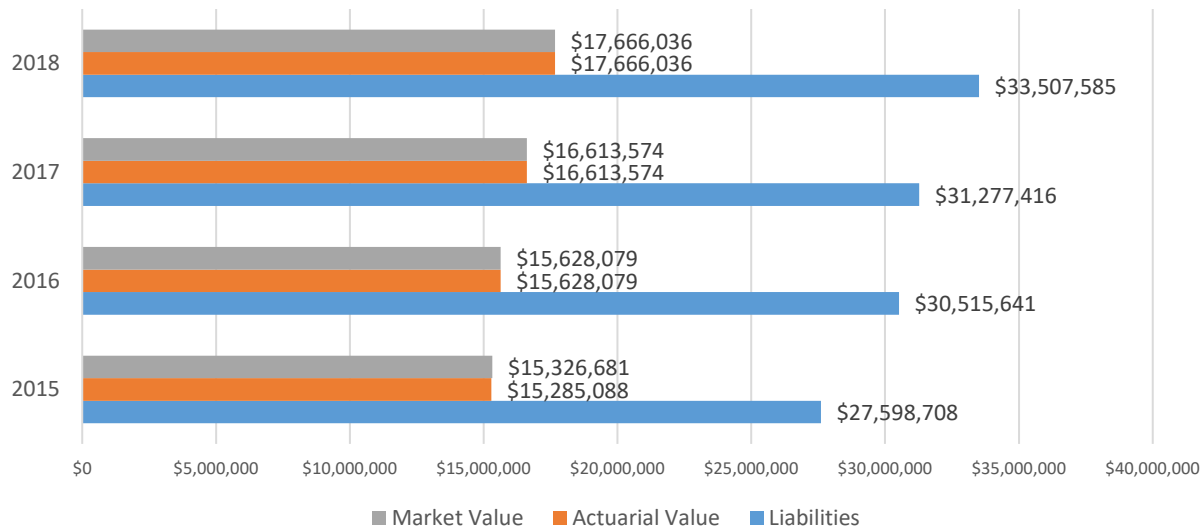
Annual Amount Maximum: 3%

No COLA if below 50% funded

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%

\*Includes tax receipts of \$350,515



# HAZELWOOD CITY COUNCIL MEMBERS RETIREMENT PLAN

## MEMBERSHIP:

Active: 9 Inactive: 7

## CONTRIBUTIONS:

Employer: \$9,079 Employee: Non-Contributory

## BENEFITS:

Normal Retirement Formula:

\$10 times years of credited service

Normal Retirement Eligibility:

Age 60 with 6 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2000 Combined Healthy Mortality Table with 70% Blue Collar Adjustment, Generational, Scale BB

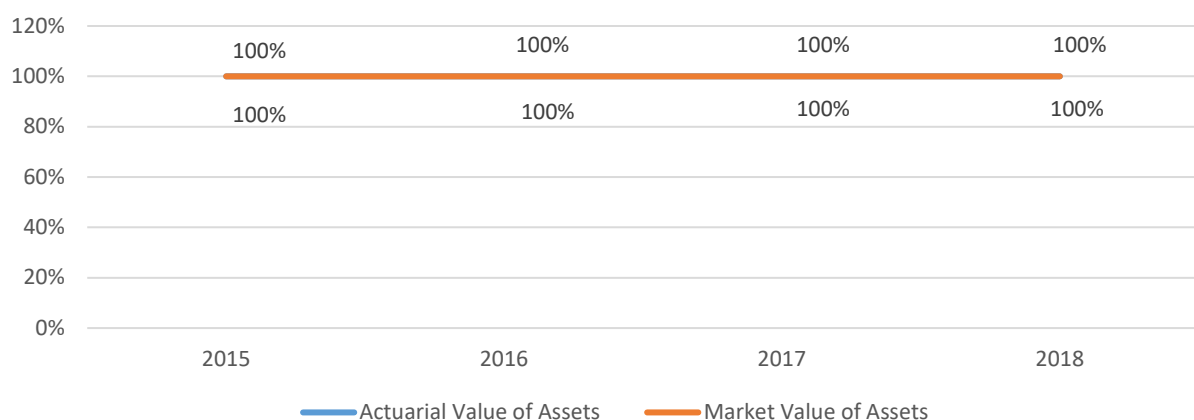
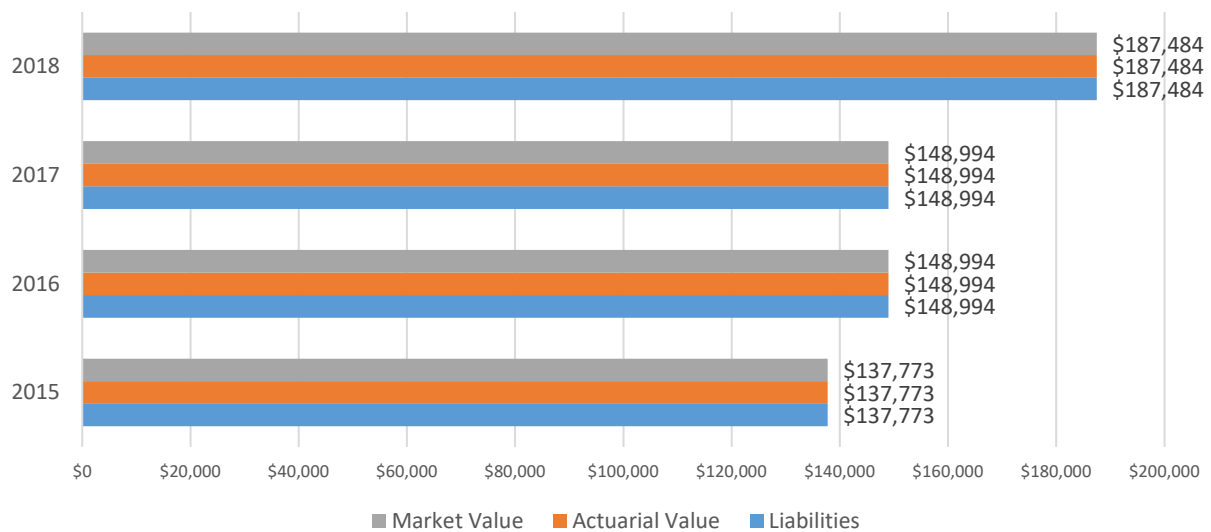
Vesting: 6 years

COLA: No COLA

## ACTUARIAL ASSUMPTION:

Interest: 7.5%

Plan performs actuarial valuation biennially.



# HAZELWOOD RETIREMENT PLAN

## MEMBERSHIP:

Active: 171 Inactive: 147

## CONTRIBUTIONS:

Employer: \$1,324,248 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service  
Maximum: 30 years of service

### Normal Retirement Eligibility:

The later of age 60 or 25 years of service  
Rule of 85 with age 55

Social Security Coverage: Yes

Valuation of Assets: 5 years

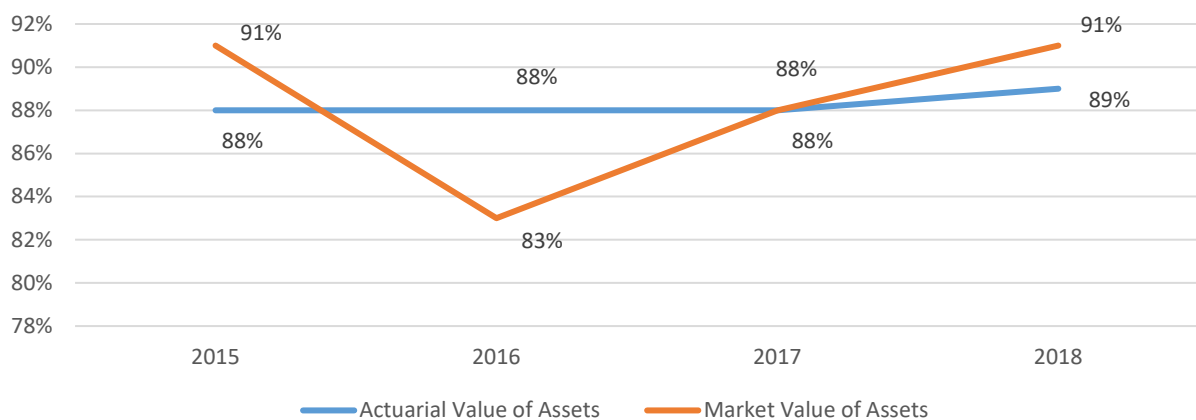
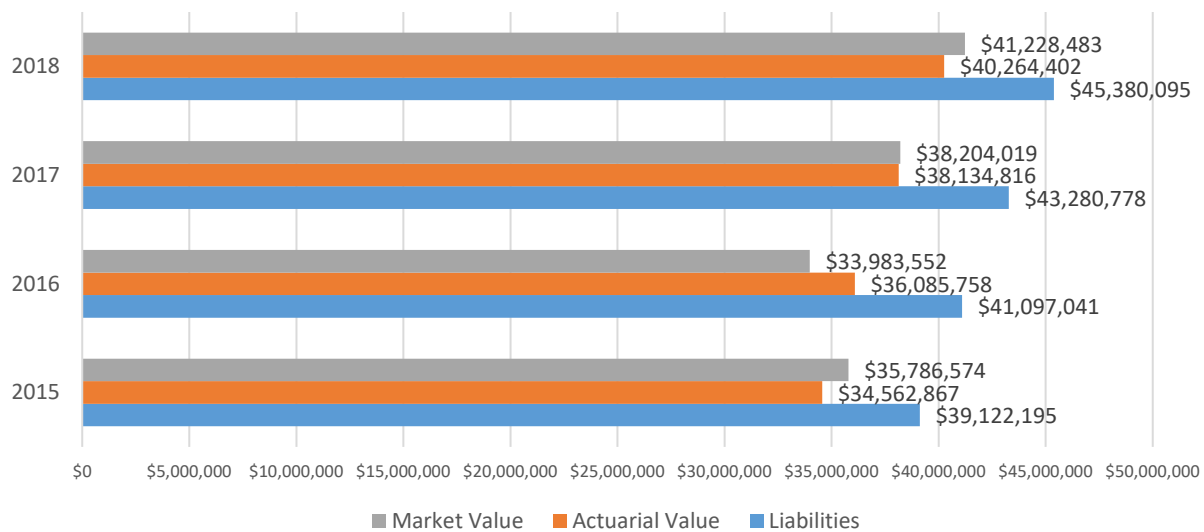
Mortality Table: RP-2000 70% Blue Collar Adjustment, Scale BB, Generational

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 4.5%



# HIGH RIDGE FIRE PROTECTION DISTRICT PENSION PLAN

## MEMBERSHIP:

Active: 37 Inactive: 15

## CONTRIBUTIONS:

Employer: \$301,744 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

\$100 per month x years of service. Maximum: 50 years of service.

### Normal Retirement Eligibility:

Age 55 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

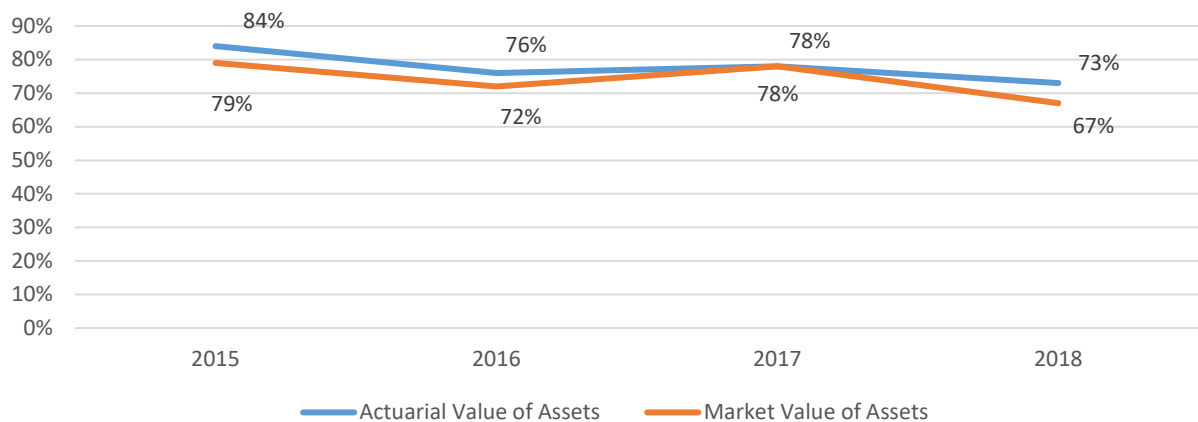
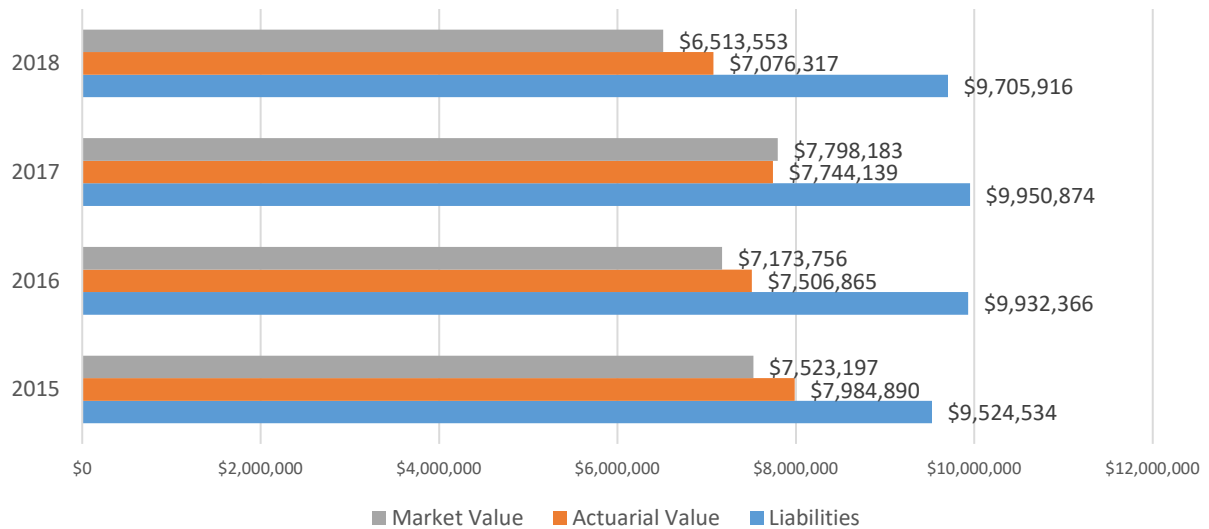
Mortality Table: RP-2014 Blue Collar with generational improvements from 2006 using Scale MP-2018

Vesting: 10 years

COLA: No COLA

## ACTUARIAL ASSUMPTION:

Interest: 7%



# JACKSON COUNTY EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 1,246 Inactive: 2,510

## CONTRIBUTIONS:

Employer: \$9,885,962 Employee: \$23,488\*

## BENEFITS:

### Normal Retirement Formula:

1.5% of compensation x years of creditable service

Elected officials: 4.167% x final average salary for the first 12 years + 5% for years 12 - 16

Service credit stops after 16 years for elected officials

### Normal Retirement Eligibility:

Age 65 with 5 years of service

Rule of 80 at age 55

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2014 projected forward with Scale MP-2016 on a generational basis

**Vesting:** 5 years

**COLA:** Ad hoc

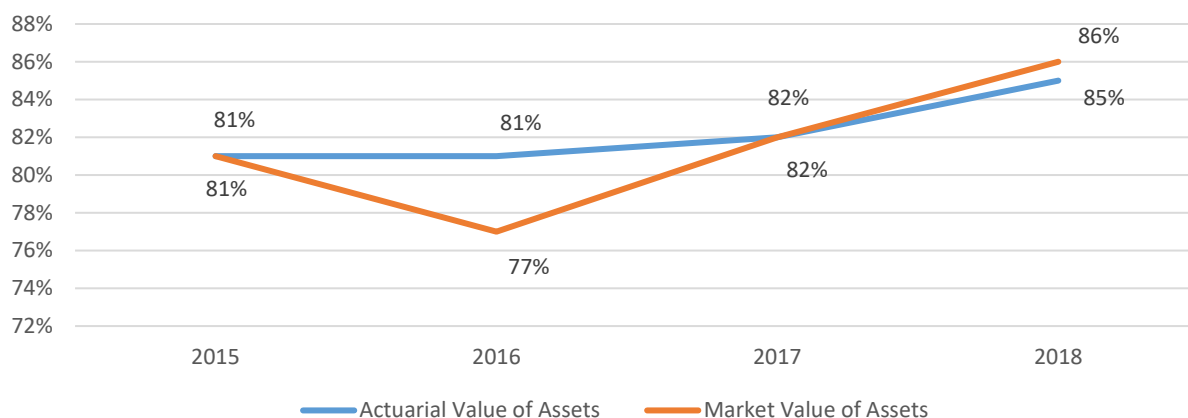
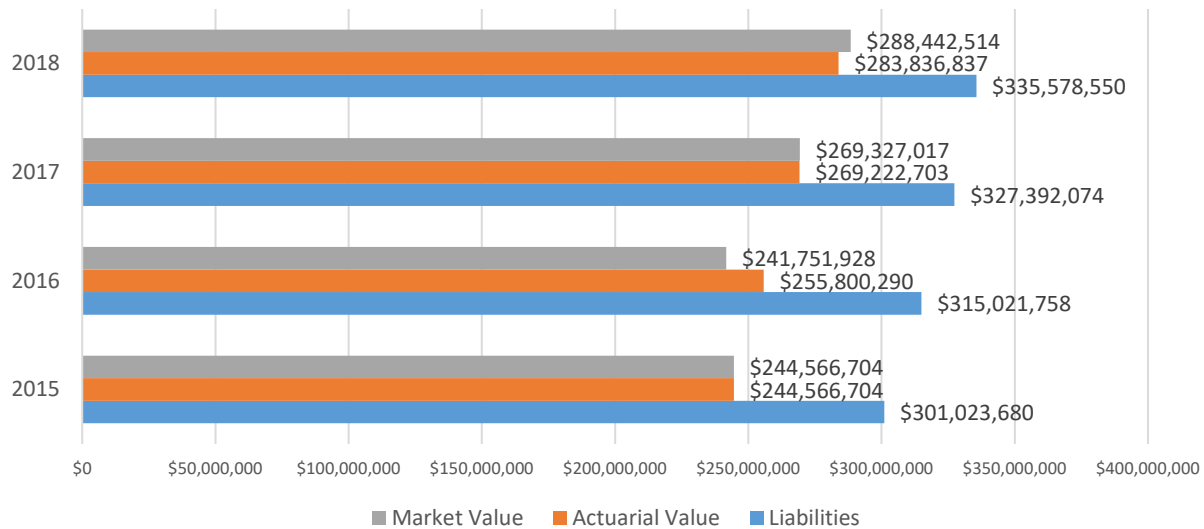
**Annual Amount Maximum:** 3%

## ACTUARIAL ASSUMPTIONS:

**Interest:** 6.75%

**Salary:** 2.75%

\*Employee contributions are from elected officials only



# JOPLIN POLICE & FIRE PENSION PLAN

## MEMBERSHIP:

Active: 185 Inactive: 161

## CONTRIBUTIONS:

Employer: \$2,620,298 Employee: \$1,234,842

## BENEFITS:

### Normal Retirement Formula:

2.2% of compensation for the first 25 years of service + 1% for the next 5 years of service. Maximum: 60%  
Hired before 2009: 2.5% percent of compensation for the first 20 years of service + 1% for each of the next 5 years. Maximum: 65%

### Normal Retirement Eligibility:

Age 60 or 25 years of service  
Hired before 2009: 20 years

**Social Security Coverage:** No

**Valuation of Assets:** 5 Years

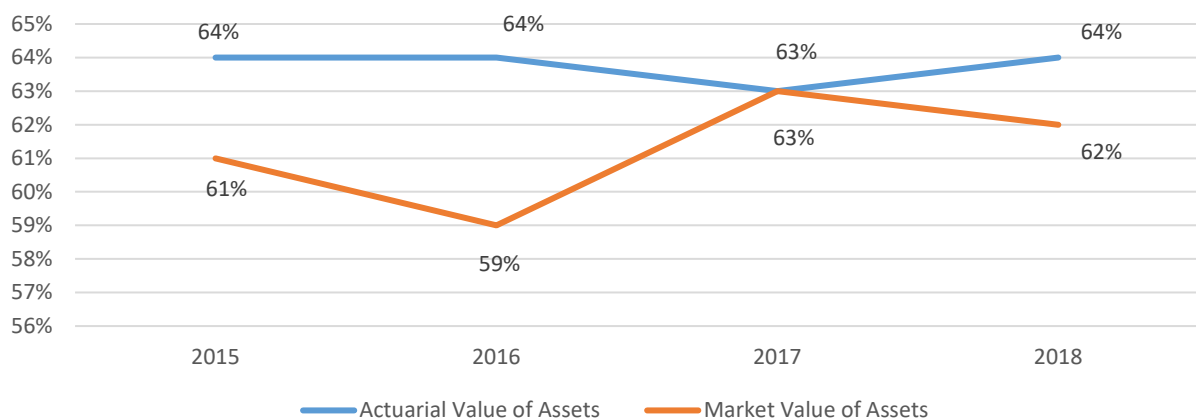
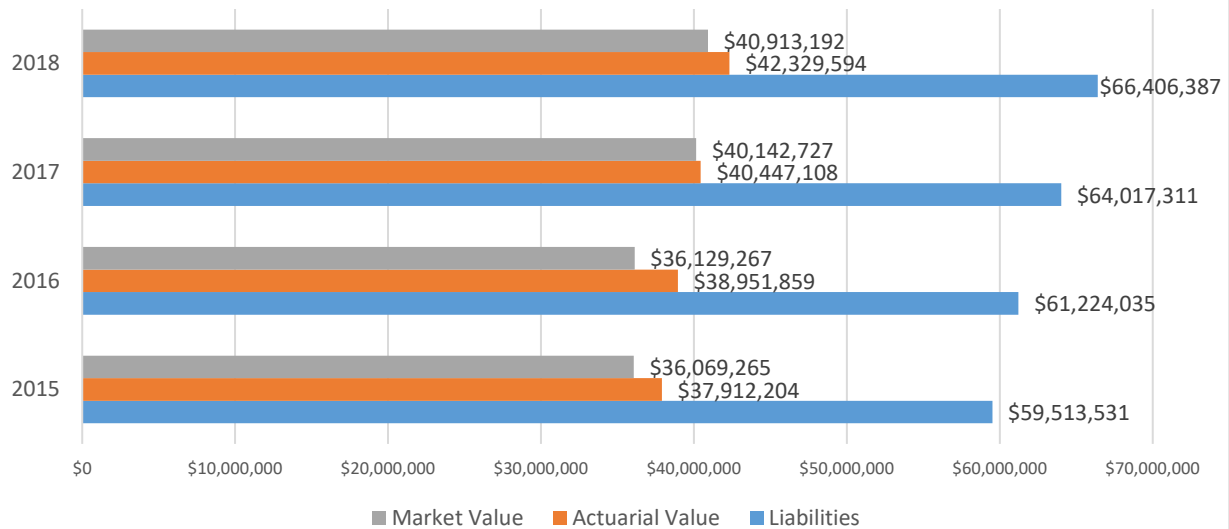
**Mortality Table:** RP-2014 Adjusted for mortality improvement to 2017 and 2006 for men and women

**Vesting:** 25 years

**COLA:** No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6.75% Salary: 2.5%



# JUDICIAL RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 415 Inactive: 595

## CONTRIBUTIONS:

Employer: \$36,892,203 Employee: \$902,320

## BENEFITS:

### Normal Retirement Formula:

More than 12 years of service: 50% of compensation  
Less than 12 years of service: 4.17% of compensation x years of creditable service

### Normal Retirement Eligibility:

Tier 1: Age 62 with 12 years of service  
Age 60 with 15 years of service  
Age 55 with 20 years of service  
Tier 2 (serving for the first time on/after 1/1/11): Age 67 with 12 years of service  
Age 62 with 20 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 years (7 years for deferred investment experience)

Mortality Table: RP-2014 Healthy projected from 2006 to 2026, Scale MP-2015

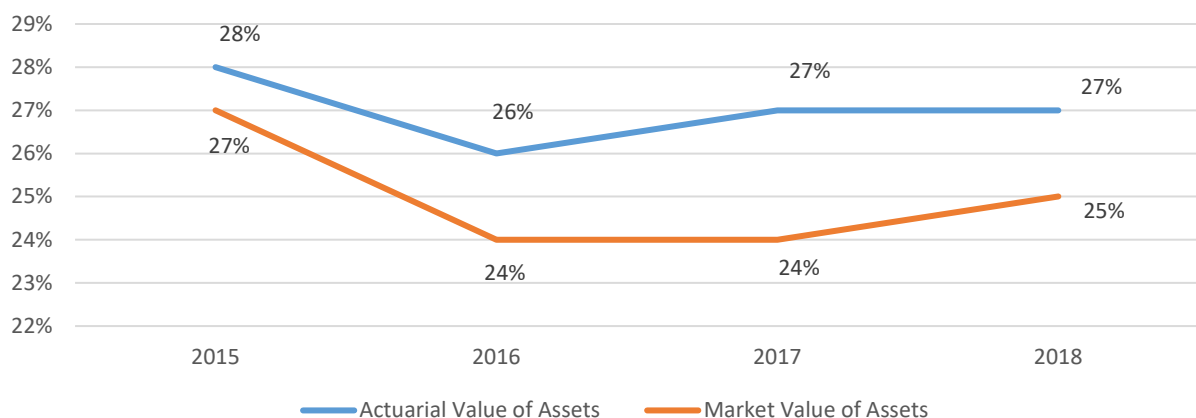
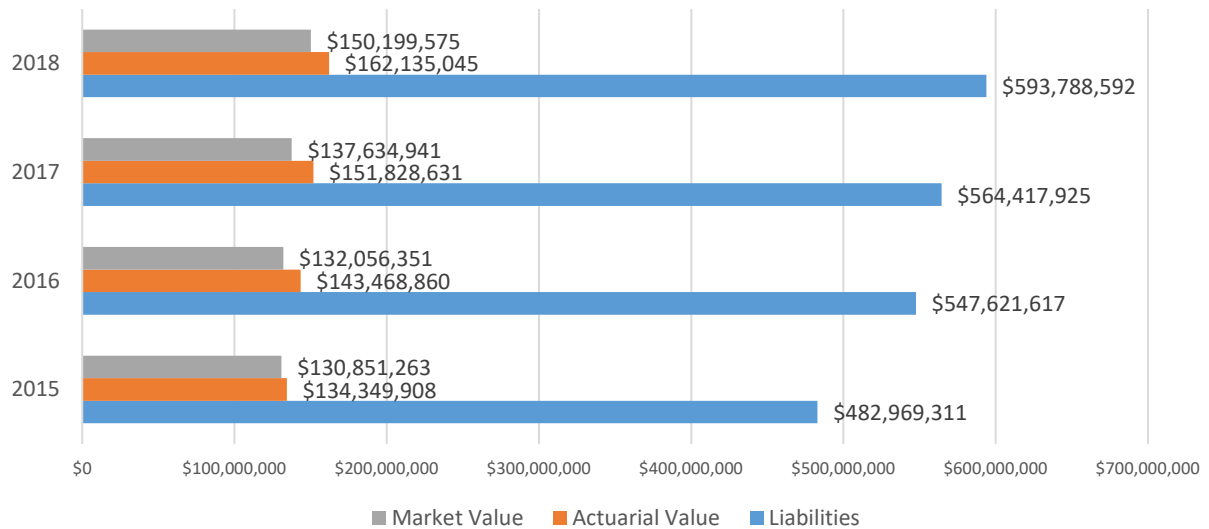
Vesting: Immediate upon employment

COLA: Annual Amount Maximum: 5%

Percent of CPI: 80%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 2.75%



# KANSAS CITY AREA TRANSPORTATION AUTHORITY SALARIED EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 106 Inactive: 66

## CONTRIBUTIONS:

Employer: \$1,312,552 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1.45% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 65 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

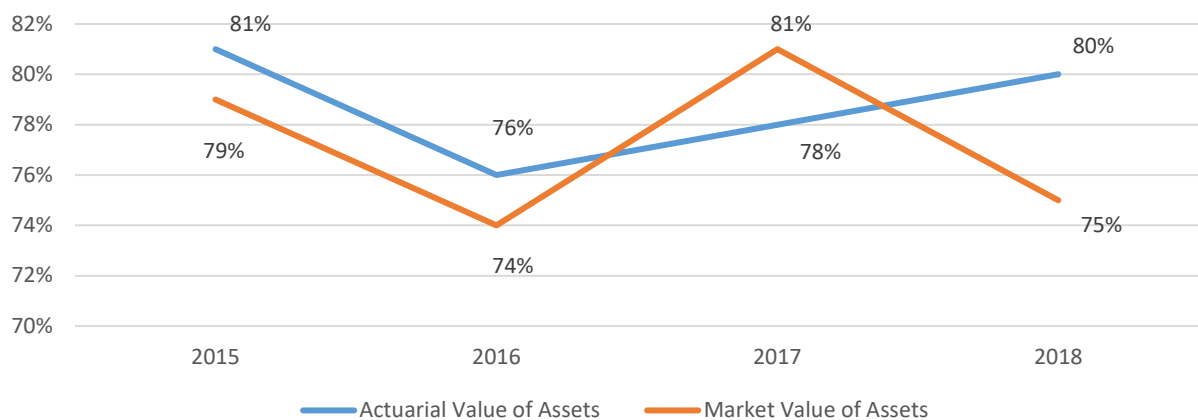
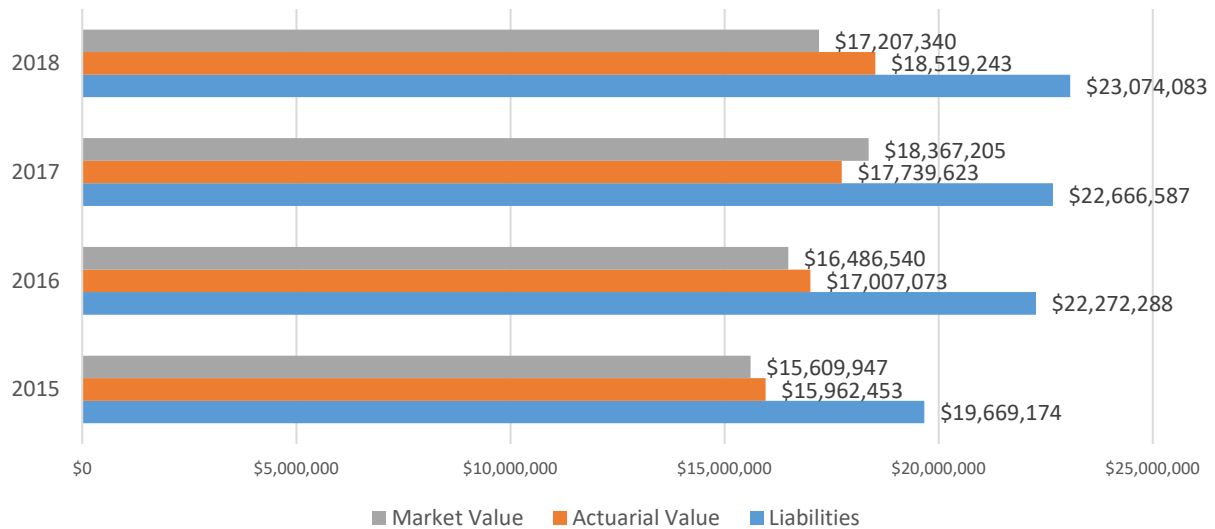
Mortality Table: RP-2014 with 2014 intermediate assumption Social Security improvement scale, Generational projection

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4%





# KANSAS CITY AREA TRANSPORTATION AUTHORITY UNION EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 543 Inactive: 241

## CONTRIBUTIONS:

Employer: \$2,550,097 Employee: \$1,223,924

## BENEFITS:

### Normal Retirement Formula:

1.28% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 62 with 10 years of service

Age 60 with 30 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

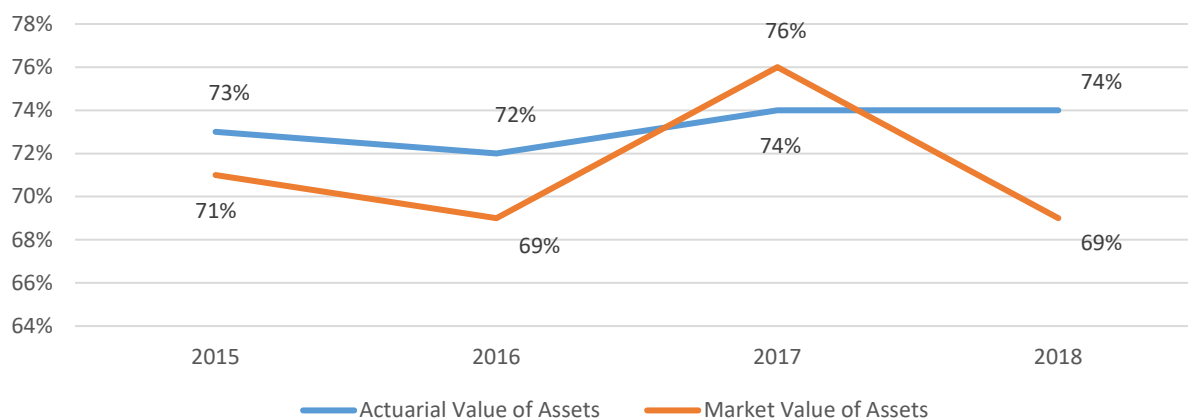
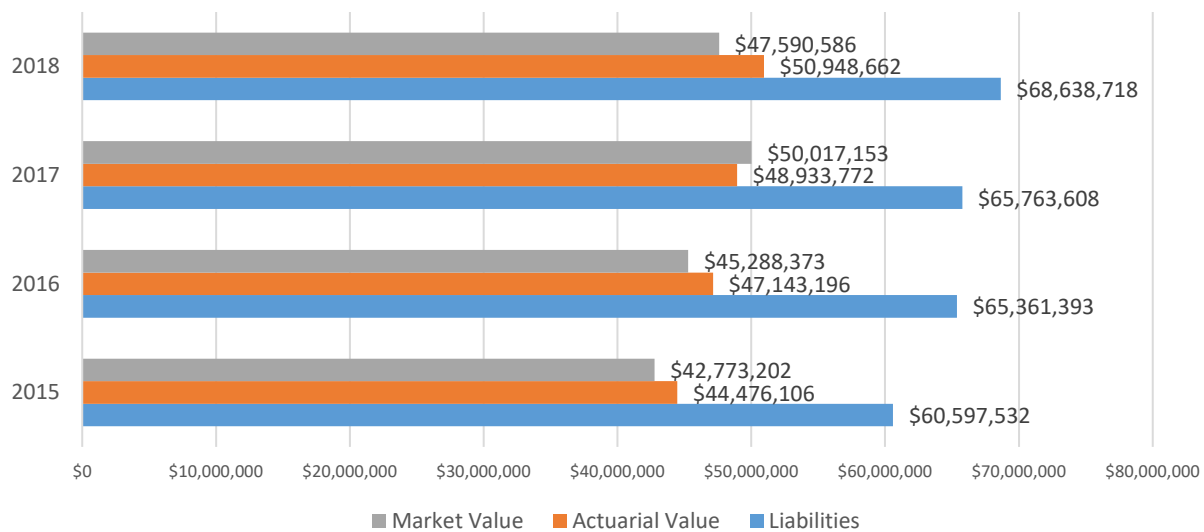
Mortality Table: RP-2014 Blue Collar with Scale MP-2014, generational projection

Vesting: 10 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.25%



# KANSAS CITY CIVILIAN POLICE EMPLOYEES' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 511 Inactive: 312

## CONTRIBUTIONS:

Employer: \$4,994,191 Employee: \$1,271,683

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

Supplemental Benefit: \$160 per month with 15 years of service

### Normal Retirement Eligibility:

Tier 1: Later of Age 65 or 10 years of service

Rule of 80

Tier 2 (Hired on/after 8/28/13): Later of Age 67 or 20 years of service

Rule of 85

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2000 Healthy Scale AA

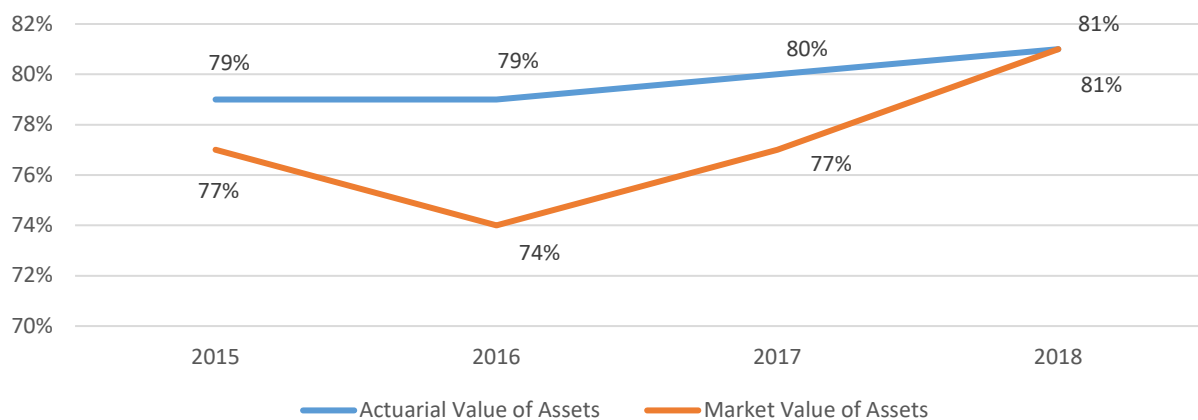
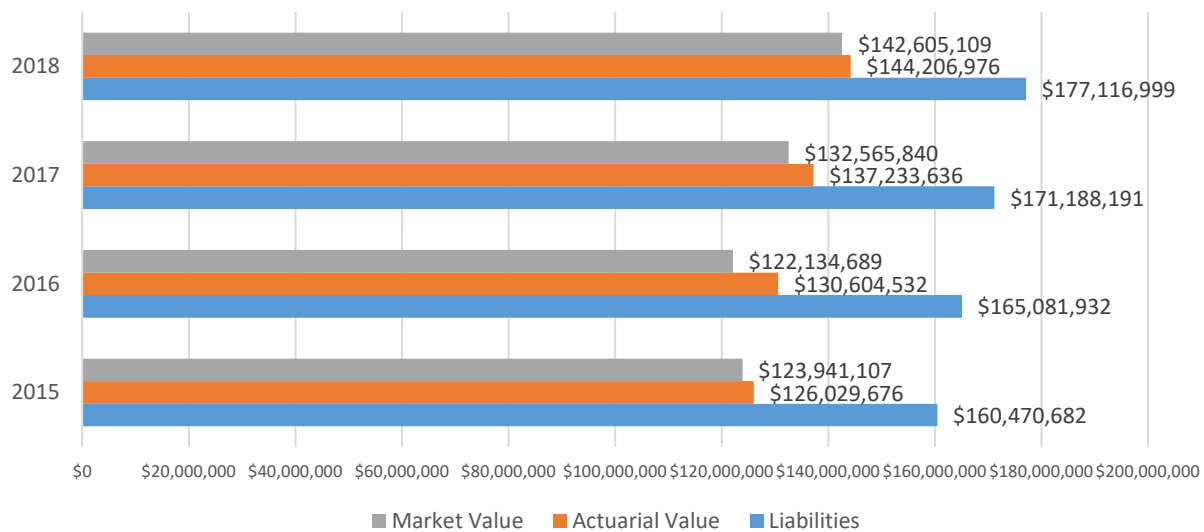
Vesting: 5 years

COLA: Ad hoc.

Annual Amount Maximum: 3%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 3.75%



# KANSAS CITY EMPLOYEES' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 3,218 Inactive: 2,637

## CONTRIBUTIONS:

Employer: \$24,530,445 Employee: \$8,622,835

## BENEFITS, Normal Retirement Formula:

Hired before 4/20/14: General Employees: 2% of compensation x years of creditable service  
If Single 2.22% - Married May Elect 2.22% & Forfeit Survivor Benefits; Maximum: 70% of compensation  
Judges/Elected Officials: 2.22% of compensation received by then serving judges/officials in same office 24 months preceding annuity x YOS  
Hired on or after 4/20/14: 1.75% of compensation x years of service; Maximum 70% of compensation

## Normal Retirement Eligibility:

Hired before 4/20/14: Age 65 with 5 years of service  
Age 60 with 10 years of service  
Age 55 with 25 years of service. Rule of 80.  
Judges/Elected Officials: Later of Age 60 or expiration of term with 1 elective term.  
Hired on/after 4/20/14: Age 67 with 10 years of service, age 62 with 10 years of service, Rule of 85

**Social Security Coverage:** Yes

**Valuation of Assets:** 4 years

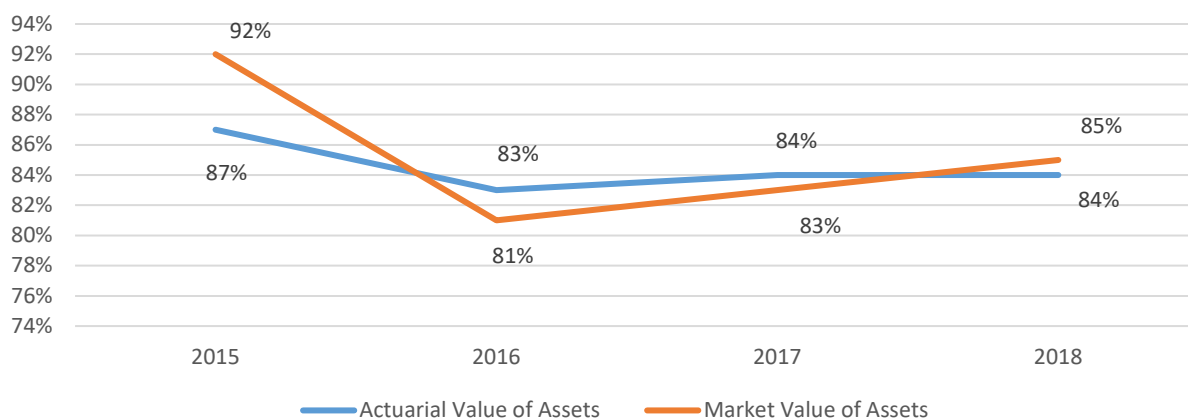
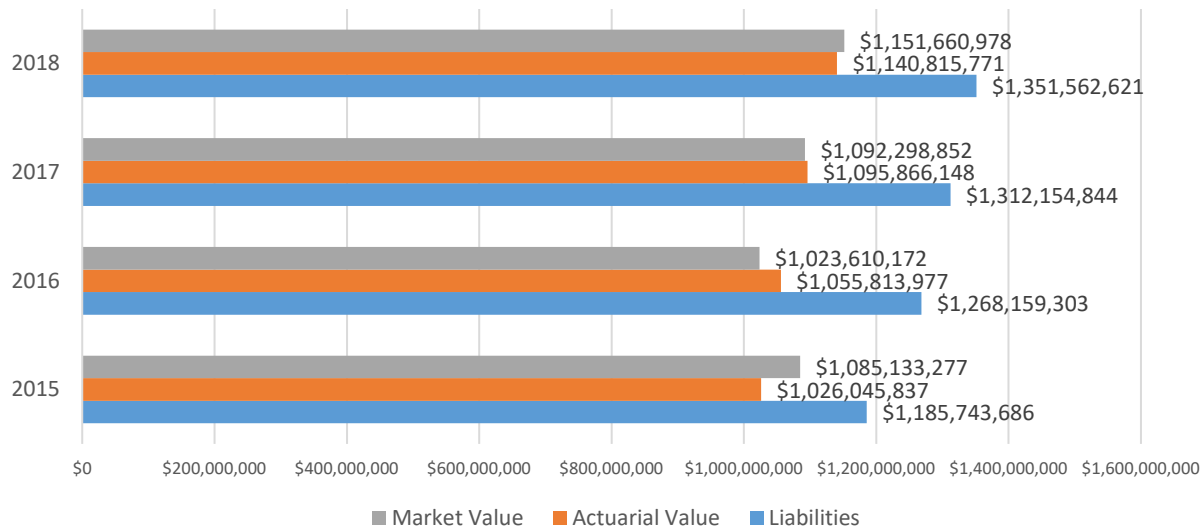
**Mortality Table:** RP-2000 generational with modified Scale MP-2015

**Vesting:** Hired before 4/20/14: 5 years. Hired on/after 4/20/14: 10 years

**COLA:** Annual Amount Maximum: 3% (hired before 4/20/14).  
2.5% (hired on/after 4/20/14). Only payable if funded ratio is equal to or greater than 80%.

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 3.75%



# KANSAS CITY FIREFIGHTERS' PENSION SYSTEM

## MEMBERSHIP:

Active: 981 Inactive: 931

## CONTRIBUTIONS:

Employer: \$17,435,993 Employee: \$7,562,958

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service  
Maximum: 80% of compensation  
Minimum monthly benefit of \$600

### Normal Retirement Eligibility:

Tier 1 (hired before 4/20/14): 25 years of service  
Tier 2 (hired on/after 4/20/14): 27 years of service

**Social Security Coverage:** No

**Valuation of Assets:** 5 Years

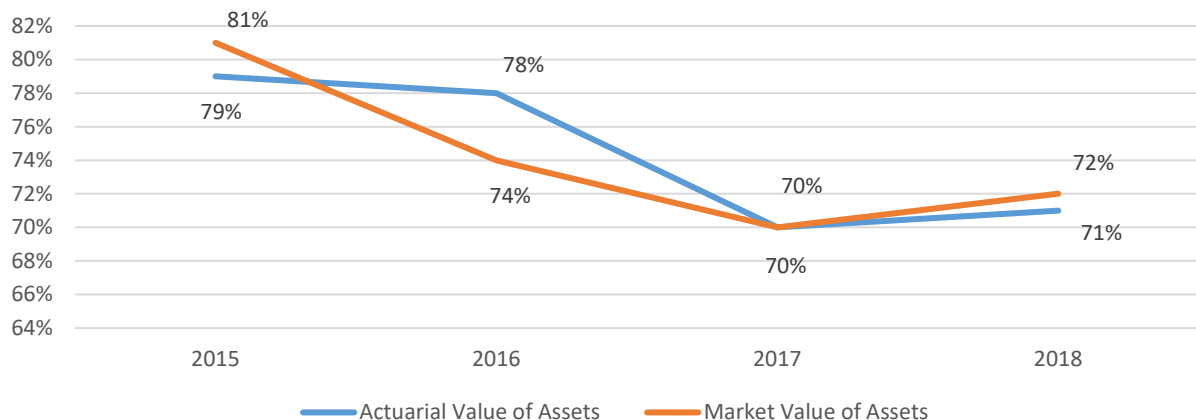
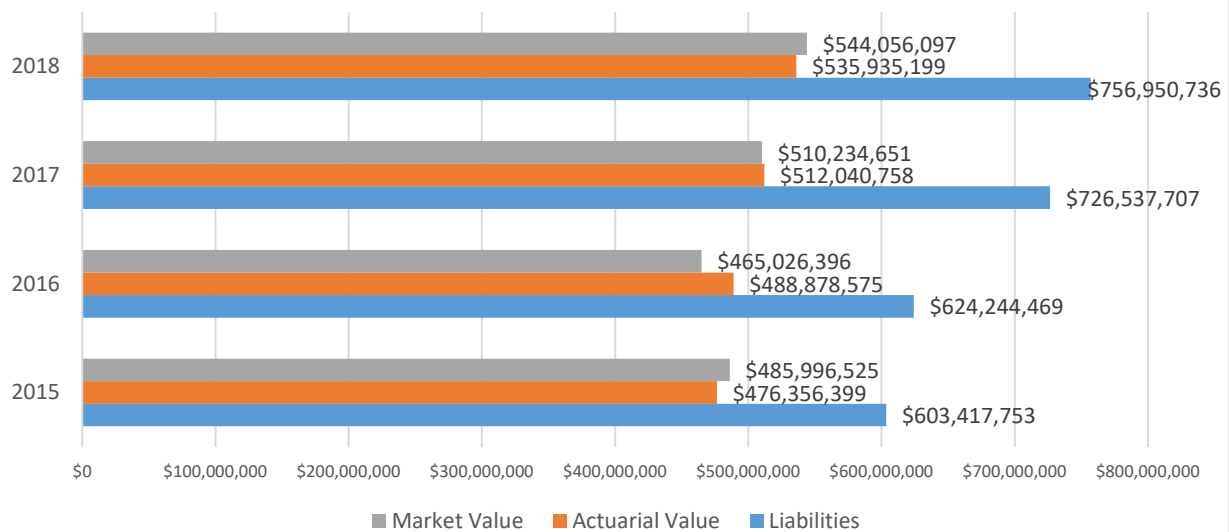
**Mortality Table:** RP-2000 Combined, Modified Scale MP-2015, Generational Projection

**Vesting:** 10 years

**COLA:** Annual Amount Maximum: 3% (hired before 4/20/14)  
2.5% (hired on/after 4/20/14). Only payable if funded ratio is equal to or greater than 80%.

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 3%



# KANSAS CITY POLICE RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 1,284 Inactive: 1,365

## CONTRIBUTIONS:

Employer: \$32,103,207 Employee: \$11,390,571

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service. Maximum: 75% of compensation. Supplemental benefit of \$420 per month.  
Retiring on/after 8/28/13: 2.5% of compensation x years of service. Benefit frozen at 32 years of service. Maximum 80% of compensation.  
Supplemental Benefit \$200 per month

### Normal Retirement Eligibility:

Age 60 with 10 years of service  
25 years of service  
Hired on/after 8/28/13: Age 60 with 15 years of service  
27 years of service

Social Security Coverage: No

Valuation of Assets: 5 Years

Mortality Table: RP-2000 Scale AA

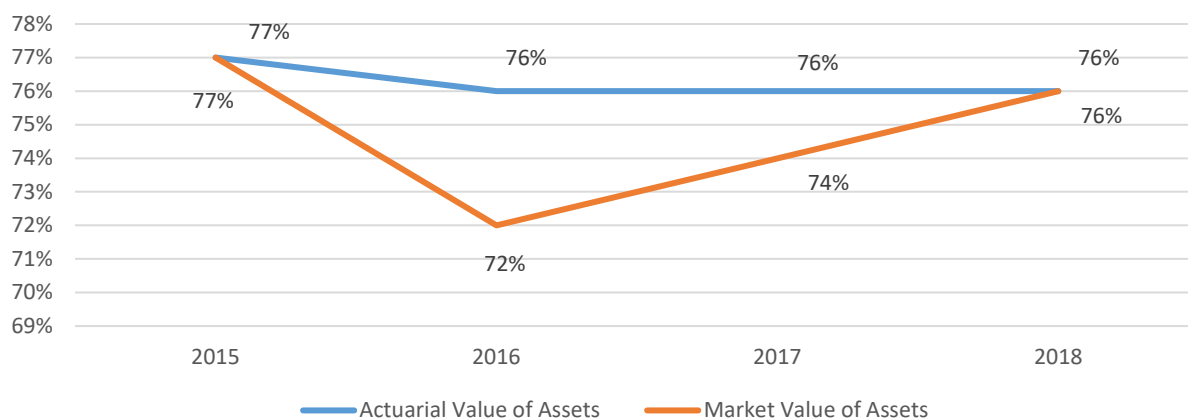
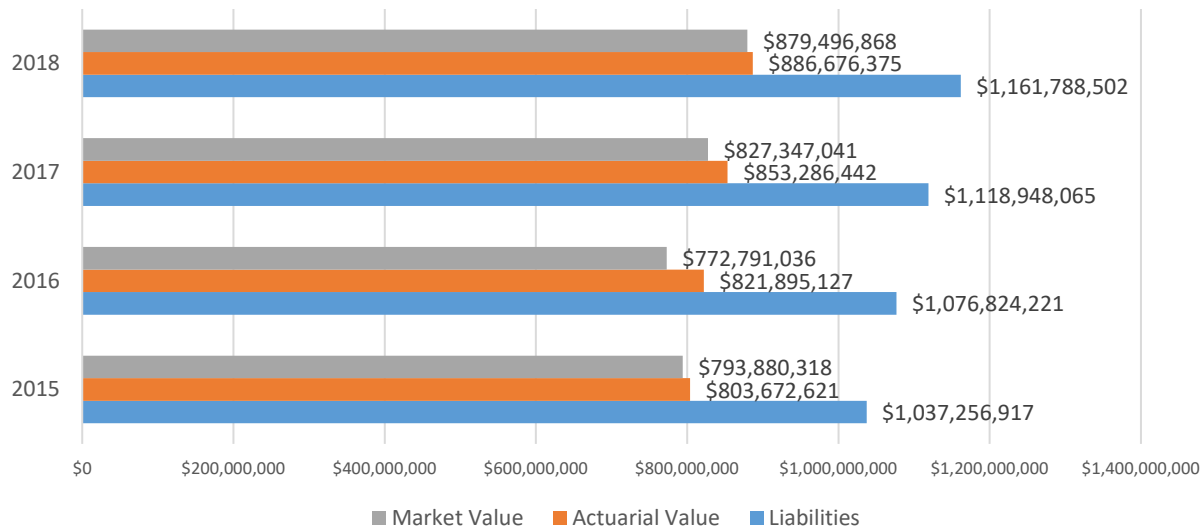
Vesting: 15 years

COLA: Ad hoc

Annual Amount Maximum: 3%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 3.75%



# KANSAS CITY PUBLIC SCHOOL RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 3,898 Inactive: 7,428

## CONTRIBUTIONS:

Employer: \$17,527,854 Employee: \$17,619,145

## BENEFITS:

### Normal Retirement Formula:

Tier 1: 2% of compensation x years of creditable service

Tier 2 (Members hired on/after 1/1/14): 1.75% of compensation x years of credited service

### Normal Retirement Eligibility:

Tier 1: Age 60 with 5 years of service

Rule of 75

Tier 2 (Members hired on/after 1/1/14): Age 62 with 5 years of service

Rule of 80

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2014 Blue Collar Table, Scale MP-2016

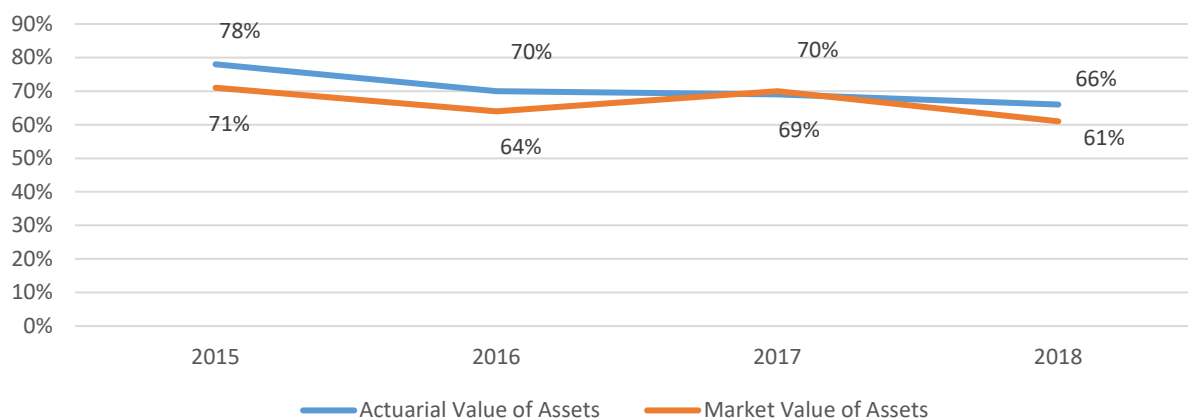
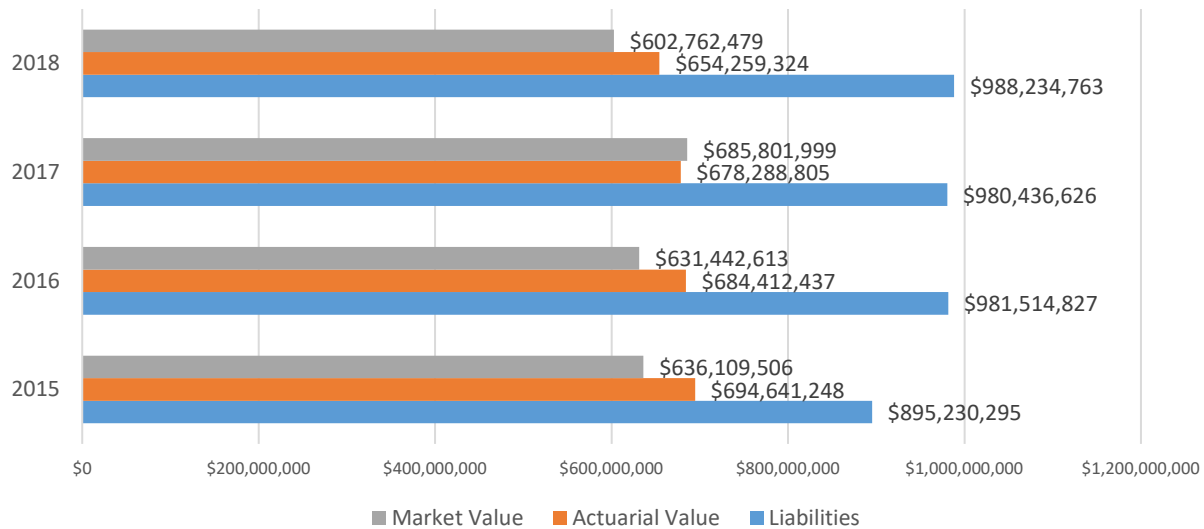
Vesting: 5 years

COLA: Ad hoc

Annual amount maximum: 3%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.75% Salary: 5%



# LADUE NON-UNIFORMED EMPLOYEES RETIREMENT PLAN

## MEMBERSHIP:

Active: 29 Inactive: 28

## CONTRIBUTIONS:

Employer: \$200,026 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1.25% of compensation x years of creditable service  
Maximum: 35 years of service

### Normal Retirement Eligibility:

Age 62 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 years

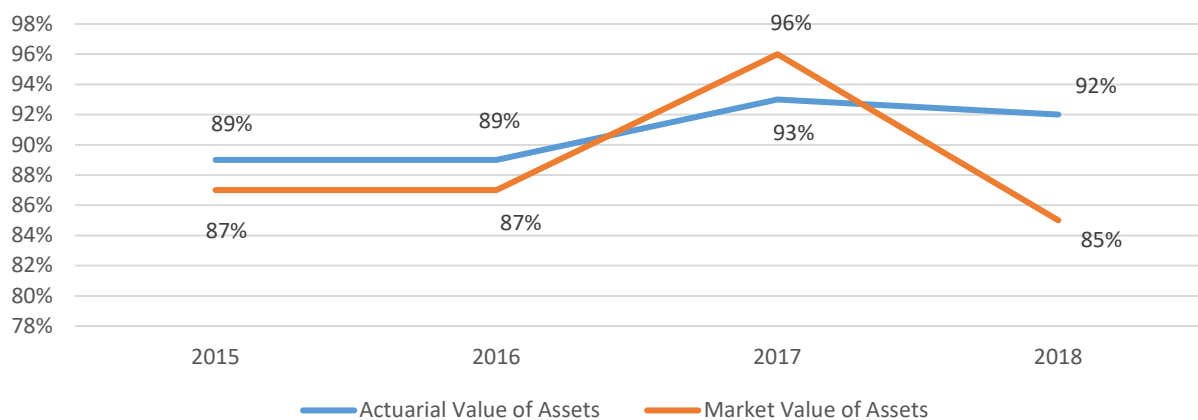
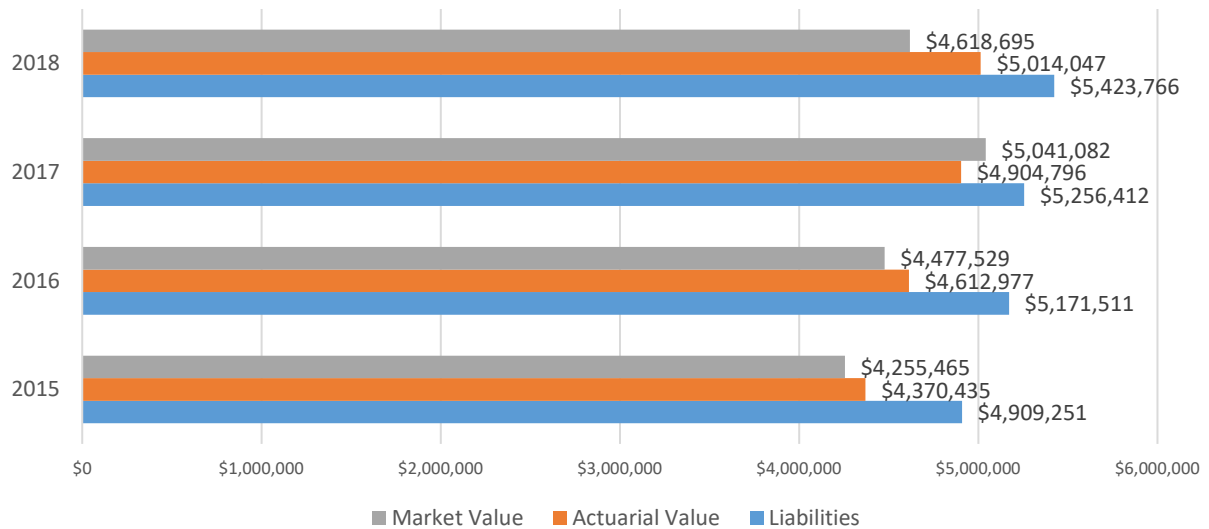
Mortality Table: RP-2014 projected generationally using Scale MP-2018

Vesting: 10 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.5%



# LADUE POLICE & FIRE PENSION PLAN

## MEMBERSHIP:

Active: 58 Inactive: 71

## CONTRIBUTIONS:

Employer: \$1,861,396 Employee: \$311,077

## BENEFITS:

### Normal Retirement Formula:

Hired prior to 1/1/13: 2% of compensation for the first 20 years of service + 2.5% for the next 10 years of service

Maximum: 65% of compensation

Hired on/after 1/1/13: 2% of compensation up to 30 years of service.

Maximum: 60% of compensation

### Normal Retirement Eligibility:

Age 55 with 10 years of service

**Social Security Coverage:** No

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2014 projected generationally using Scale MP-2018

**Vesting:** 10 years

**COLA:** Annual Amount Maximum: 2%

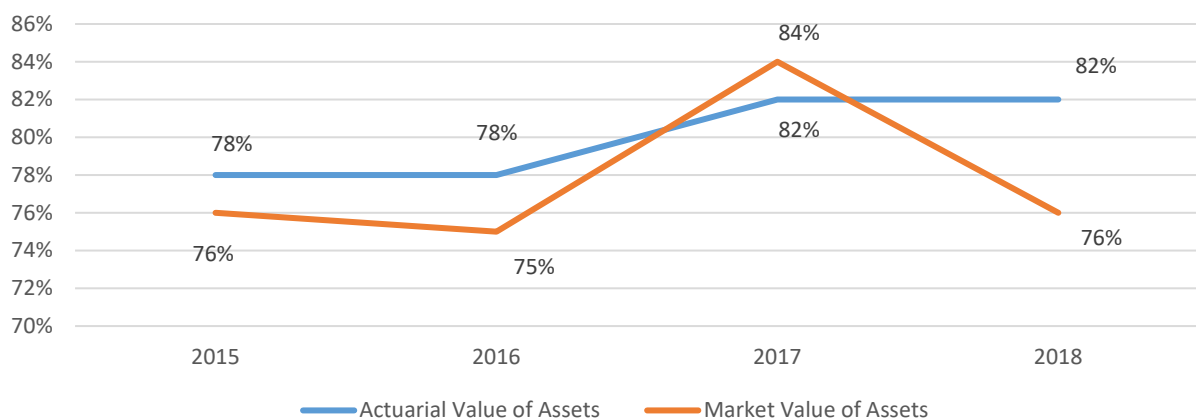
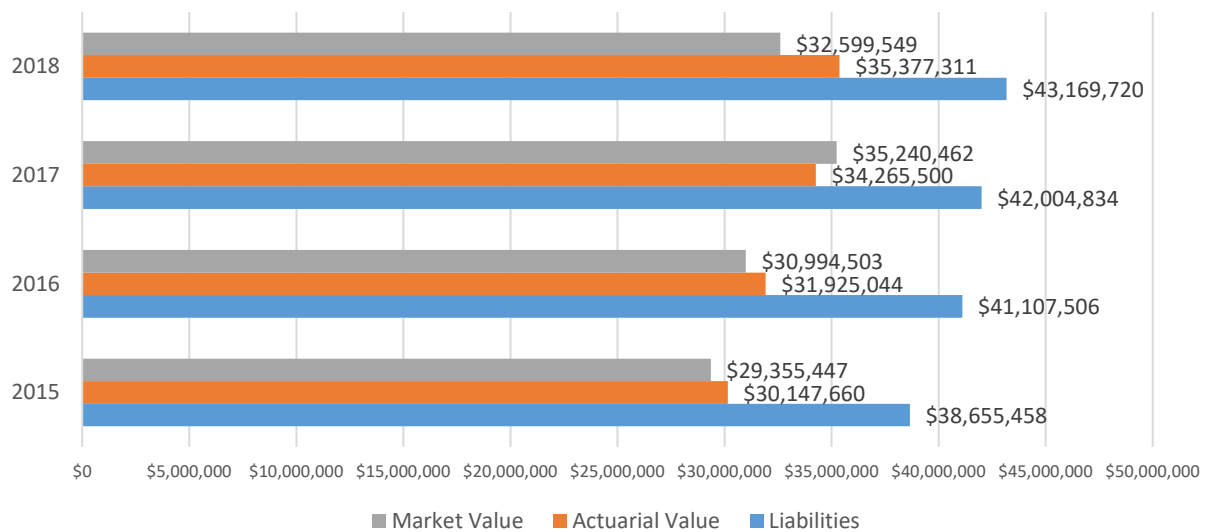
**Percent of CPI:** 100%

**Cap - Total Max:** 20%

## ACTUARIAL ASSUMPTIONS:

Interest: 7%

Salary: 4.5%





# LAGERS STAFF RETIREMENT PLAN

## MEMBERSHIP:

Active: 30 Inactive: 11

## CONTRIBUTIONS:

Employer: \$363,705 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Rule of 80

Social Security Coverage: Yes

Valuation of Assets: 5 Years

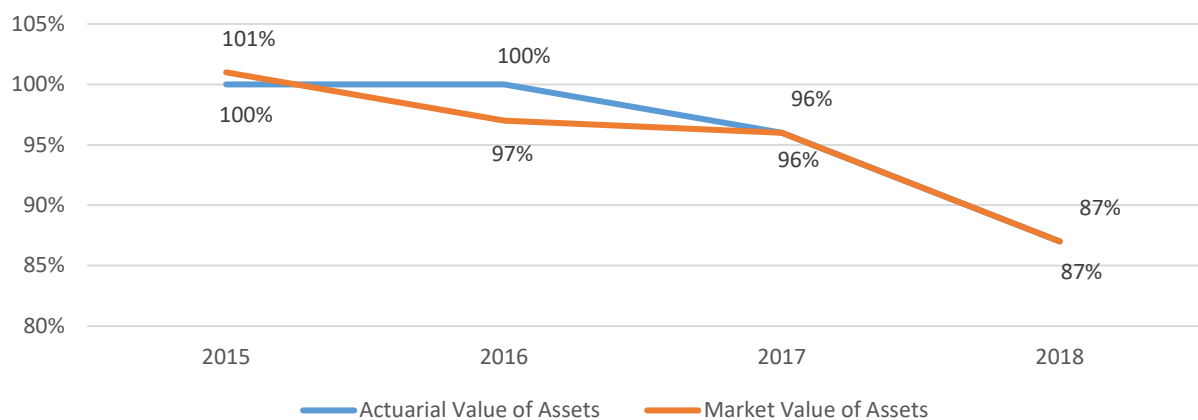
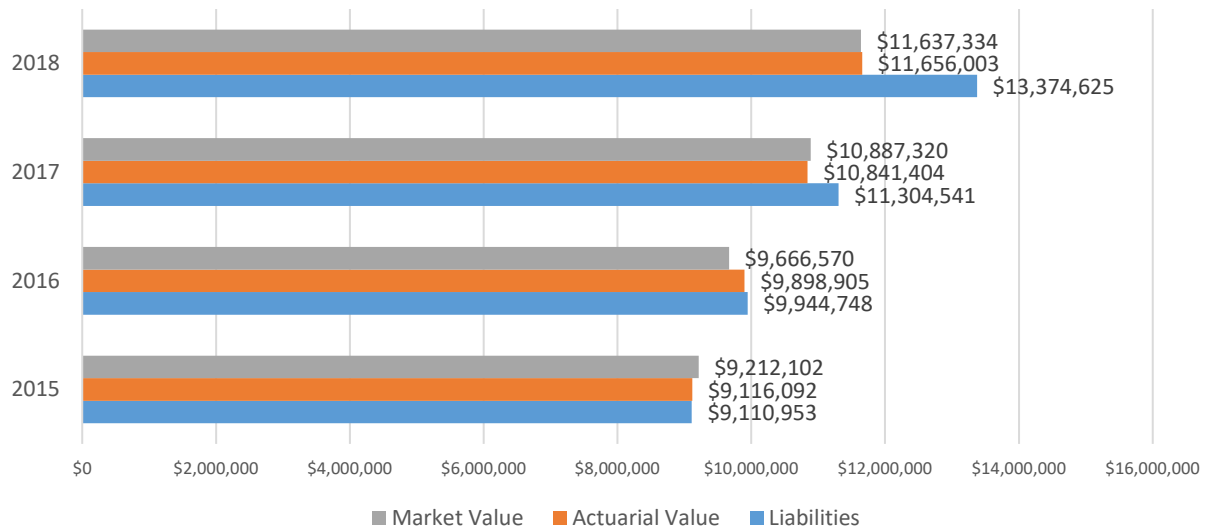
Mortality Table: RP-2014 adjusted to 2006

Vesting: 5 years

COLA: Annual Amount Maximum: 4%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 3.25%



# LITTLE RIVER DRAINAGE DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 14 Inactive: 9

## CONTRIBUTIONS:

Employer: \$50,139 Employee: \$21,054

## BENEFITS:

### Normal Retirement Formula:

1% of compensation x years of creditable service  
Minimum of \$100 per Month

### Normal Retirement Eligibility:

Age 65 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

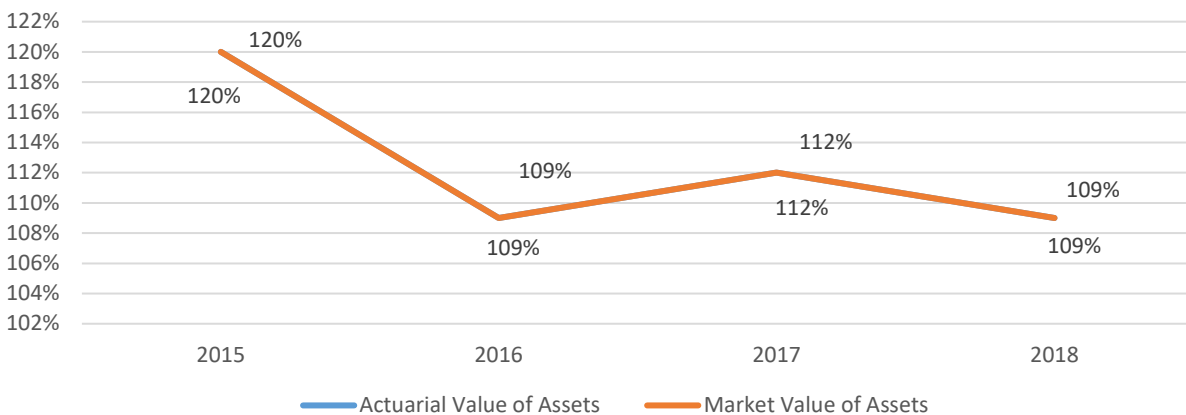
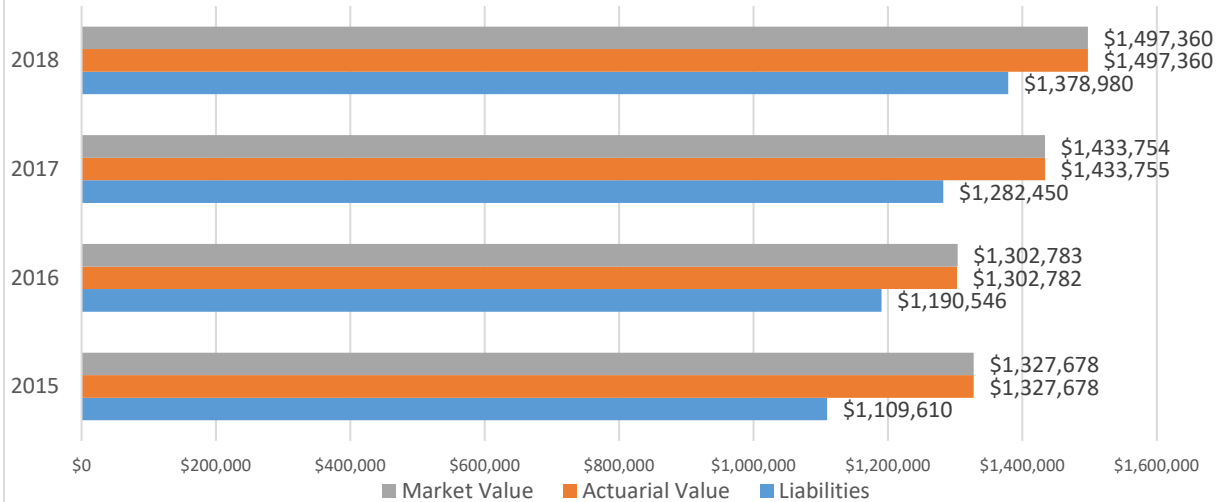
Mortality Table: IRS 417(e) Applicable for 2018

Vesting: Immediate upon employment

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 5% Salary: 3.5%



# LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM (LAGERS)

## MEMBERSHIP:

Active: 34,433 Inactive: 30,850

## CONTRIBUTIONS:

Employer: \$204,018,370 Employee: \$19,810,928

## BENEFITS:

### Normal Retirement Formula:

Several Optional Benefit Programs: 1%, 1.25%, 1.5%, 1.75%, 2%, Non-Social Security 2.5%

### Normal Retirement Eligibility:

Age 60 with 5 years of service  
Uniformed: Age 55 with 5 years of service  
Optional Rule of 80 for employer election

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2014 Healthy Annuitant

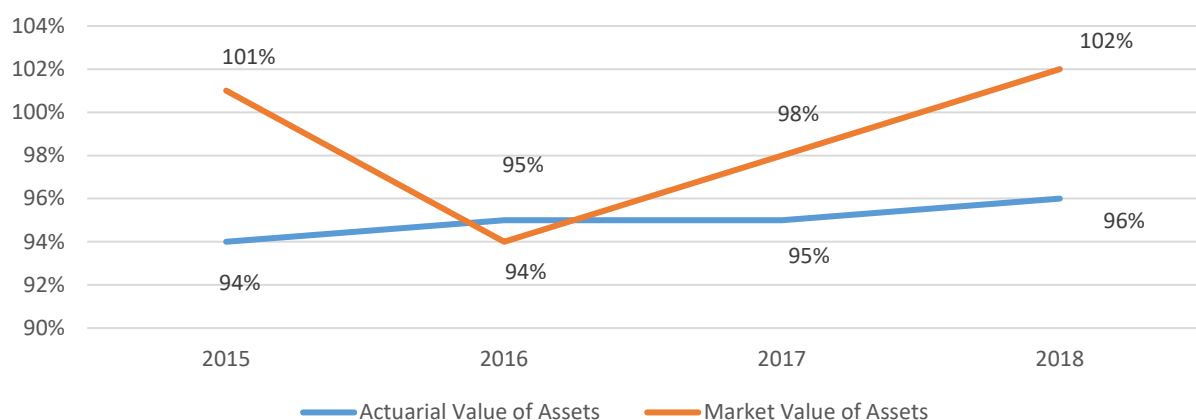
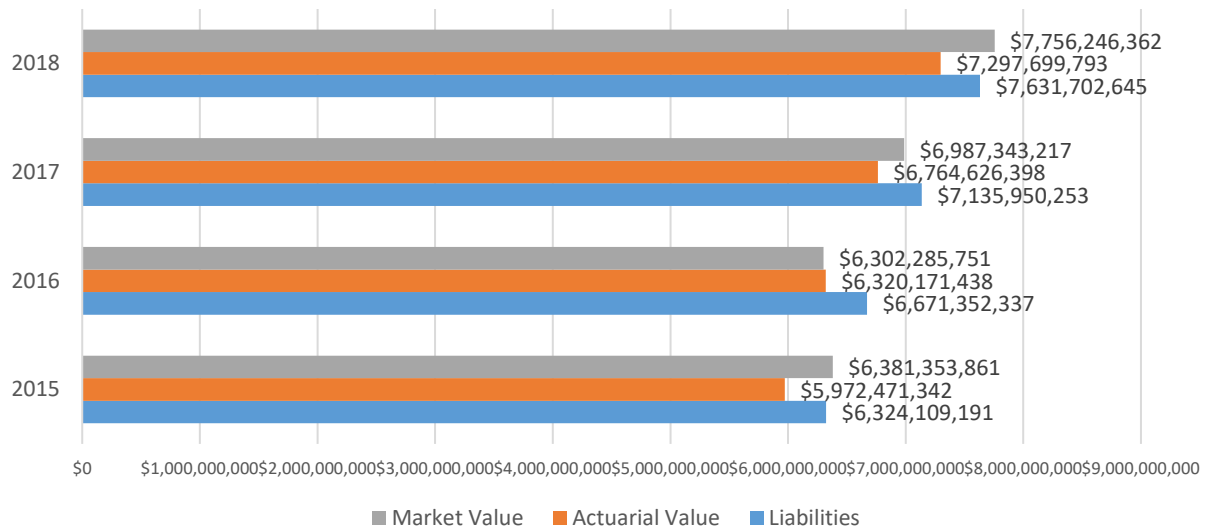
**Vesting:** 5 years

**COLA:** Annual Amount Maximum: 4%

**Percent of CPI:** 100%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 3.25%



# MAPLEWOOD POLICE & FIRE RETIREMENT FUND

## MEMBERSHIP:

Active: 0 Inactive: 22

## CONTRIBUTIONS:

Employer: \$582,564 Employee: \$87,064

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service  
Maximum: 60% of compensation

### Normal Retirement Eligibility:

20 years of service  
Age 55 with 10 years of service

**Social Security Coverage:** No

**Valuation of Assets:** Market Value

**Mortality Table:** RP-2014, Generational, Scale MP-2017

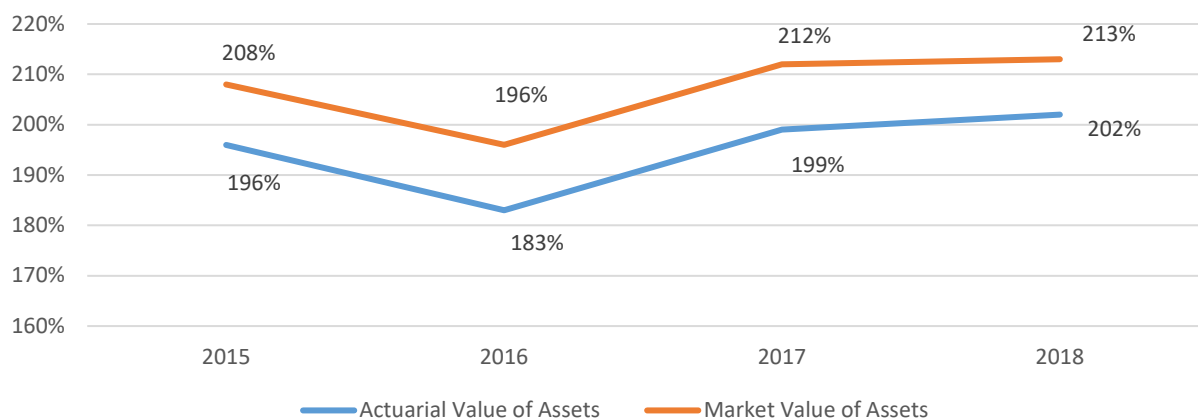
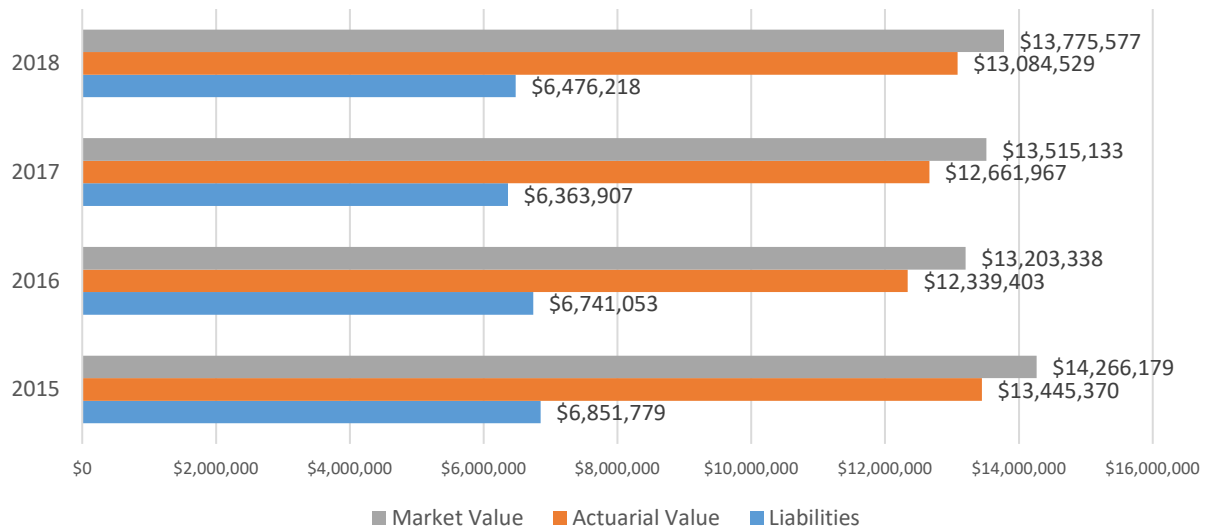
**Vesting:** 20 years

**COLA:** No COLA

## ACTUARIAL ASSUMPTION:

Interest: 6.5%

**Plan closed December 2010. All active police and fire personnel transferred to LAGERS 1/1/2011.**



# MEHLVILLE FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 0 Inactive: 24

## CONTRIBUTIONS:

Employer: \$925,000 Employee: \$0

## BENEFITS:

### Normal Retirement Formula:

2.625% of compensation for each of the first 27 years of service plus 1% for each additional year. Maximum: 75% of compensation  
Temporary Benefit: Supplemental Benefit: \$500 per month from age 58 until Social Security eligibility

### Normal Retirement Eligibility:

Age 58 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2014 Healthy Lives generational projection from 2006, Scale MP-2018

Vesting: 5 years

COLA: Ad hoc

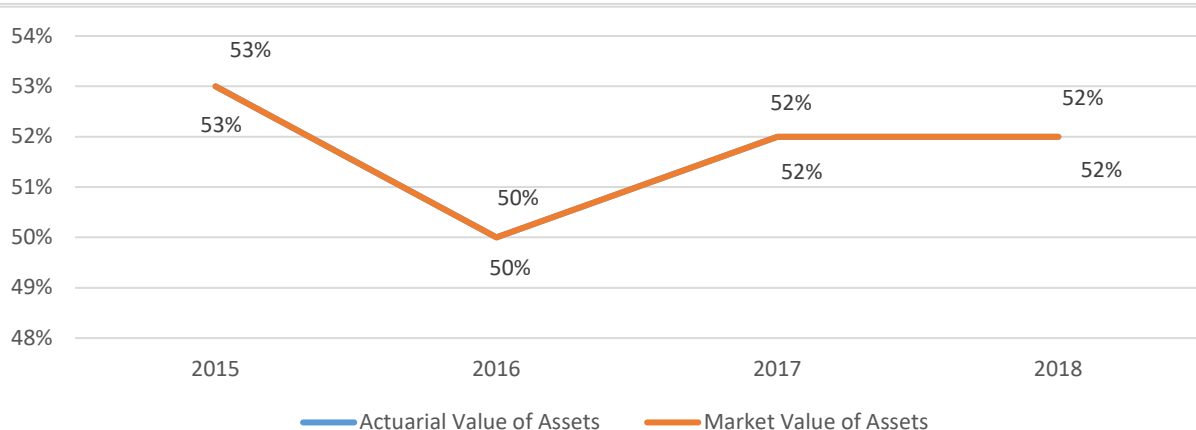
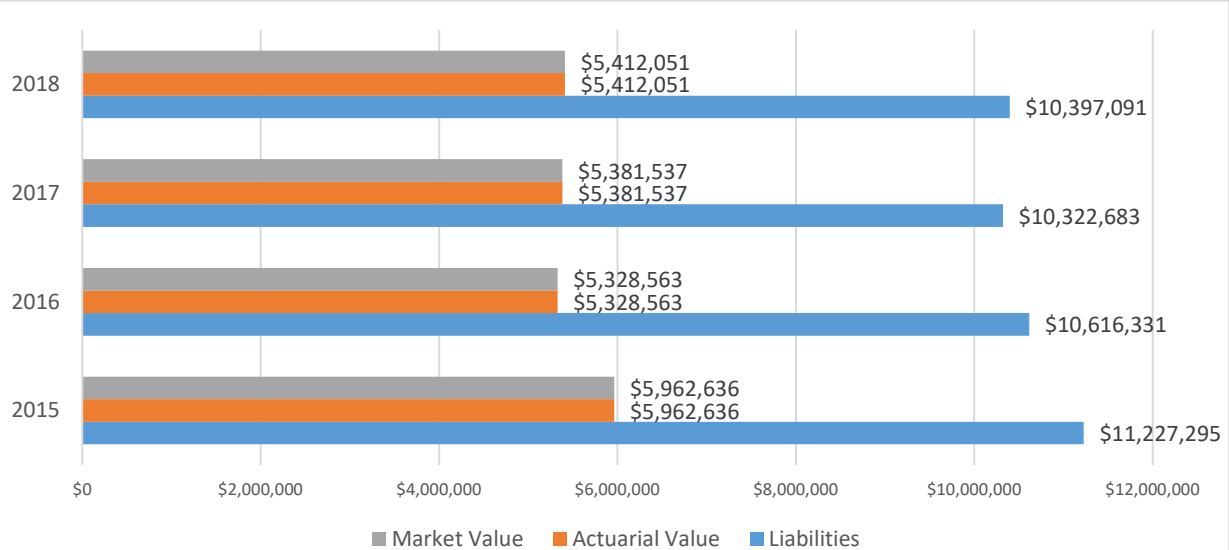
Annual Amount Maximum: 3%

## ACTUARIAL ASSUMPTIONS:

Interest: 5% Salary: N/A

Defined benefit plan frozen effective 3/31/06. IRS approved the plan's termination in a determination letter dated 6/11/10.

Defined Contribution Plan: See corresponding information in defined contribution section.



# METRO NORTH FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 15 Inactive: 6

## CONTRIBUTIONS:

Employer: \$231,278 Employee: Non-Contributory

## BENEFITS:

**Normal Retirement Formula:**  
\$200 x years of credited service

**Normal Retirement Eligibility:**  
Age 60 with 8 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** Market Value

**Mortality Table:** RP-2014 Healthy Annuitants Table, Scale MP-2018

**Vesting:** 8 years

**COLA:** Annual Amount Maximum: 1%

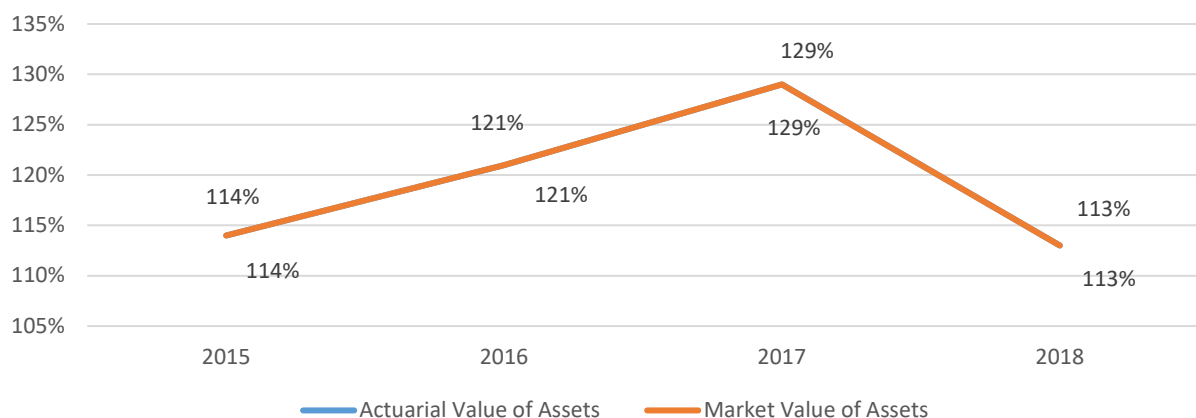
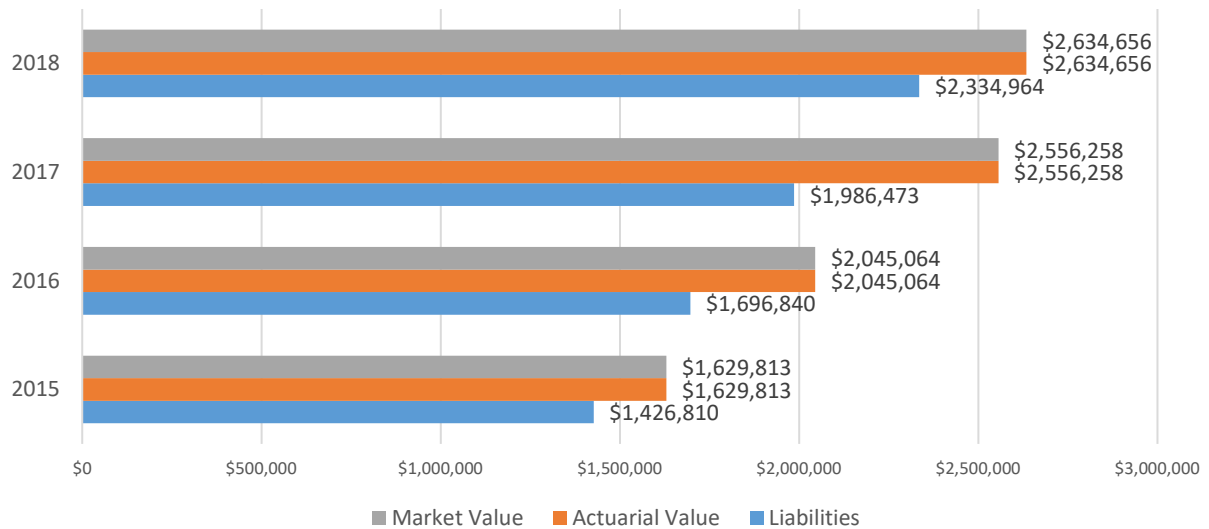
**Percent of CPI:** 100%

**Cap Total Maximum:** 10%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4.5%

**Defined Contribution Plan:** See corresponding information in Defined Contribution section.



# METRO WEST FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 99 Inactive: 78

## CONTRIBUTIONS:

Employer: \$1,802,789 Employee: \$484,265

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service  
3% for benefits accrued up to 12/31/06  
Maximum: 34 years of service

### Normal Retirement Eligibility:

Age 55 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

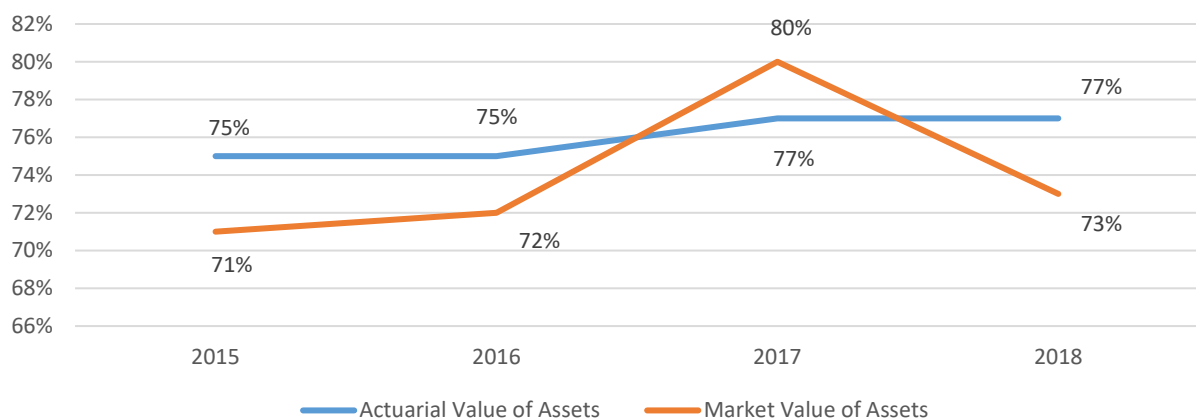
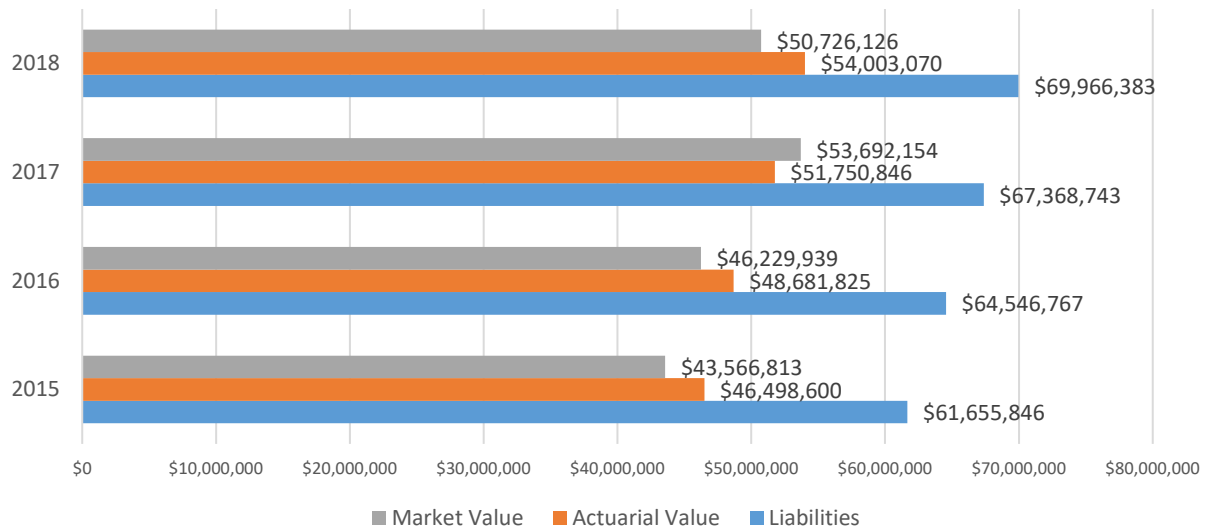
Mortality Table: RP-2014 Blue Collar, Generational Projection, Scale MP-2018

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3%



# METROPOLITAN ST. LOUIS SEWER DISTRICT EMPLOYEES PENSION PLAN

## MEMBERSHIP:

Active: 545 Inactive: 929

## CONTRIBUTIONS:

Employer: \$12,493,916 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1.7% of compensation x years of service + 0.4% of compensation above covered earnings x years of service  
Maximum: 35 Years

### Normal Retirement Eligibility:

Age 65 with 5 years of service  
Rule of 75 and Rule of 80

Social Security Coverage: Yes

Valuation of Assets: 3 Years

Mortality Table: RP-2014 Generational with MP-2018 improvement scale from 2006

Vesting: 5 years

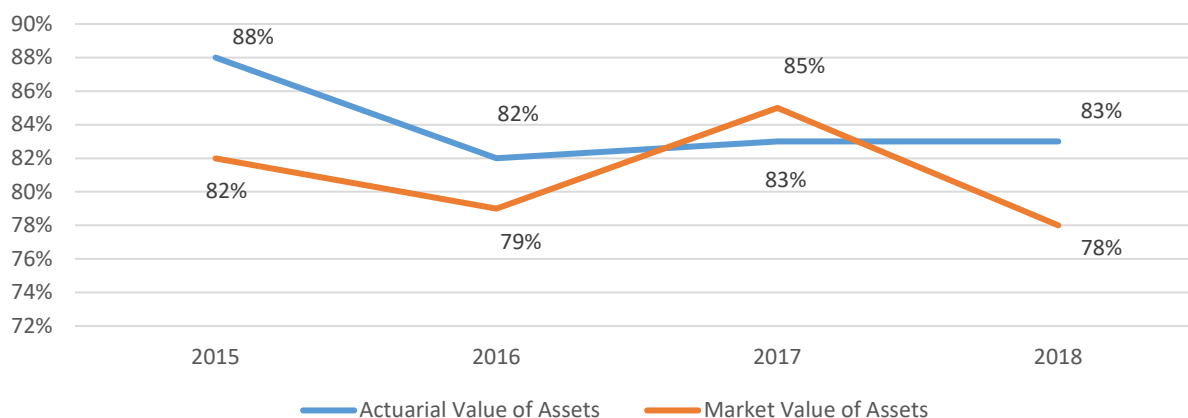
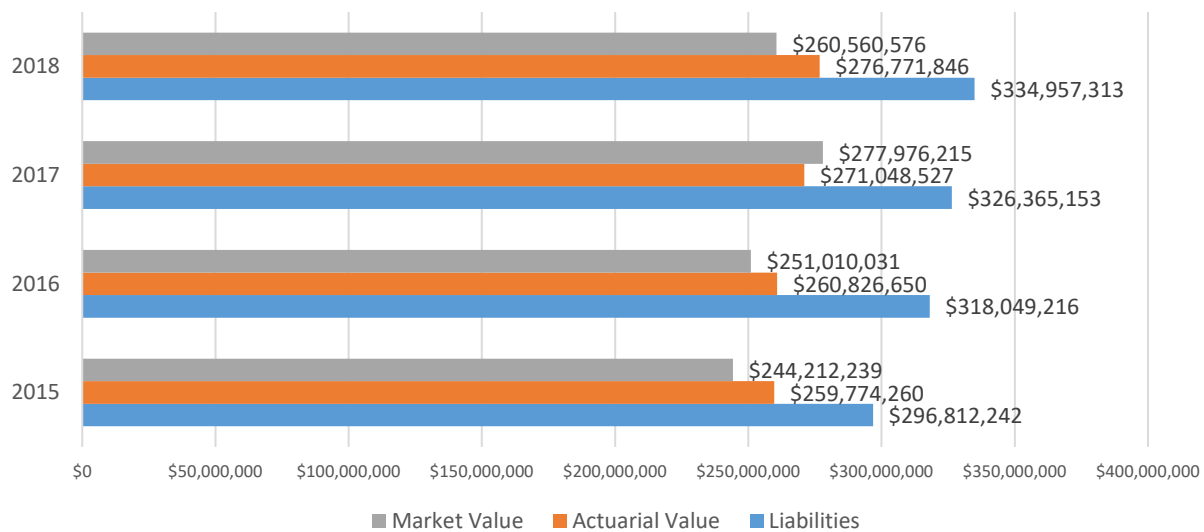
COLA: Annual Amount Maximum: 3%

Cap Total Maximum: Lesser of 45% or \$750 per month

## ACTUARIAL ASSUMPTIONS:

Interest: 6.9% Salary: 4.25%

Defined Benefit Plan Closed 1/1/11. Defined Contribution Plan. See corresponding information in Defined Contribution section.





# MID-COUNTY FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 18 Inactive: 4

## CONTRIBUTIONS:

Employer: \$110,000 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

\$55 x years of credited service  
Maximum: 20 Years of Credited Service

### Normal Retirement Eligibility:

Age 55 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2014 Healthy Annuitant Blue Collar, Scale MP-2018

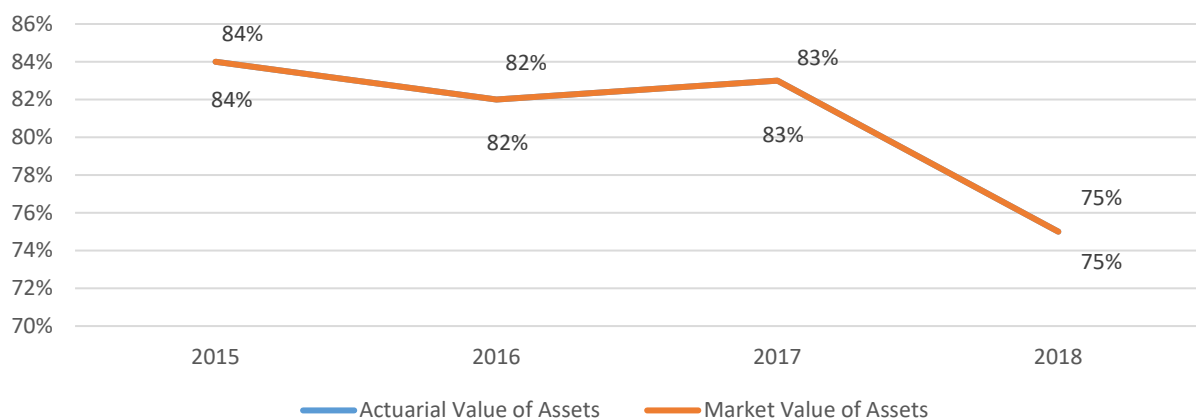
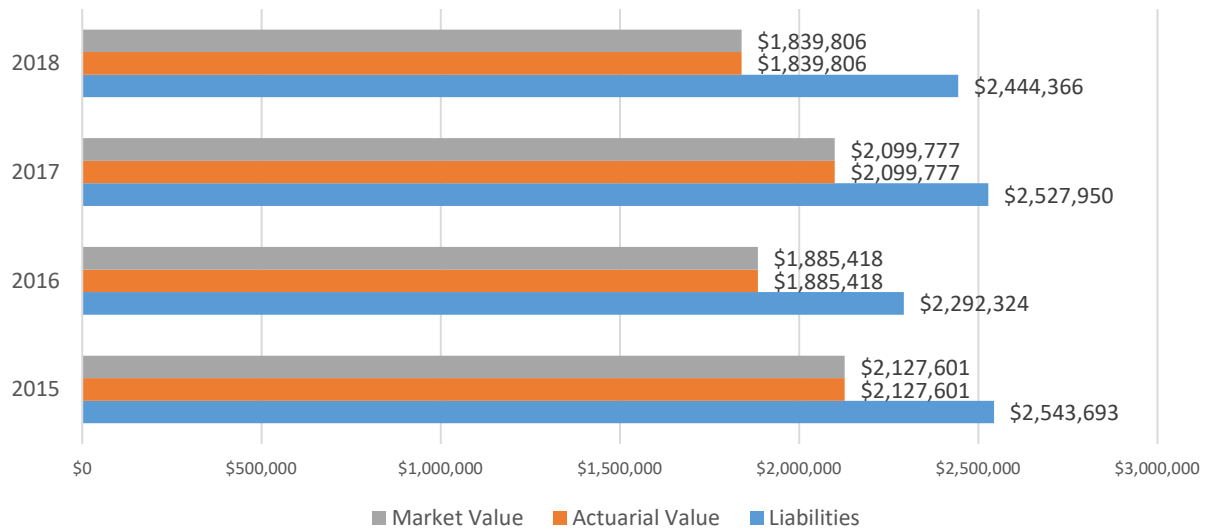
Vesting: Partial 5 / Full 10

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 6% Salary: 4.5%

Defined Contribution Plan. See Corresponding Information in Defined Contribution Section.



# MISSOURI HIGHER EDUCATION LOAN AUTHORITY PENSION PLAN

## MEMBERSHIP:

Active: 444 Inactive: 43

## CONTRIBUTIONS:

Employer: \$3,165,747 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service  
1.5% of compensation x years of service (non-salaried members)

### Normal Retirement Eligibility:

Age 60 with 15 years of service  
Age 65 with 5 years of service  
Rule of 80 with minimum age of 50.  
Employees hired after 6/30/17: Rule of 85 with a minimum age of 55.

**Social Security Coverage:** Yes

**Valuation of Assets:** Market Value

**Mortality Table:** RP-2014 Blue Collar adjusted to 2006, Scale MP-2017

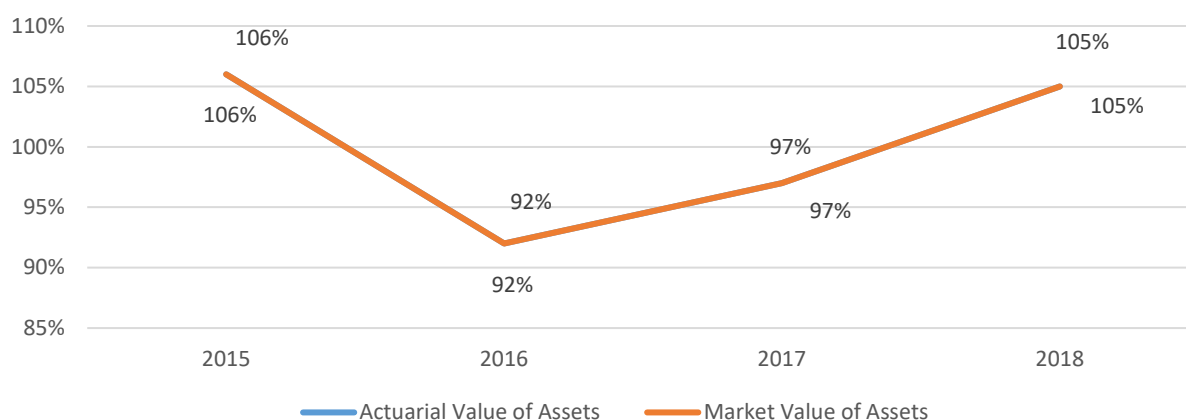
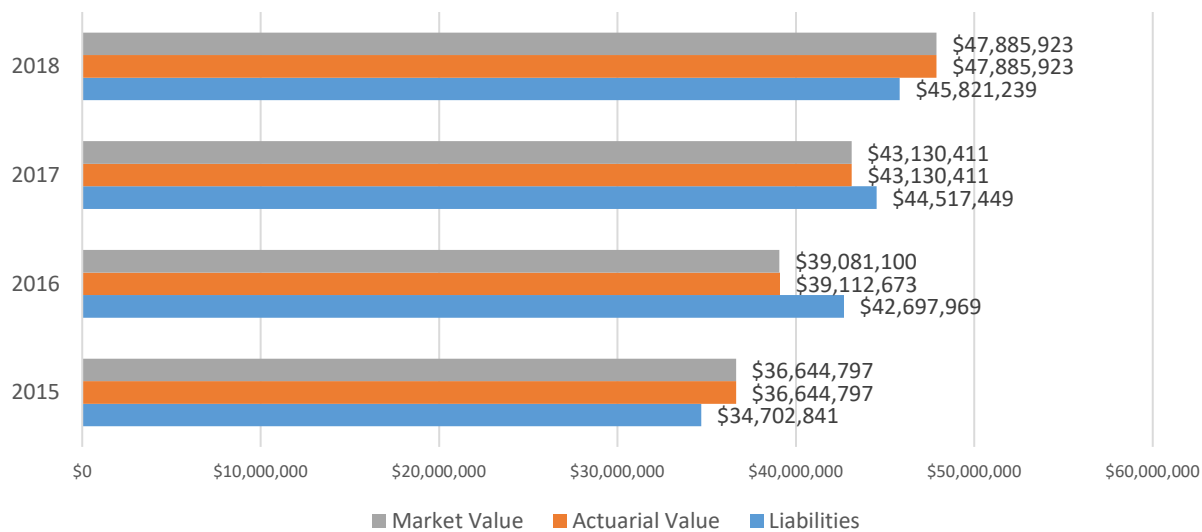
**Vesting:** 5 years

**COLA:** Annual Amount Maximum: 5% **Percent of CPI:** 80%

## ACTUARIAL ASSUMPTIONS:

**Interest:** 6.75% **Salary:** 4.5%

**Defined Contribution Plan:** See Corresponding Information in Defined Contribution Section



# MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 47,806 Inactive: 63,684

## CONTRIBUTIONS:

Employer: \$379,557,962 Employee: \$28,303,994

## BENEFITS:

### Normal Retirement Formula:

1.7% of compensation x years of creditable service  
Plus 0.8% Temporary Benefit to Age 62 under Rule of 80 (Year 2000 Plan) or Rule of 90 (Tier 2011)  
MSEP (closed plan): 1.6% of compensation x years of service

### Normal Retirement Eligibility:

Age 62 with 5 years of service  
Rule of 80 at age 48  
Hired for the first time on/after 1/1/11 (Tier 2011): Age 67 with 5 years of service  
Rule of 90 at minimum age of 55 years

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 years (7 years for deferred investment experience)

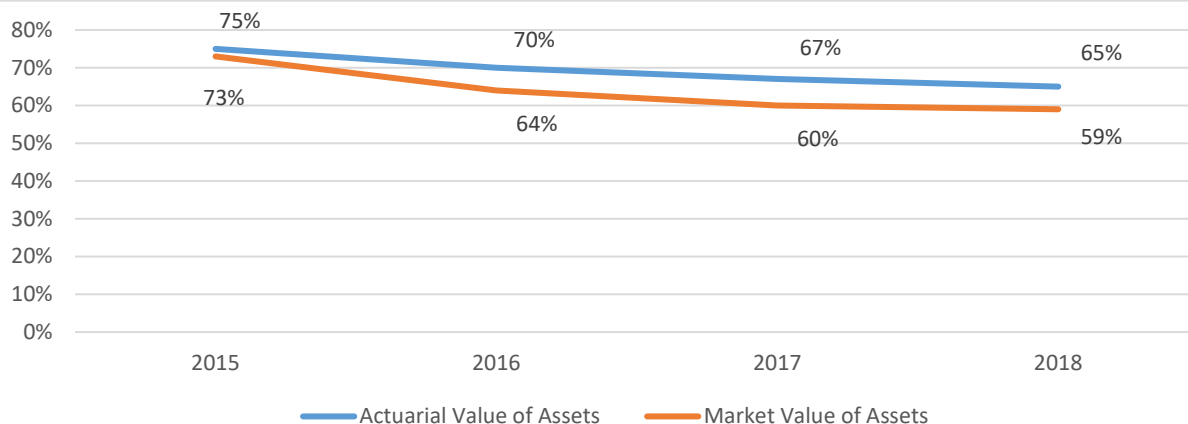
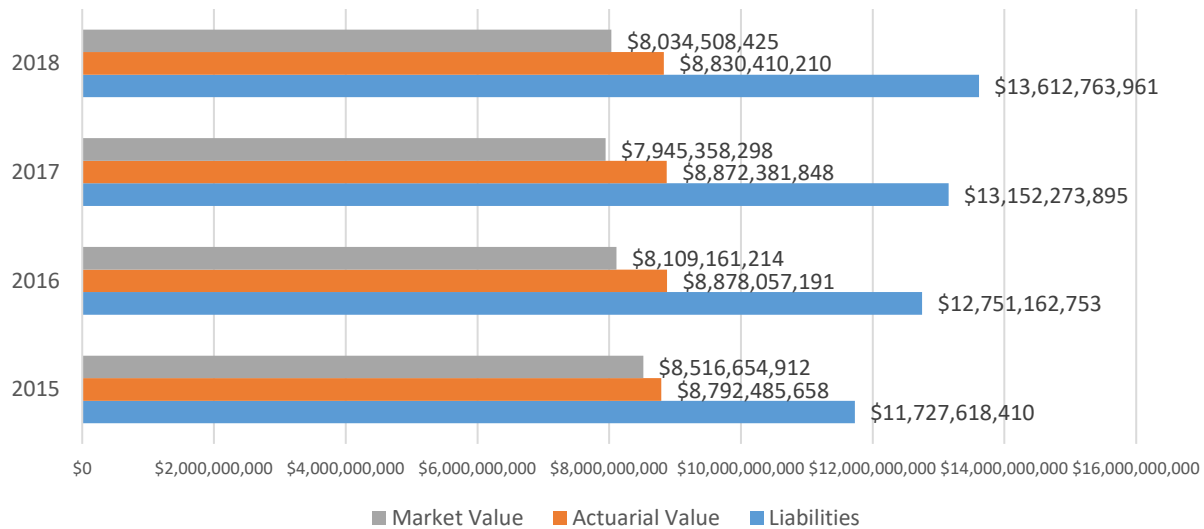
**Mortality Table:** RP-2014 Scale MP-2015

**Vesting:** 5 years

**COLA:** Annual Amount Maximum: 5% **Percent of CPI:** 80%

## ACTUARIAL ASSUMPTIONS:

**Interest:** 7.25% **Salary:** 2.75%



# MODOT & HIGHWAY PATROL EMPLOYEES' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 7,415 Inactive: 10,952

## CONTRIBUTIONS:

Employer: \$204,955,180 Employee: \$3,721,983

## BENEFITS:

### Normal Retirement Formula:

1.7% of compensation x years of creditable service

Plus 0.8% Temporary Benefit to Age 62 under Rule of 80 (Year 2000 Plan) or Rule of 90 (Tier 2011)

Closed Plan: 1.6% of compensation x years of service. Uniformed Patrol receive an additional 1/3 monthly base benefit

### Normal Retirement Eligibility:

Age 62 with 5 years of service. Rule of 80

Uniformed Patrol: Mandatory retirement age of 60

Hired for the first time on/after 1/1/11 (Tier 2011): Age 67 with 5 years of service. Rule of 90 at minimum age of 55.

Uniformed Patrol: Mandatory retirement age of 60

Social Security Coverage: Yes

Valuation of Assets: 3 Years

Mortality Table: RP-2014 Healthy Annuitant Mortality Tables projected to 2022 using Scale MP-2017

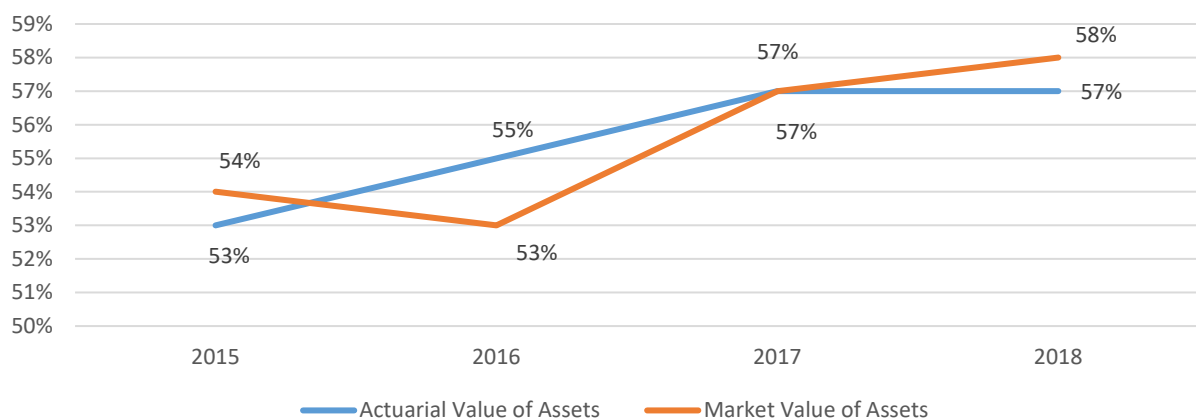
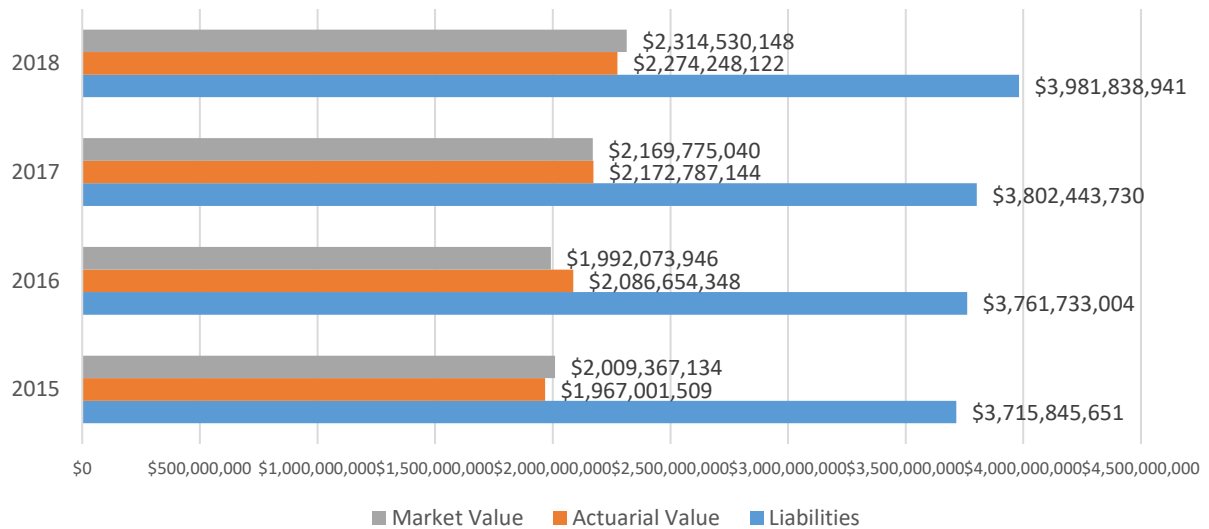
Vesting: 5 years

COLA: Annual Amount Maximum: 5% Percent of CPI: 80%

## ACTUARIAL ASSUMPTIONS:

Interest: 7%

Salary: 3%



# NORTH KANSAS CITY HOSPITAL RETIREMENT PLAN

## MEMBERSHIP:

Active: 2,892 Inactive: 1,611

## CONTRIBUTIONS:

Employer: \$4,533,336 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

Hired after 1/1/05, 0.9% of compensation not in excess of the integration level & 1.4% above it; hired prior to 1/1/05, 1.35% & 2% respectively.

### Normal Retirement Eligibility:

Age 65 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2000 Combined projected generationally with Scale BB

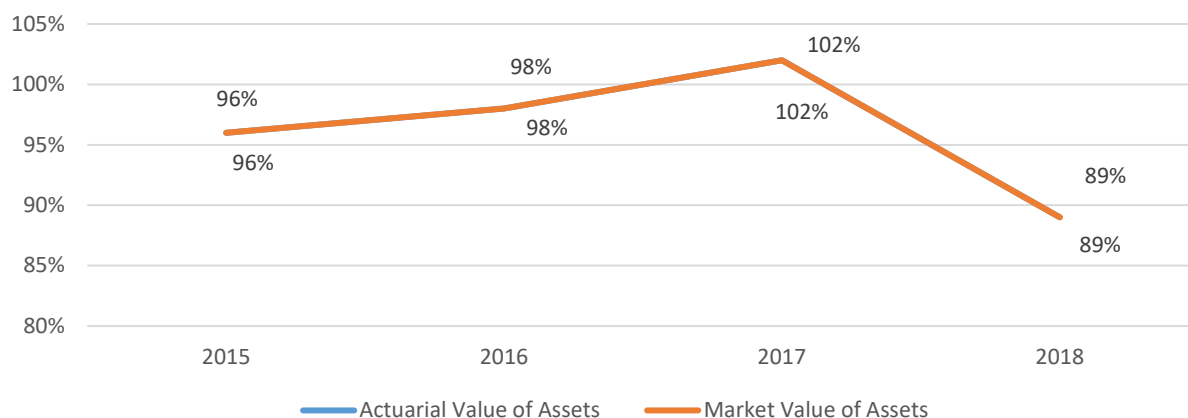
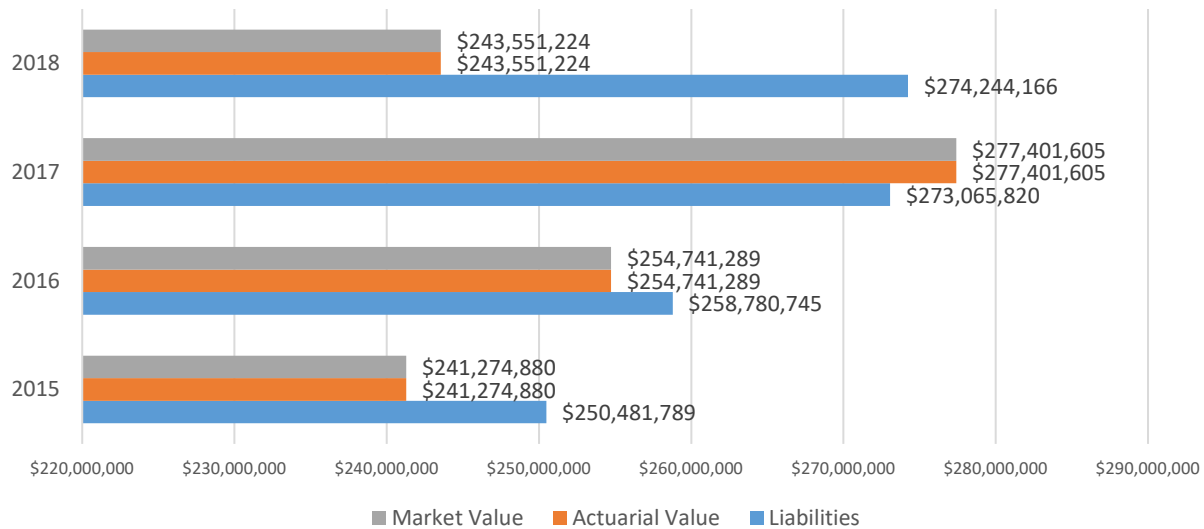
Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 2.5%

Effective 5/1/19, the plan was amended to provide for cash balance benefits. Employees who become active participants on/after May 1, 2019 and certain other previously hired employees participate in the cash balance plan.



# NORTH KANSAS CITY POLICEMEN'S & FIREMEN'S RETIREMENT FUND

## MEMBERSHIP:

Active: 93 Inactive: 88

## CONTRIBUTIONS:

Employer: \$1,093,114 Employee: \$172,931

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation for the first 20 years of service + 1% for the next 10 years of service  
Maximum: 30 years of service

### Normal Retirement Eligibility:

Age 55 with 10 years of service  
Mandatory retirement at age 65

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2014 at 2006, Blue Collar, Generational, Scale MP-2018

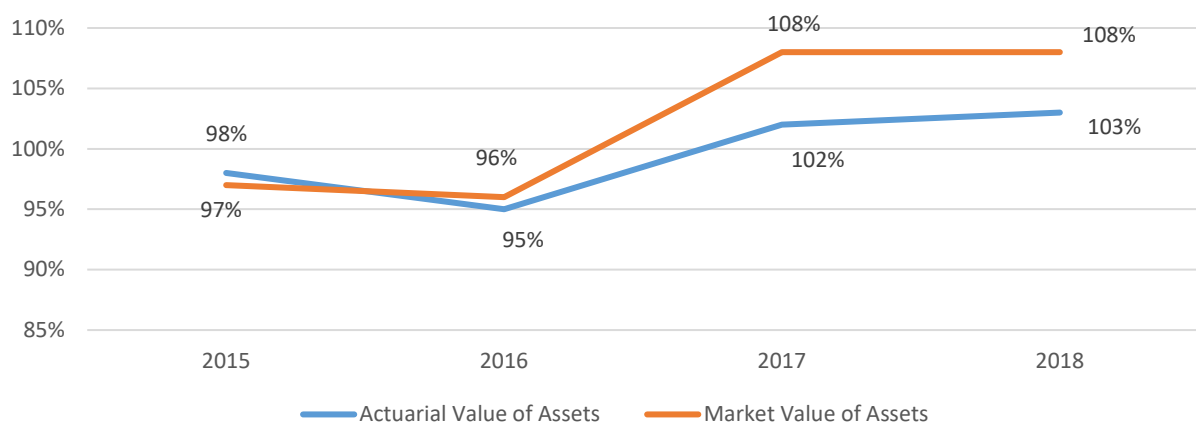
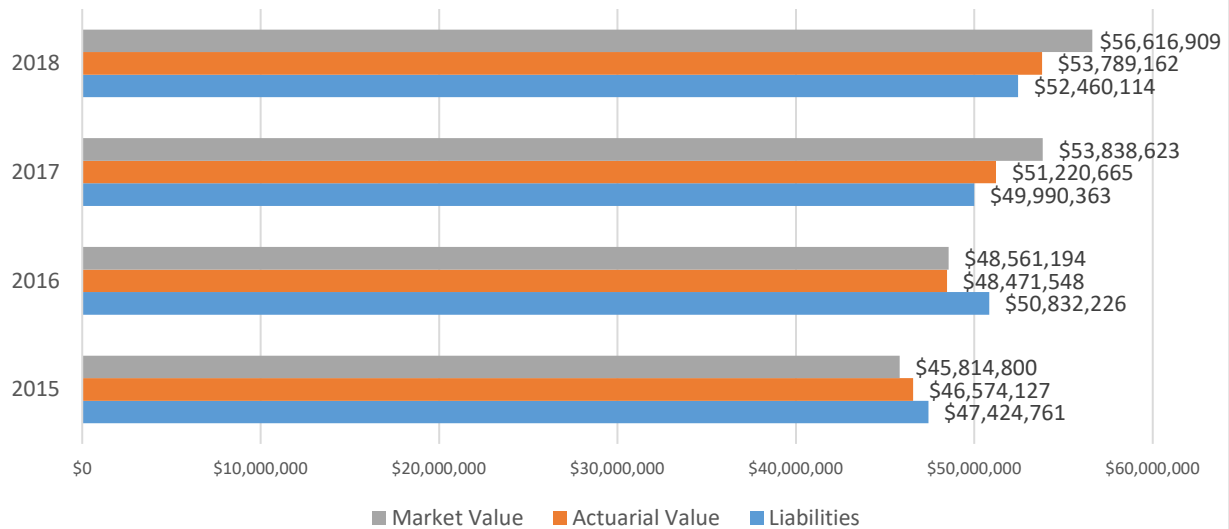
**Vesting:** 10 years

**COLA:** Annual Amount Minimum: 1%

**Annual Amount Maximum:** 3%

## ACTUARIAL ASSUMPTIONS:

Interest: 6.5% Salary: 4%



# OLIVETTE SALARIED EMPLOYEES' RETIREMENT PLAN

## MEMBERSHIP:

Active: 55 Inactive: 87

## CONTRIBUTIONS:

Employer: \$510,000 Employee: \$214,669

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of service

### Normal Retirement Eligibility:

Age 58 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2014 Healthy Annuitant Blue Collar, Scale MP-2018

Vesting: 5 years

COLA: Ad Hoc

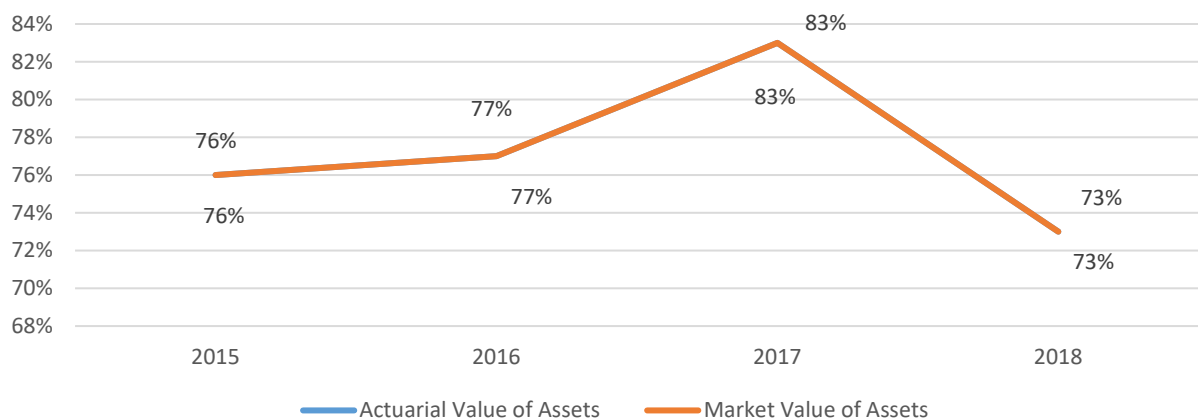
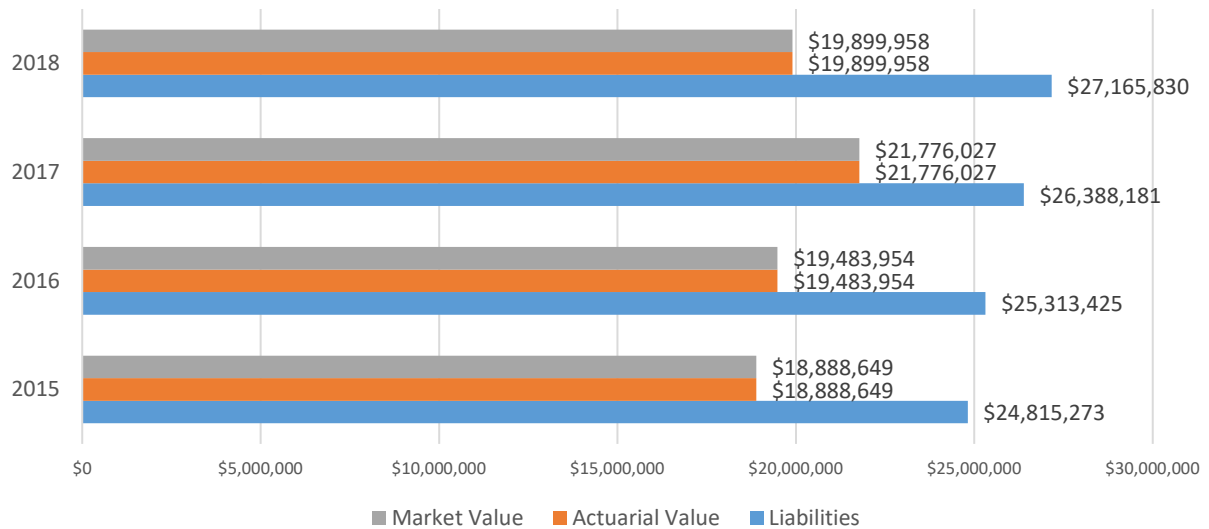
Annual Amount Maximum: 2%

Cap Total Maximum: 25%

Retirements after 1/1/10 receive no COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: 4%



# OVERLAND NON-UNIFORMED EMPLOYEES' PENSION FUND

## MEMBERSHIP:

Active: 46 Inactive: 59

## CONTRIBUTIONS:

Employer: \$537,996 Employee: \$127,100

## BENEFITS:

### Normal Retirement Formula:

2.25% of compensation x years of creditable service  
Maximum: 60% of compensation

### Normal Retirement Eligibility:

Age 58 with 5 years of service  
25 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2000 projected generationally using scale AA

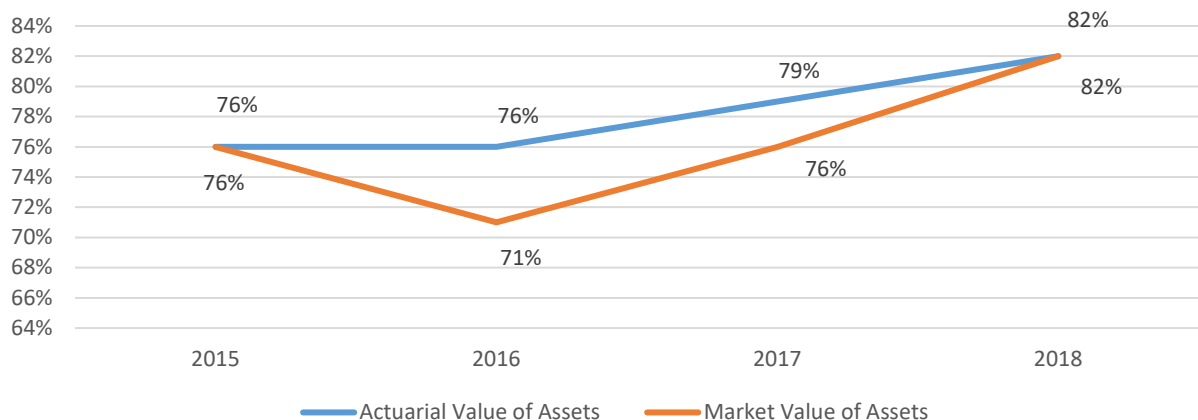
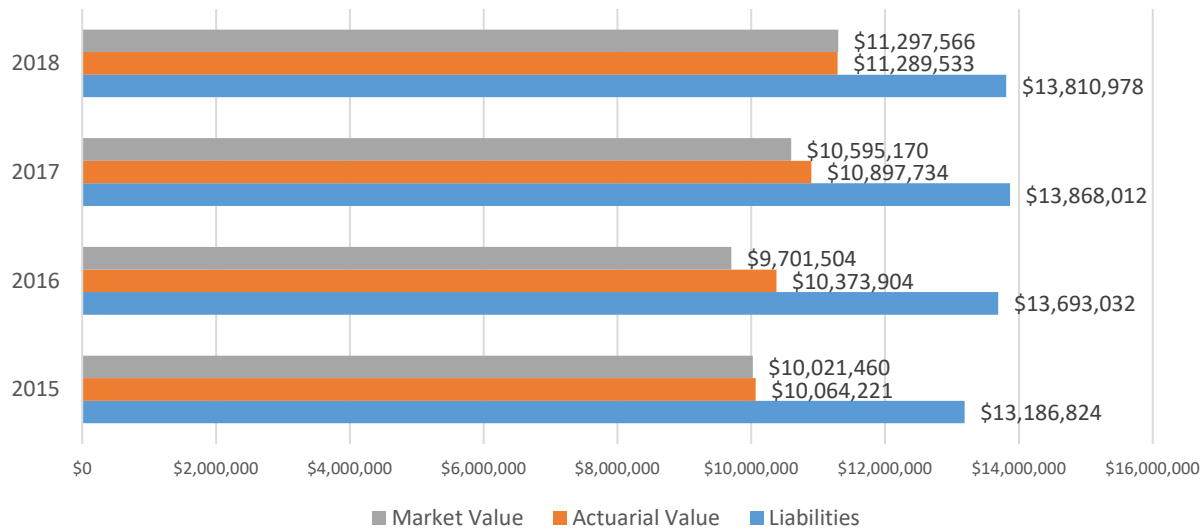
Vesting: Partial 5 / Full 15

COLA: Annual Amount Maximum: 3%

Percent of CPI: 60%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%





# OVERLAND POLICE RETIREMENT FUND

## MEMBERSHIP:

Active: 40 Inactive: 41

## CONTRIBUTIONS:

Employer: \$553,559 Employee: \$187,206

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation for the first 20 years of service + 1.5% for the next 10 years of service

### Normal Retirement Eligibility:

20 years of service  
Age 62 with 18 years of service  
Age 65 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2000 projected generationally using scale AA

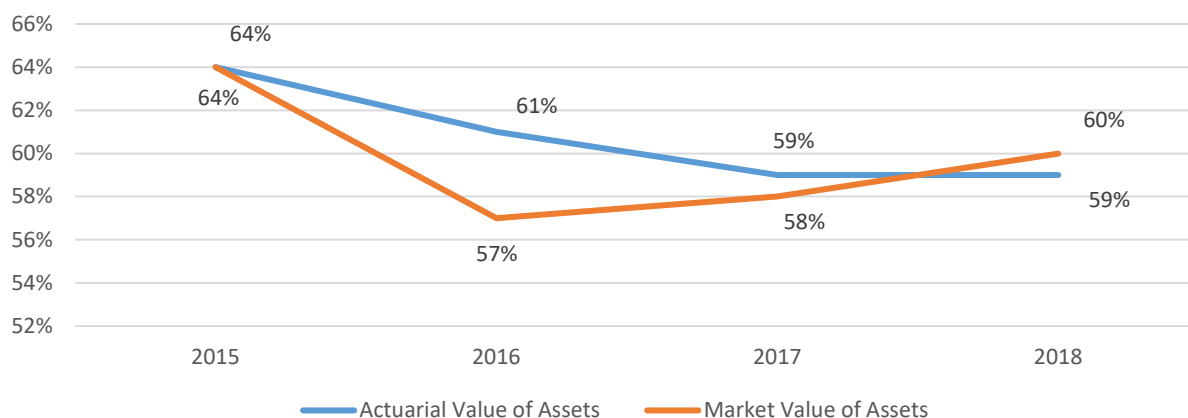
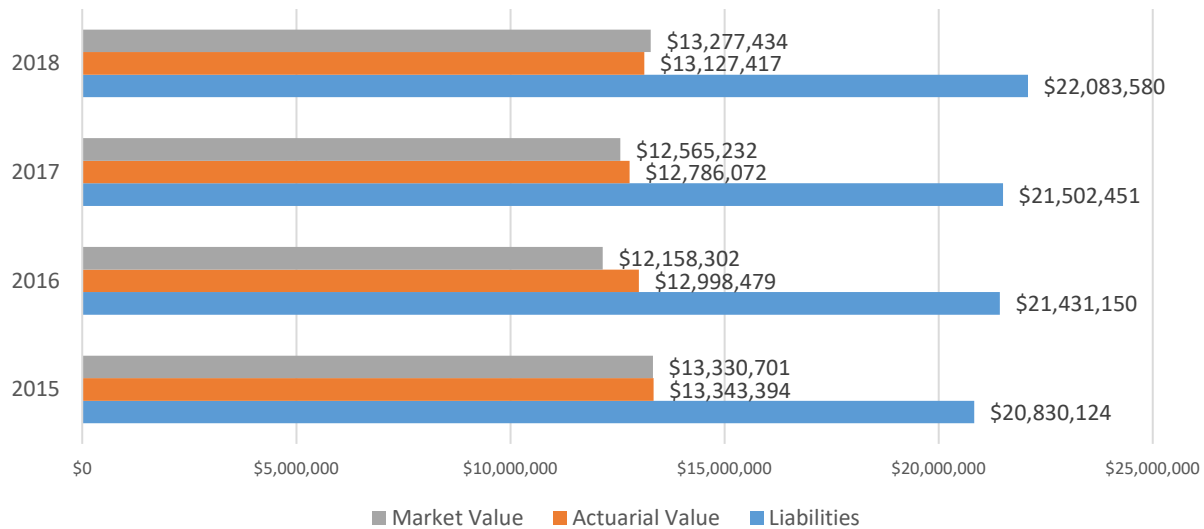
Vesting: Partial 15 / Full 20

COLA: Annual Amount Maximum: 3%

Percent of CPI: 60%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%



# PATTONVILLE FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 61 Inactive: 41

## CONTRIBUTIONS:

Employer: \$1,090,000 Employee: \$127,661

## BENEFITS:

### Normal Retirement Formula:

50% of compensation

50% of average monthly compensation reduced for service less than 20 years (if hired before 11/26/07) or reduced for service less than 25 years (if hired after 11/26/07)

Supplemental benefit from age 55 to age 62: 20% of compensation

### Normal Retirement Eligibility:

Uniformed: Age 57 with 5 years of service

Age 55 for those hired before 1/1/13 and born before 1/1/1963

Non-Uniformed: Age 62 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

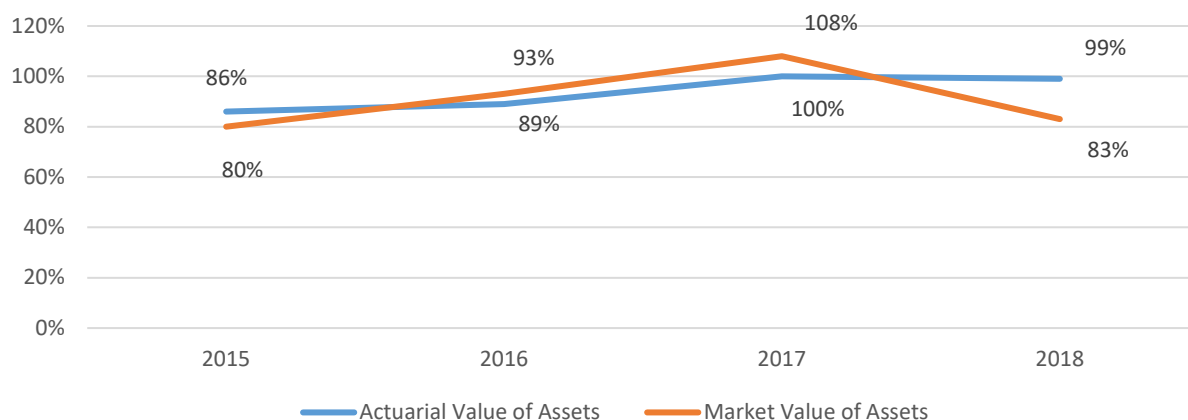
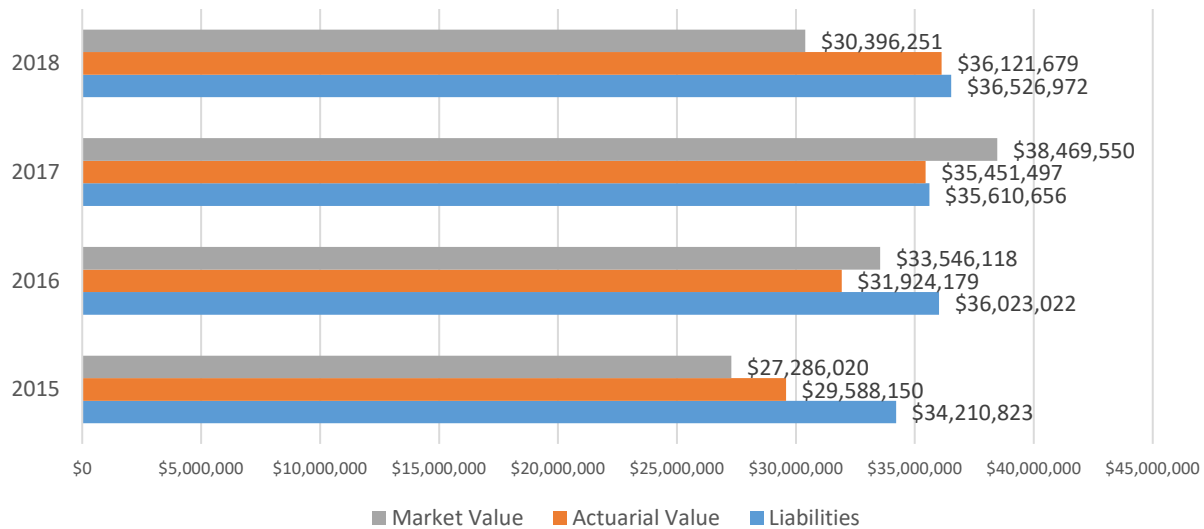
Mortality Table: RP-2014 Generational from 2006, Scale MP - 2018

Vesting: Partial 5 / Full 10

COLA: Annual Amount Minimum: 1%  
Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7.75% Salary: 2.5%



# POPLAR BLUFF POLICE & FIRE PENSION PLAN

## MEMBERSHIP:

Active: 80 Inactive: 69

## CONTRIBUTIONS:

Employer: \$253,165 Employee: \$188,762

## BENEFITS:

### Normal Retirement Formula:

2% of compensation for the first 20 years of service + 1.5% for each additional year of service  
Maximum: \$1,650 per month

### Normal Retirement Eligibility:

Later of Age 55 or 5 years of service

Social Security Coverage: No

Valuation of Assets: 4 Years

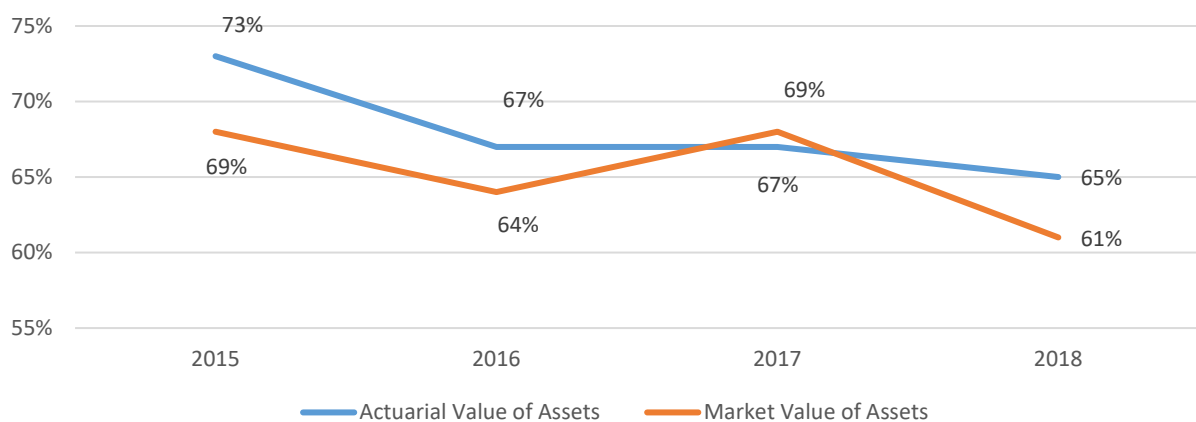
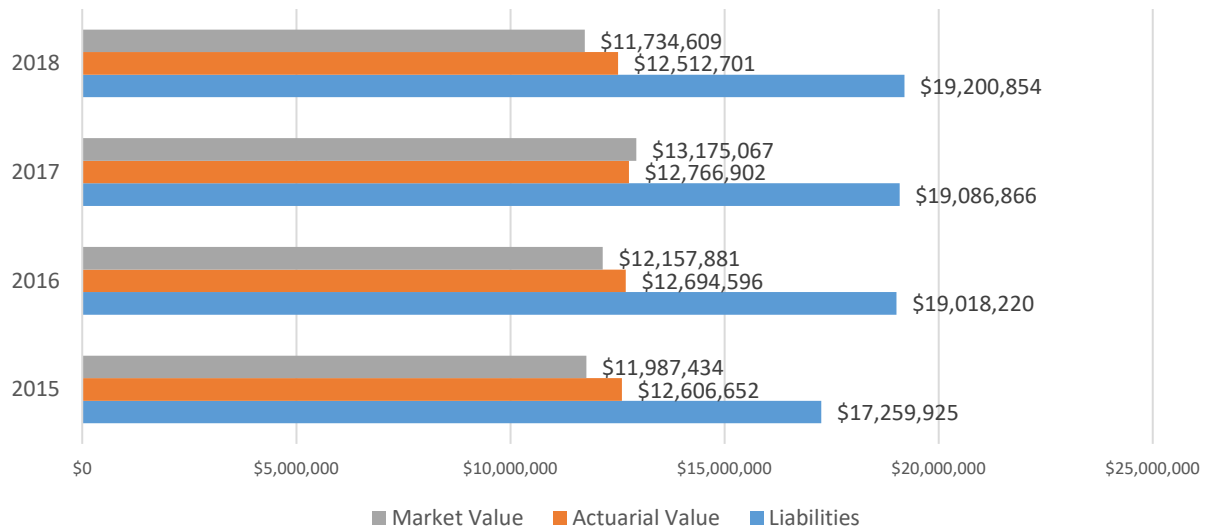
Mortality Table: IRS Prescribed Mortality-Generational Annuitant

Vesting: Partial 5 / Full 10

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 5.25% Salary: 3%



# PROSECUTING ATTORNEYS' & CIRCUIT ATTORNEYS' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 115 Inactive: 106

## CONTRIBUTIONS:

Employer: \$2,008,175 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1st & 2nd Class Counties & St. Louis City: 50% of Final Average Salary  
3rd & 4th Class Counties: 12 - 20 years of service = \$105 x each 2 year period  
3rd & 4th Class Counties: 20+ years of service = \$130 x each 2 year period

### Normal Retirement Eligibility:

Age 62 with 12 years of service  
Hired on/after 1/1/19: Age 65 with 12 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** Market Value

**Mortality Table:** PubG-2010 projected generationally, Scale MP-2018

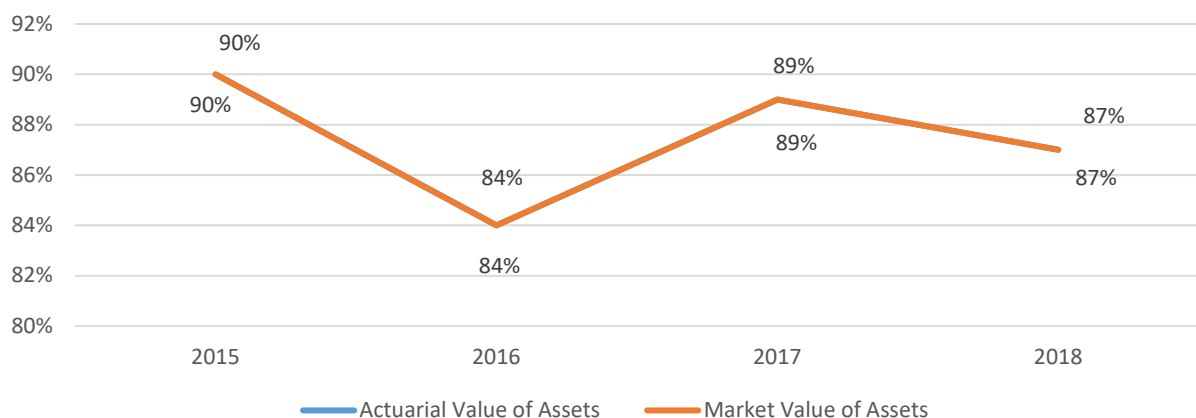
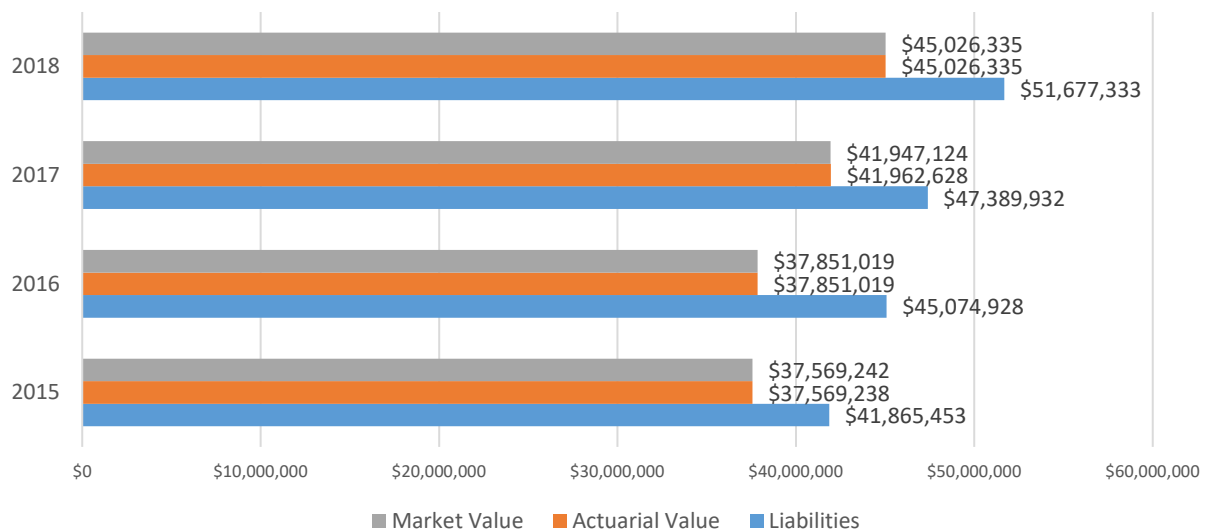
**Vesting:** 12 years

**COLA:** Annual Amount Maximum: 2%

**Cap - Total Max:** 50%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%



# PUBLIC EDUCATION EMPLOYEES' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 48,549 Inactive: 65,769

## CONTRIBUTIONS:

Employer: \$115,103,143 Employee: \$121,467,850

## BENEFITS:

### Normal Retirement Formula:

1.61% of compensation x years of creditable service

Rule of 80/30 & Out: 0.8% of compensation x years of service to Social Security eligibility

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Rule of 80

Age 55 with 25 years of service

30 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

**Mortality Table (Retiree Mortality):** RP-2006 Total Dataset Mortality Tables with plan specific experience adjustments with static projection to 2028 using 2014 SSA Improvement Scale

**Vesting:** 5 years

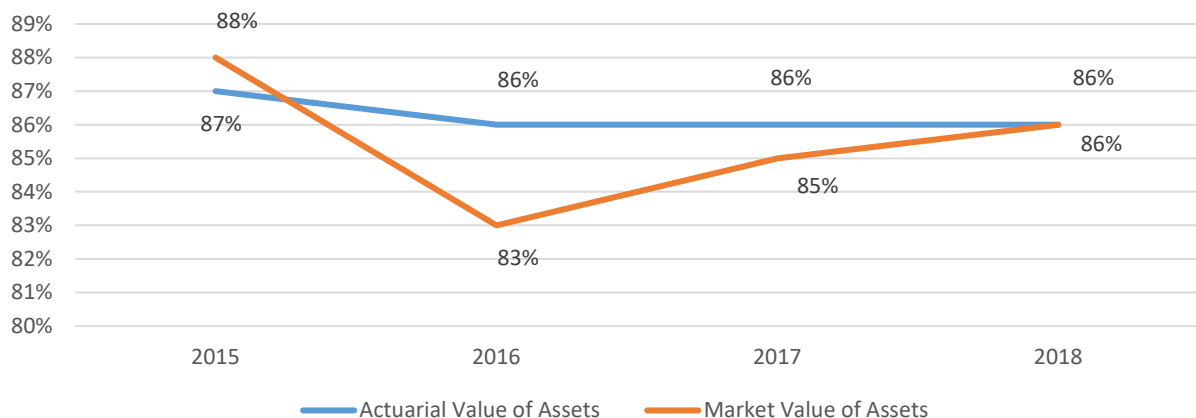
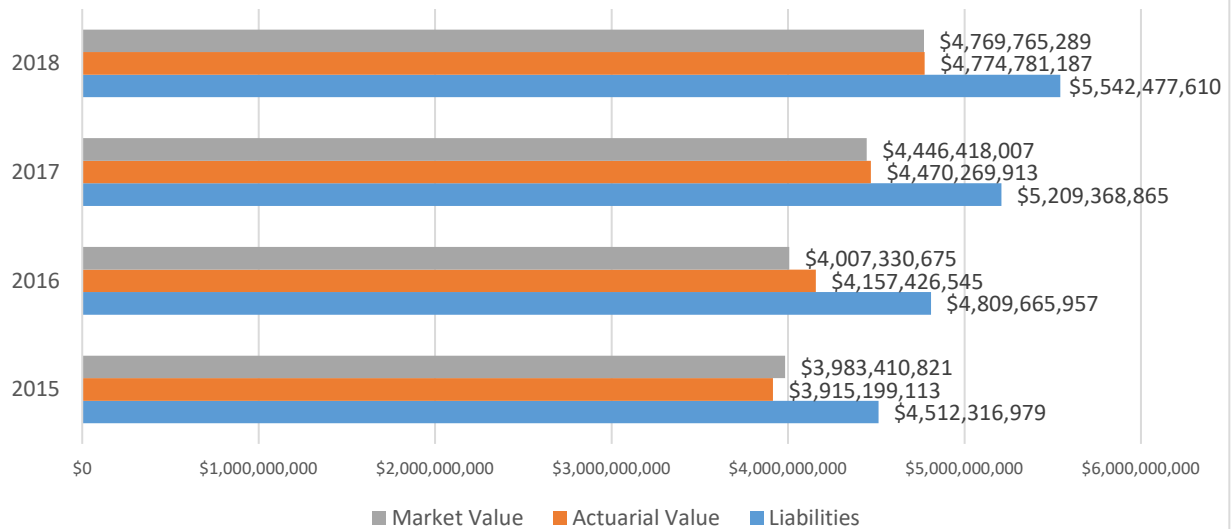
**COLA:** Annual Amount Maximum: 5%

**Cap Total Max:** 80%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5%

Salary: 3.25%



# PUBLIC SCHOOL RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 78,700 Inactive: 78,819

## CONTRIBUTIONS:

Employer: \$697,214,370 Employee: \$726,996,161

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Rule of 80

30 years of service

Age 55 with 25 years of service

**Social Security Coverage:** No

**Valuation of Assets:** 5 Years

**Mortality Table (Retiree Mortality):** RP-2006 White Collar Mortality Tables with plan specific experience adjustments and static projection to 2028 using 2014 SSA Improvement Scale

**Vesting:** 5 years

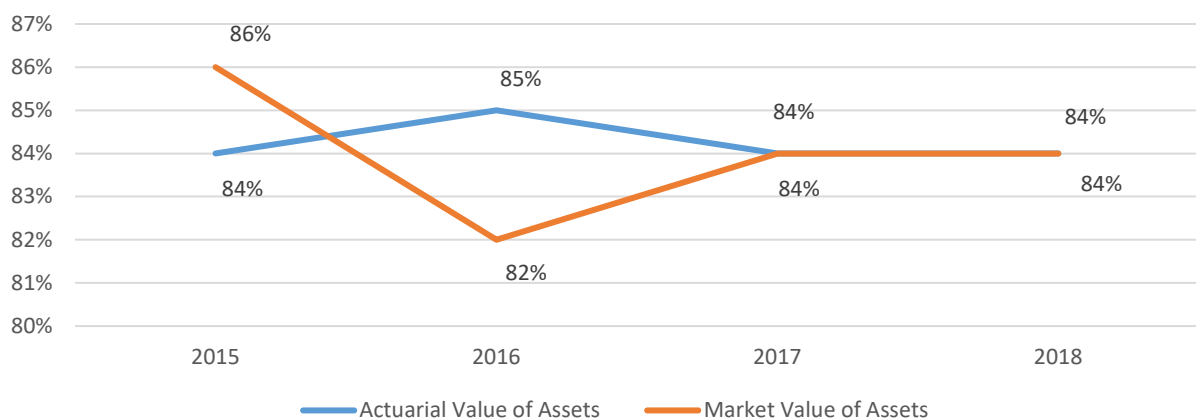
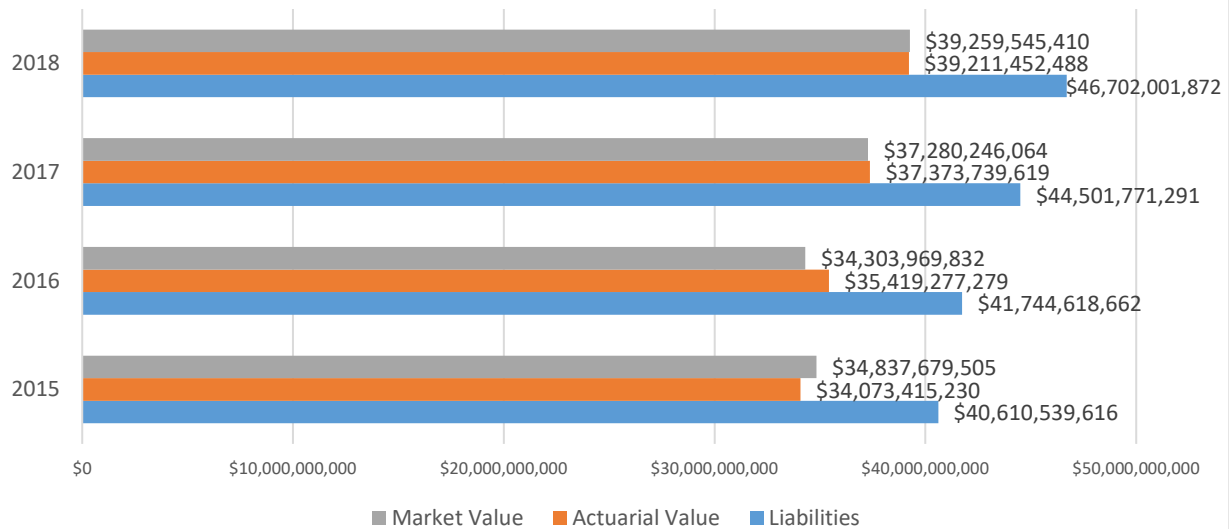
**COLA:** Annual Amount Maximum: 5%

**Cap Total Max:** 80%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5%

Salary: 2.75%



# RAYTOWN POLICEMEN'S RETIREMENT FUND

## MEMBERSHIP:

Active: 20 Inactive: 62

## CONTRIBUTIONS:

Employer: \$593,459 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2.5% of compensation for the first 20 years of service + 1% for the next 10 years of service

### Normal Retirement Eligibility:

Age 55 with 20 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 years

Mortality Table: RP-2014 Blue Collar at 2006, generational, Scale MP-2018

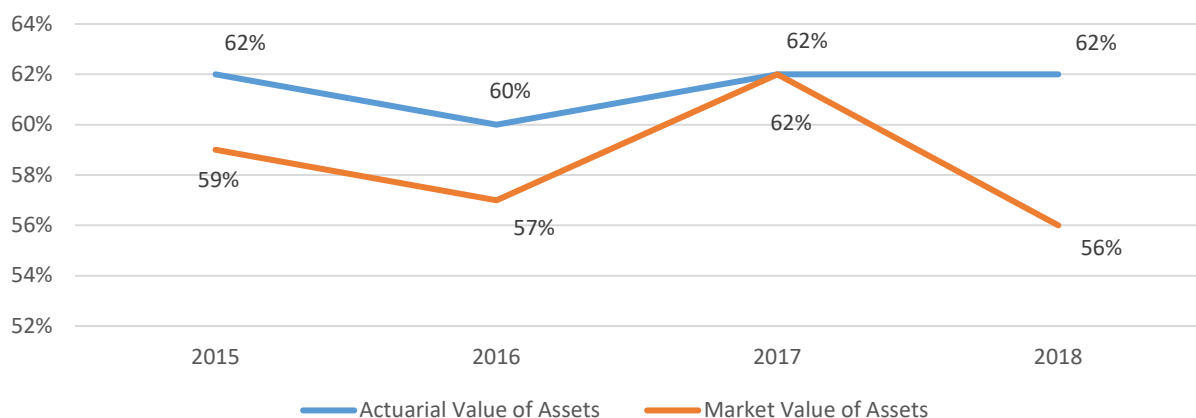
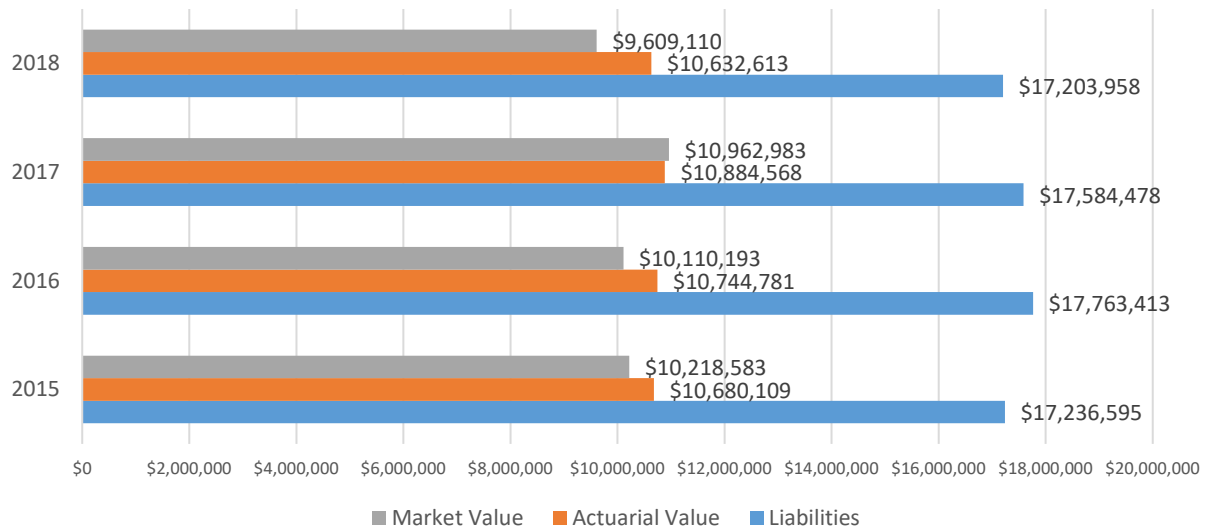
Vesting: 10 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 4%

Plan frozen effective 12/31/2013. Moved current and new employees to LAGERS.



# RICHMOND HEIGHTS POLICE & FIRE RETIREMENT PLAN

## MEMBERSHIP:

Active: 61 Inactive: 41

## CONTRIBUTIONS:

Employer: \$1,024,098 Employee: \$137,245

## BENEFITS:

Normal Retirement Formula:  
70% of compensation

Normal Retirement Eligibility:  
Age 60 or 30 years of service

Social Security Coverage: Yes

Valuation of Assets: 4 Years

Mortality Table: RP-2014 Blue Collar Healthy, Scale MP-2014, Generational Projection

Vesting: 15 years

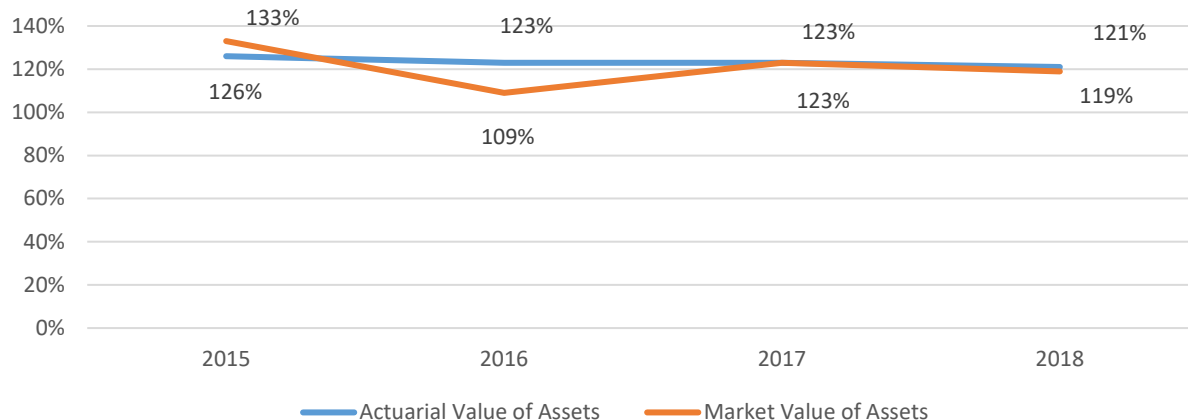
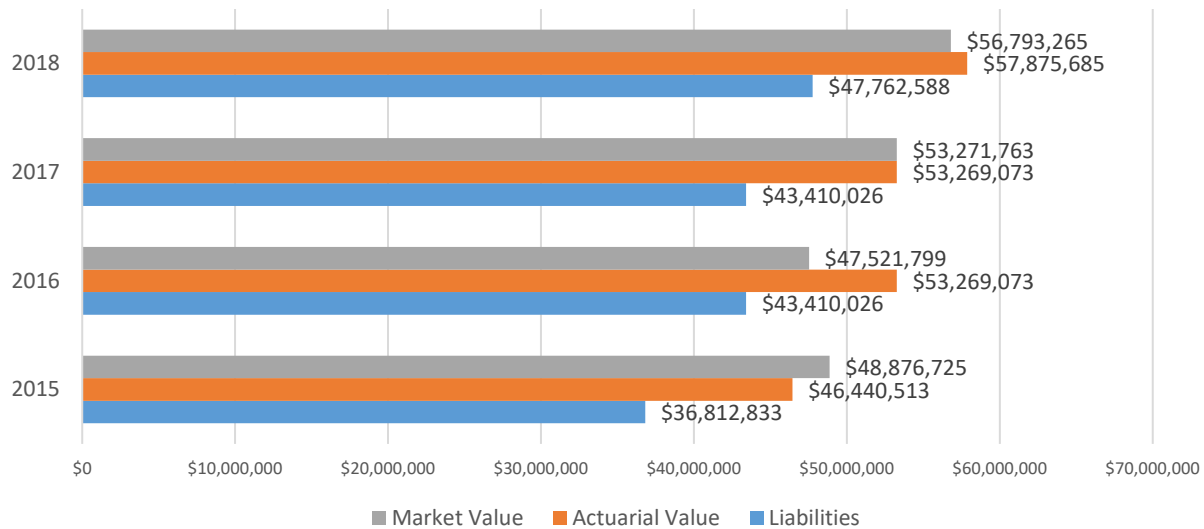
COLA: Ad Hoc

CAP-Total Maximum: Based on increase in base pay of actives until retiree reaches full Social Security age

## ACTUARIAL ASSUMPTIONS:

Interest: 6% Salary: 4%

Plan performs actuarial valuation biennially





# ROCK COMMUNITY FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 61 Inactive: 27

## CONTRIBUTIONS:

Employer: \$1,007,907 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

Temporary Benefit: \$500 per month to Medicare eligibility

### Normal Retirement Eligibility:

Age 60 with 5 years of service

Age 55 with 30 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 years

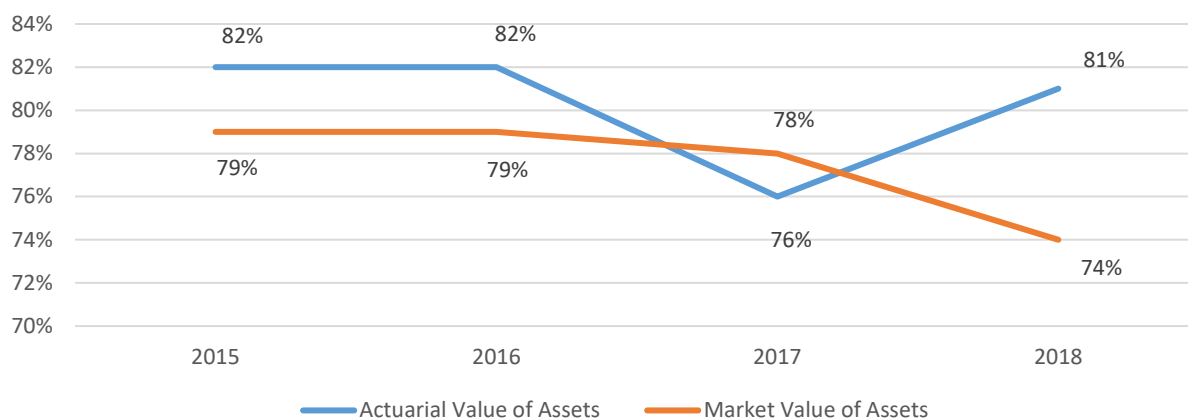
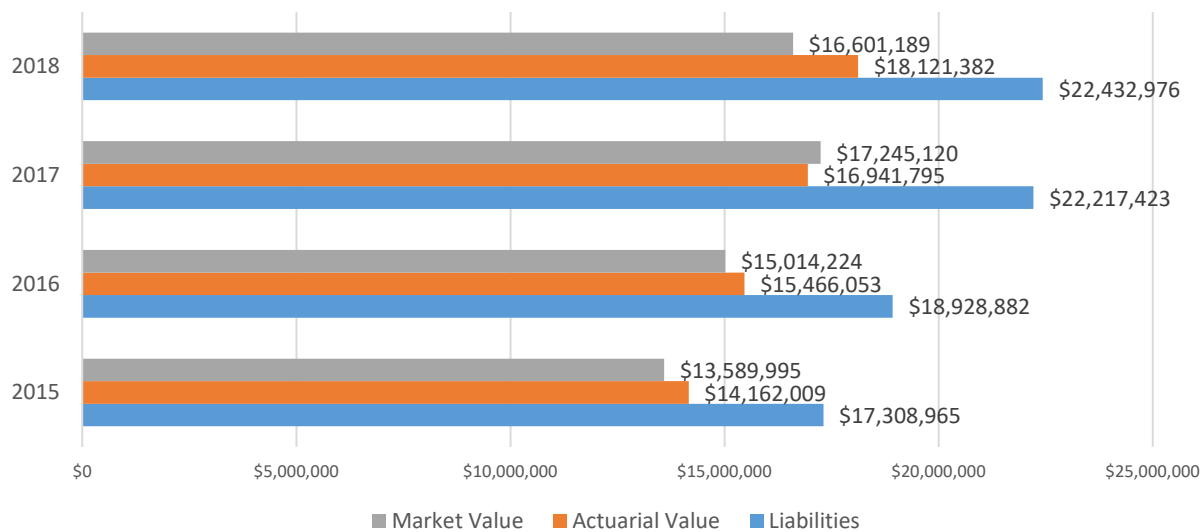
Mortality Table: Blue Collar RP-2014 generational SSA from 2006 based on 2018 SSA Trustees Report

Vesting: 7 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3%



# ROCK HILL POLICE & FIREMEN'S PENSION PLAN

## MEMBERSHIP:

Active: 7 Inactive: 19

## CONTRIBUTIONS:

Employer: \$150,000 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

40% or 50% of compensation, reduced by 1/20 per final years of service below 20 years, full 40% or 50% if greater than 20 years of service  
Percentage based on age and years of service as of 4/30/2003

### Normal Retirement Eligibility:

Age 60 with 20 years of service  
Mandatory retirement at age 70

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: IRS Combined Static Mortality Table

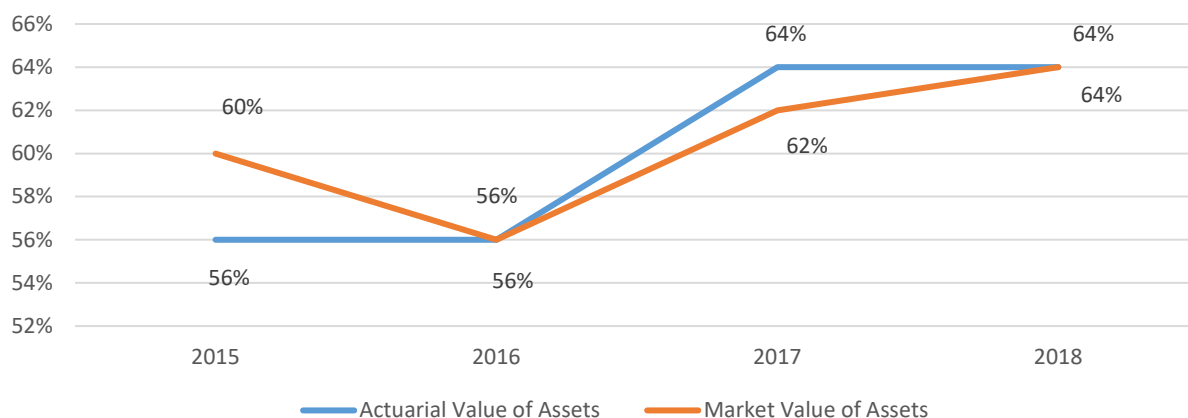
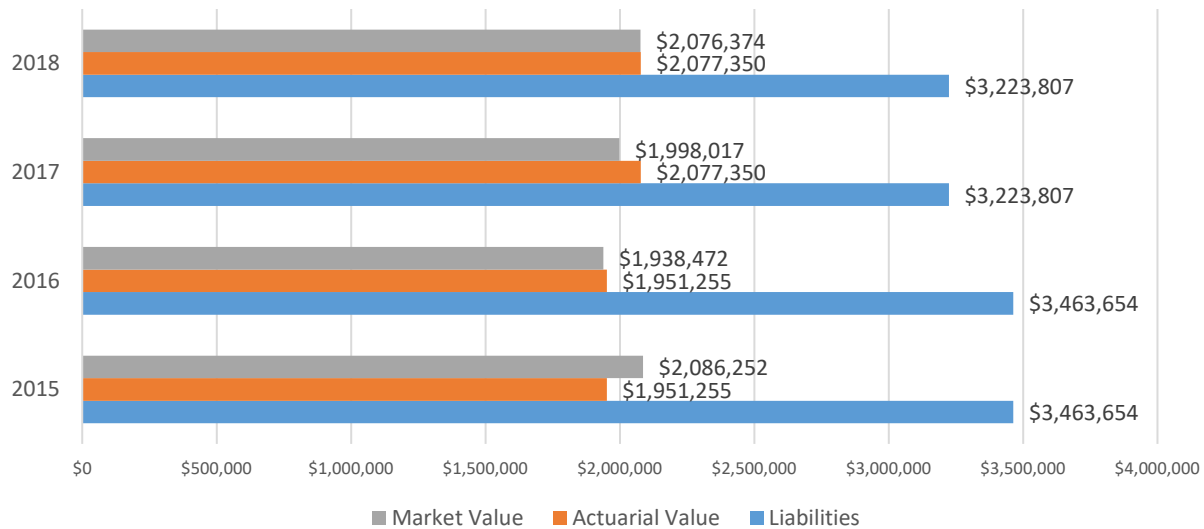
Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTION:

Interest: 6.4%

Plan closed effective October 2003. Plan frozen effective May 1, 2011.



# SALINE VALLEY FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 32 Inactive: 18

## CONTRIBUTIONS:

Employer: \$226,287 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

\$110 per month x years of credited service

Maximum: 36 years of service

Supplemental Benefit of \$500 per month from age 60-65

### Normal Retirement Eligibility:

Age 60 with 7 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

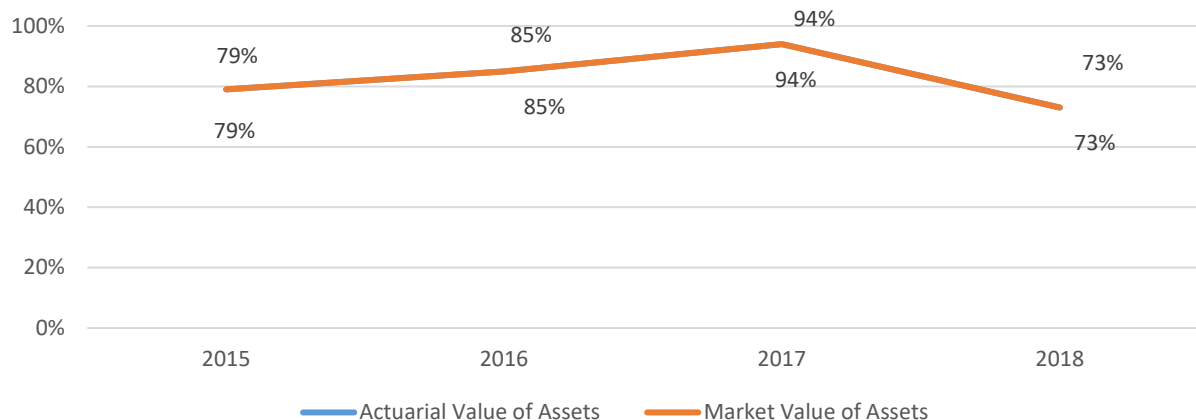
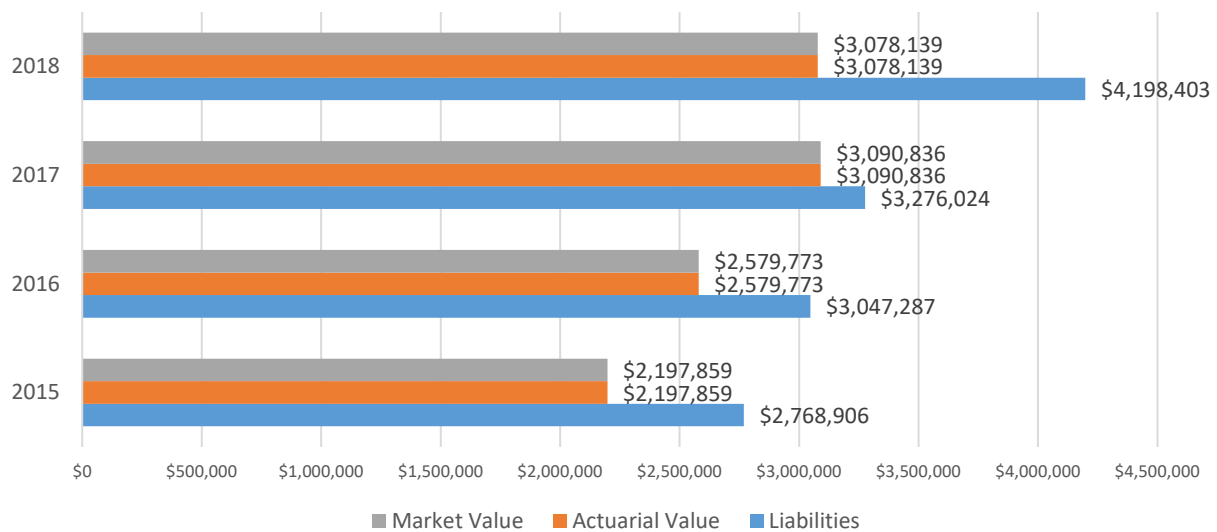
Mortality Table: RP-2014 Blue Collar with generational improvements from 2006 based on 2018 SSA Trustees Report

Vesting: Partial 3 / Full 7

COLA: No COLA

## ACTUARIAL ASSUMPTION:

Interest: 7%



# SEDALIA FIREMEN'S RETIREMENT FUND

## MEMBERSHIP:

Active: 37 Inactive: 48

## CONTRIBUTIONS:

Employer: \$450,145 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

50% of Indexed Earnings Base (IEB). IEB = \$56,112 (effective 4/1/18)

### Normal Retirement Eligibility:

Age 55 with 22 years of service

Social Security Coverage: No

Valuation of Assets: Market Value

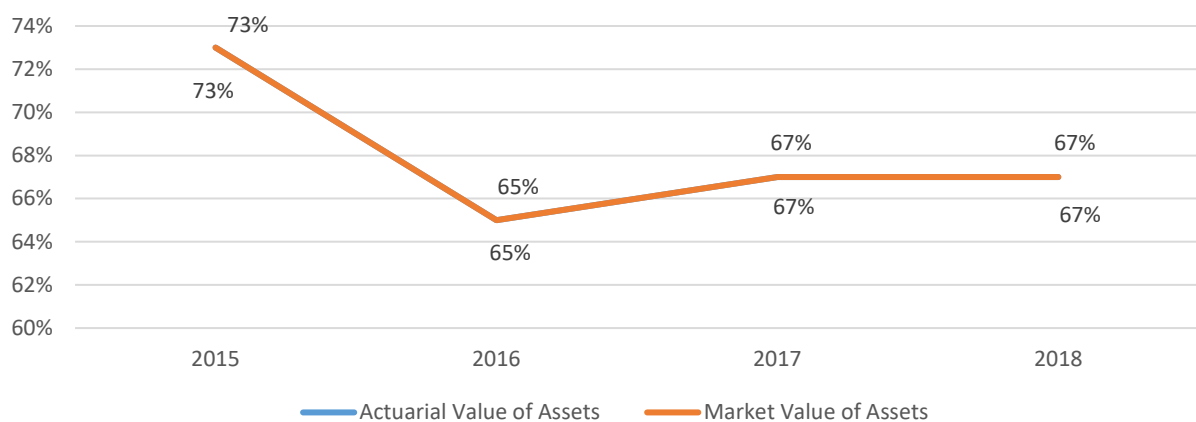
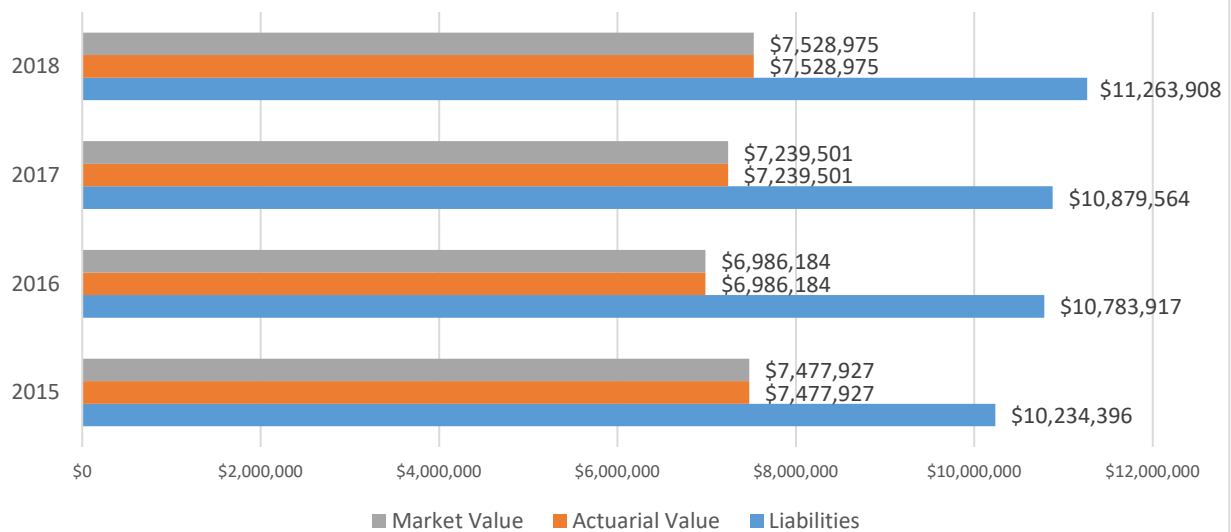
Mortality Table: RP-2014 at 2006, Blue Collar, Projected with Generational Improvements, Scale MP-2017

Vesting: Partial 1 / Full 10

COLA: Annual Amount Maximum: 3%  
Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3%



# SEDALIA POLICE RETIREMENT FUND

## MEMBERSHIP:

Active: 25 Inactive: 46

## CONTRIBUTIONS:

Employer: \$529,789 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

Maximum: 30 years

Minimum benefit of \$885/month for hires prior to 08/01/1989

### Normal Retirement Eligibility:

Age 52 with 15 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2014 at 2006, Blue Collar, Generational, Scale MP-2018

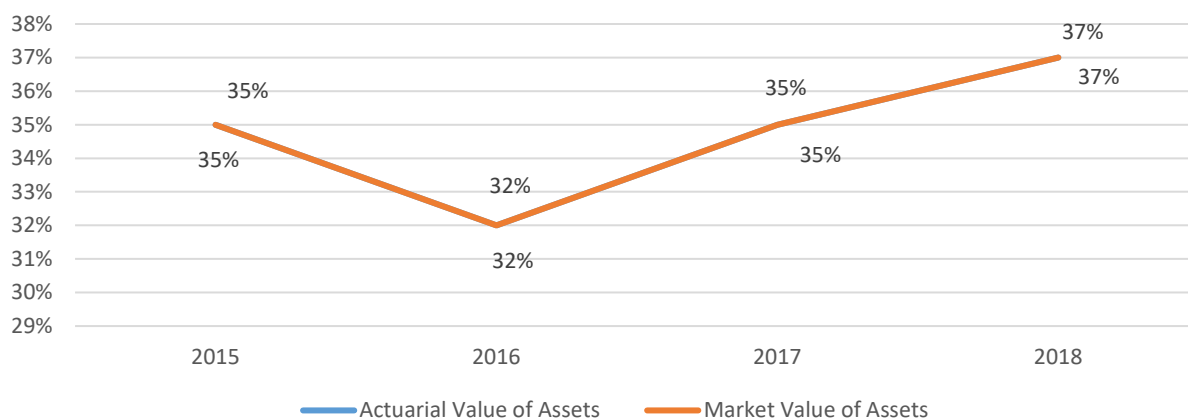
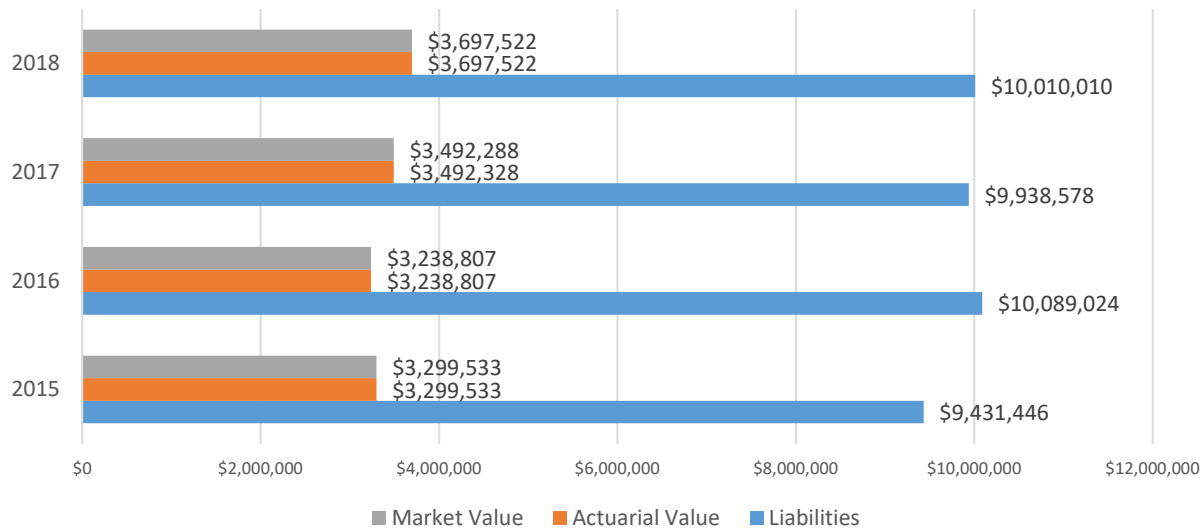
Vesting: Partial 5 / Full 15

COLA: Annual Amount Maximum: 2%

## ACTUARIAL ASSUMPTION:

Interest: 6%

Plan frozen as of April 2010. Current and new members moved to LAGERS. The City transferred the administration of the plan to LAGERS in June 2019 under section 70.621.



# SHERIFFS' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 114 Inactive: 209

## CONTRIBUTIONS:

Employer: \$2,171,831 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

Maximum: 75% of final average compensation

Plus monthly supplement not to exceed \$450. 2018 supplement = \$450

### Normal Retirement Eligibility:

Age 55 with 12 years of service

Age 62 with 8 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2000 Blue Collar Generational with Scale BB

**Vesting:** 8 years

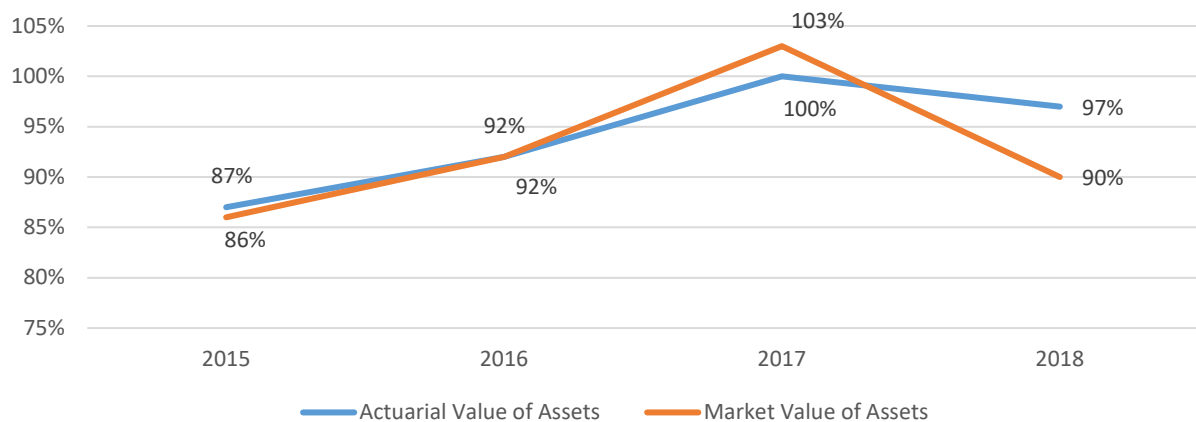
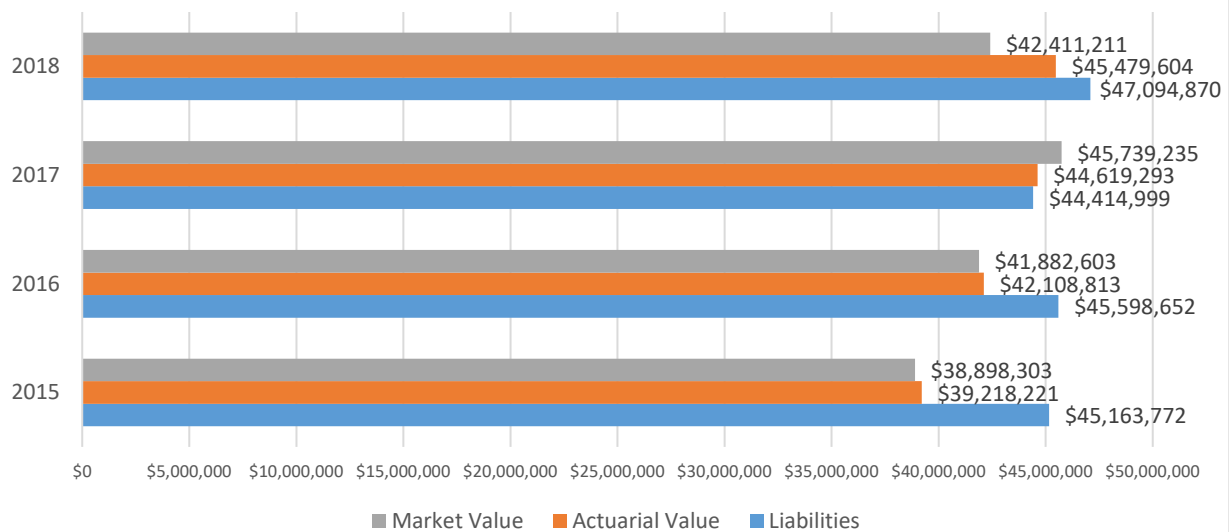
**COLA:** Annual Amount Maximum: 5%

**Percent of CPI:** 100%

## ACTUARIAL ASSUMPTIONS:

**Interest:** 7%

**Salary:** 1.5% in non-election years, 9% in election years



# SPRINGFIELD POLICE & FIRE RETIREMENT FUND

## MEMBERSHIP:

Active: 235 Inactive: 593

## CONTRIBUTIONS:

Employer: \$39,815,730 Employee: \$2,978,645

## BENEFITS:

### Normal Retirement Formula:

2.8% of compensation x years of creditable service  
Max: 70% of compensation

### Normal Retirement Eligibility:

Age 50 with 20 years of service  
Mandatory retirement at age 60 with 20 years of service  
Age 60  
25 years of service

Social Security Coverage: No

Valuation of Assets: 4 Years

Mortality Table: RP-2000 Generational Scale AA

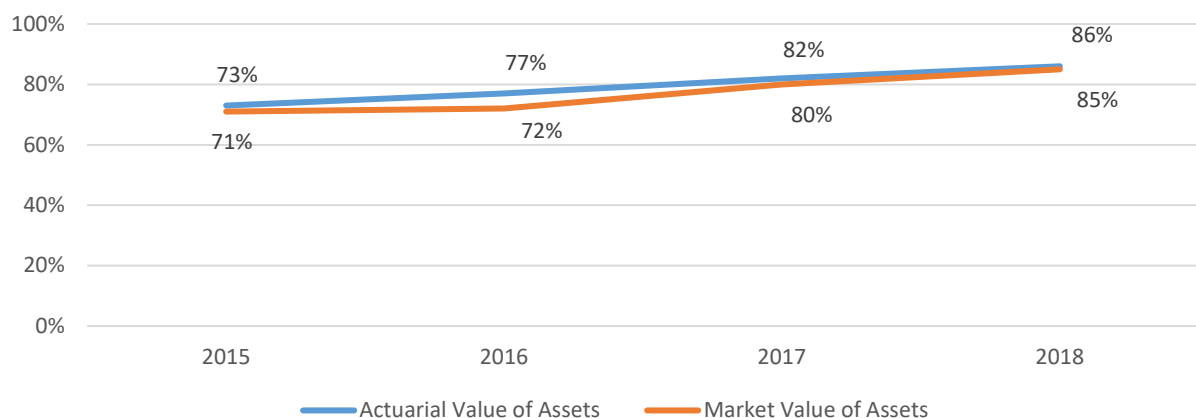
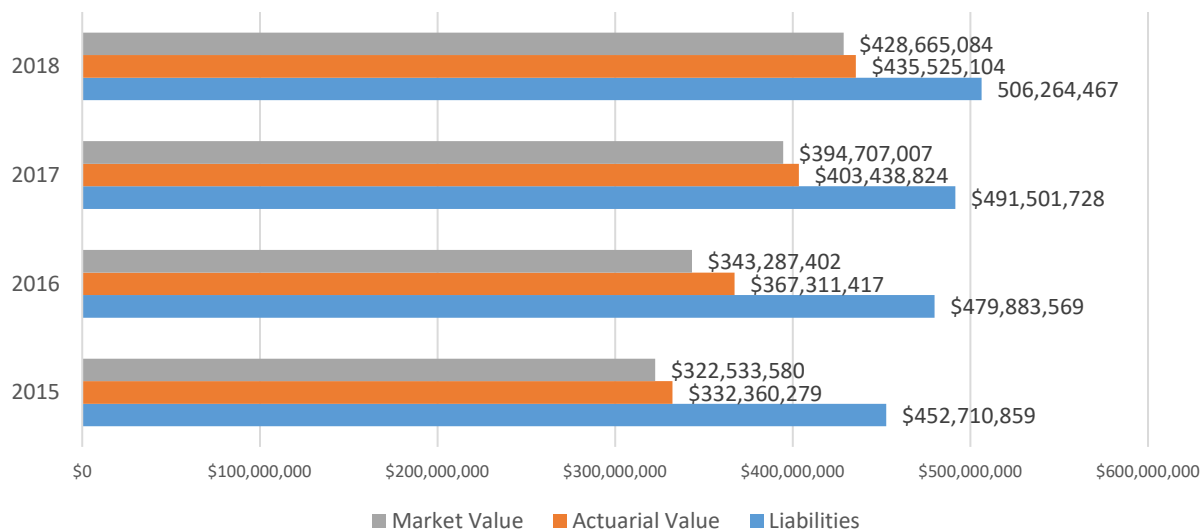
Vesting: 5 years

COLA: Annual Amount Maximum: 3%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: varies

Plan closed 1/31/10. Active members hired after 6/1/06 and new hires participate in LAGERS.



# ST. JOSEPH POLICEMEN'S PENSION FUND

## MEMBERSHIP:

Active: 0 Inactive: 113

## CONTRIBUTIONS:

Employer: \$2,430,332 Employee: \$270,199

## BENEFITS:

### Normal Retirement Formula:

40% of compensation for the first 20 years of service + 2% for each of the next 15 years of service  
Maximum: 70%

### Normal Retirement Eligibility:

20 years of service

### Social Security Coverage: No

**Valuation of Assets:** 5 years, reset assets to market value as of 1/1/19

**Mortality Table:** RP-2014 Blue Collar, Generational from 2006, Scale MP-2018

**Vesting:** 20 years

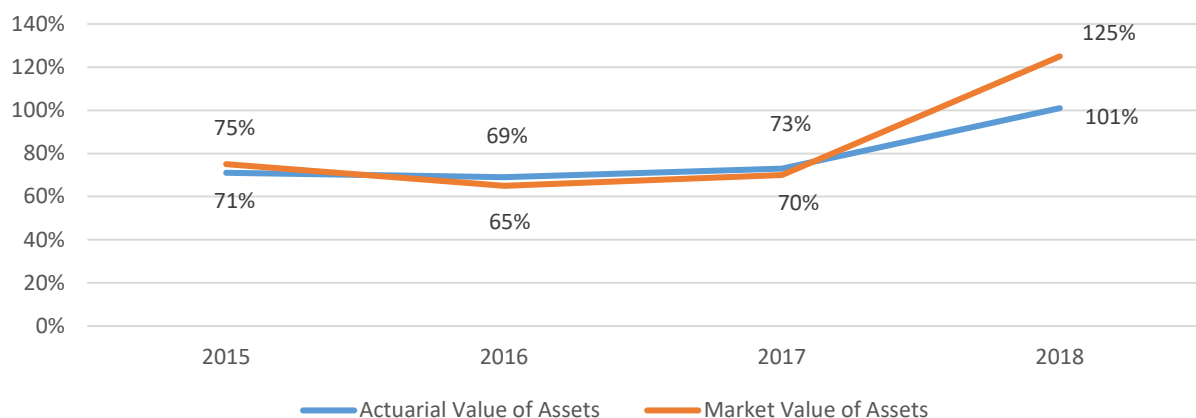
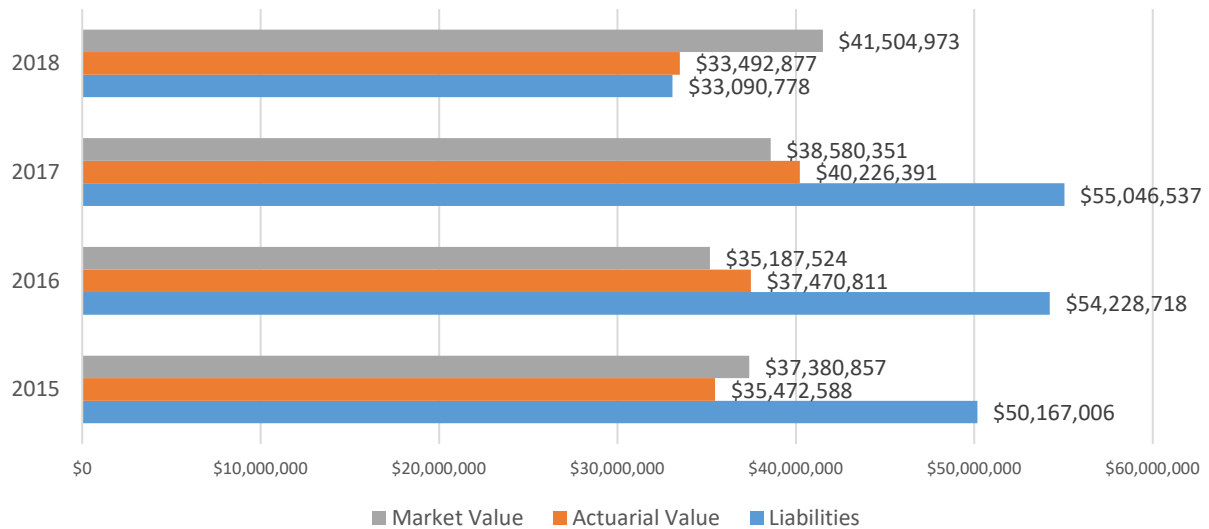
**COLA:** Annual Amount Maximum: 4%

**Percent of CPI:** 50%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.1% Salary: N/A

**Plan closed effective 8/20/18. Active employees and new hires participate in LAGERS. The City transferred all active member plan liabilities and approximately \$4.6 million to LAGERS in October 2018.**





# ST. LOUIS COUNTY EMPLOYEES' RETIREMENT PLAN

## MEMBERSHIP:

Active: 3,737 Inactive: 4,753

## CONTRIBUTIONS:

Employer: \$44,342,552 Employee: \$269,511

## BENEFITS:

### Normal Retirement Formula:

Civilian Employees: 1.5% of compensation x years of service plus \$15 per month x years of service

Hired on/after 2/1/18: 1.3% of compensation x years of service plus \$15 per month x years of service

Police: 1.6% of compensation x years of service plus \$30 per month x years of service to Age 65 then \$5 per month x YOS

Hired on/after 2/1/18: 1.4% of compensation x years of service plus \$30 per month x years of service to Age 65 then \$5 per month x YOS

### Normal Retirement Eligibility:

Civilian Employees: Age 65 with 3 years of service. Rule of 80.

Civilian Employees Hired on/After 2/1/18: Age 67 with 3 years of service. Rule of 85.

Police: Age 60 with 10 years of service. Age 65 with 3 years of service. Rule of 80.

Police Hired on/after 2/1/18: Age 60 with 10 years of service. Age 65 with 3 years of service. Rule of 85.

Social Security Coverage: Yes

Valuation of Assets: 4 Years

**Mortality Table:** Civilian - 85% PubG-2010 and 15% PubS-2010. Police - 100% PubS-2010. Projected from 2010, Generational, Scale MP-2018

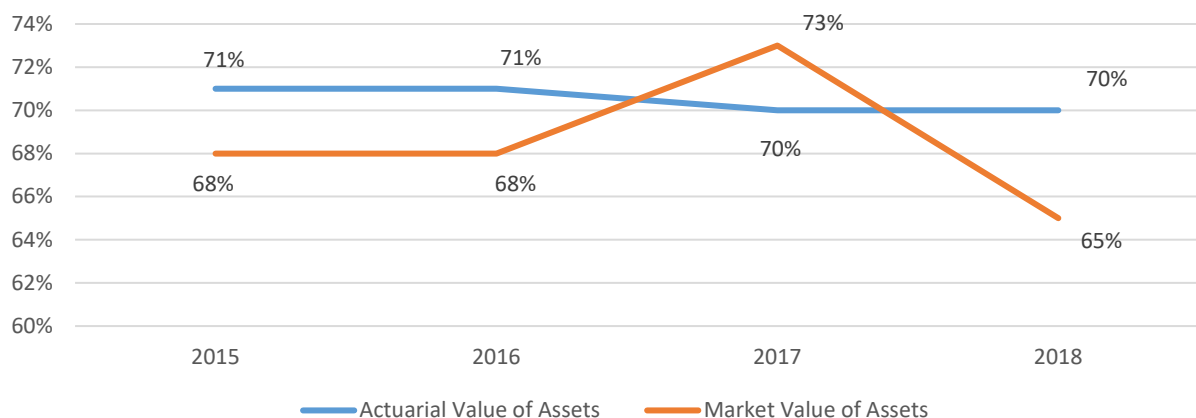
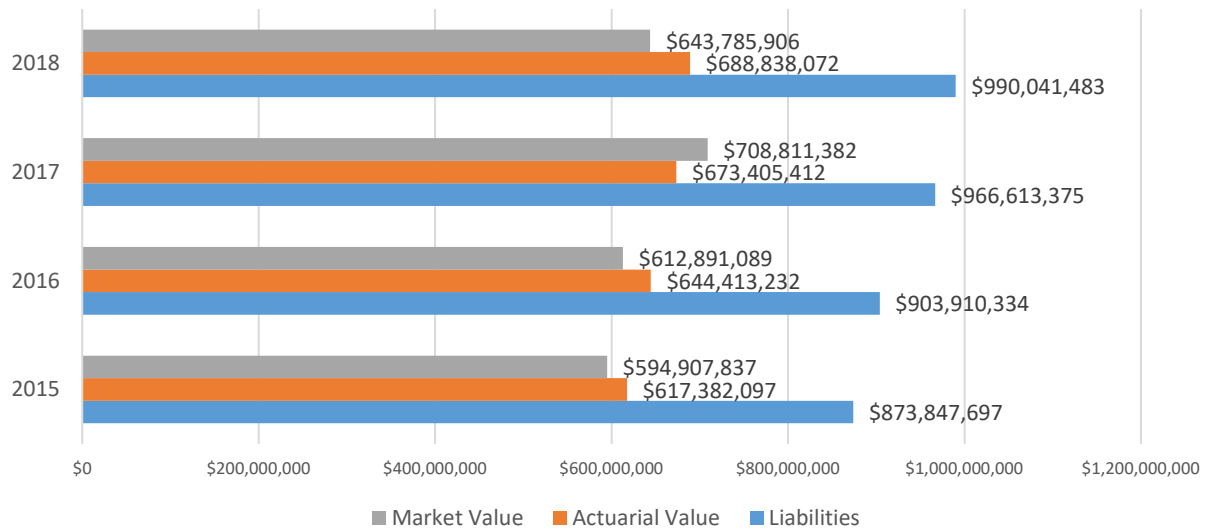
**Vesting:** Hired before 2/1/18: 5 years. Hired on/after 2/1/18: 7 years.

COLA: Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5%

Salary: Police: 3.25%, Civilian: 3.75%



# ST. LOUIS COUNTY LIBRARY DISTRICT EMPLOYEES' PENSION PLAN

## MEMBERSHIP:

Active: 362 Inactive: 349

## CONTRIBUTIONS:

Employer: \$1,914,634 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

1.6% of compensation x years of creditable service

### Normal Retirement Eligibility:

Age 65 with 5 years of service

Rule of 80 (Effective 1/1/19)

Social Security Coverage: Yes

Valuation of Assets: 4 Years

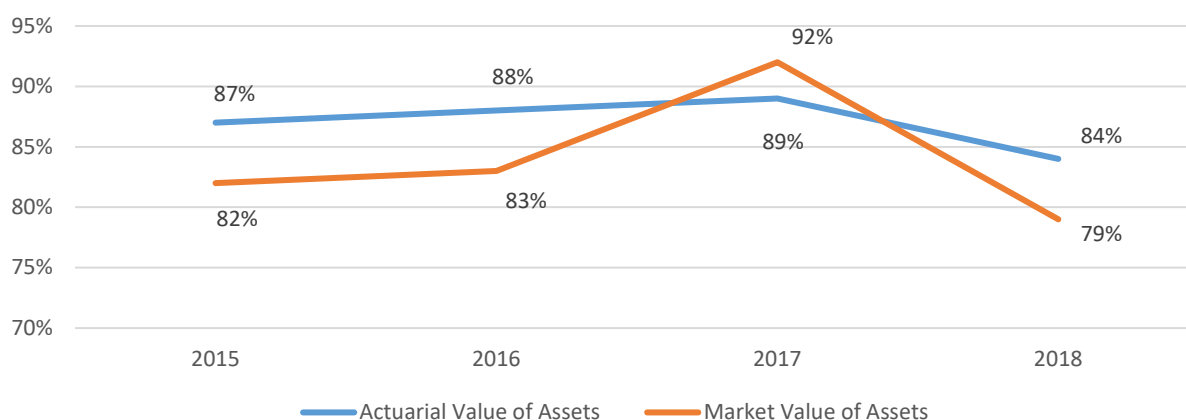
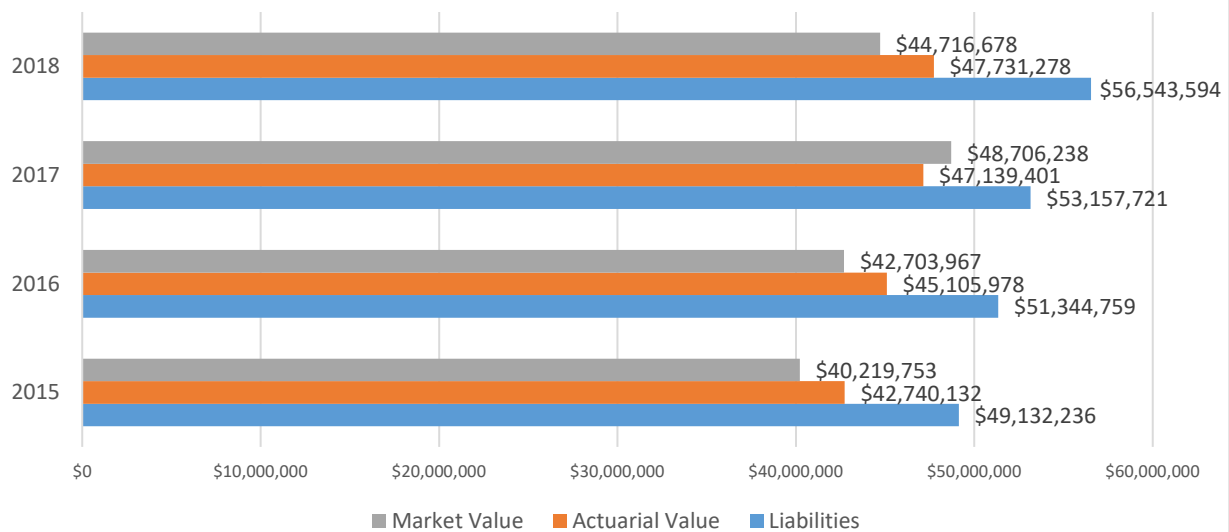
Mortality Table: RP-2014 fully generational using scale MP-2015

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3.5%



# ST. LOUIS EMPLOYEES' RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 5,202 Inactive: 7,190

## CONTRIBUTIONS:

Employer: \$29,361,102 Employee: \$58,201

## BENEFITS:

### Normal Retirement Formula:

1.3% of compensation below \$77,880 per year + 2.05% of compensation above \$77,880 x years of credited service  
Minimum benefit of \$200 per month for retirees with 12 or more years of creditable service

### Normal Retirement Eligibility:

Age 65 with 5 years of service  
Rule of 85

Social Security Coverage: Yes

Valuation of Assets: 5 Years

Mortality Table: RP-2000 with 3 year set forward, generational projection using Scale AA

Vesting: 5 years

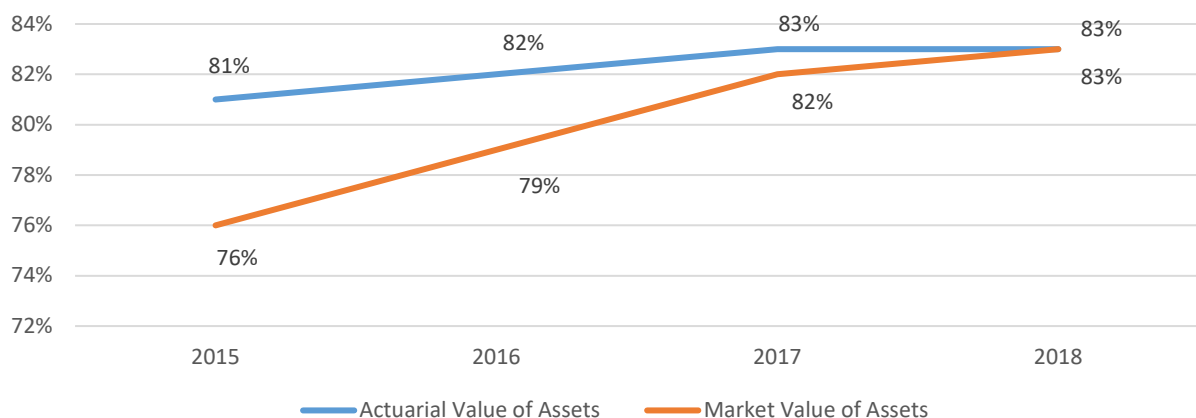
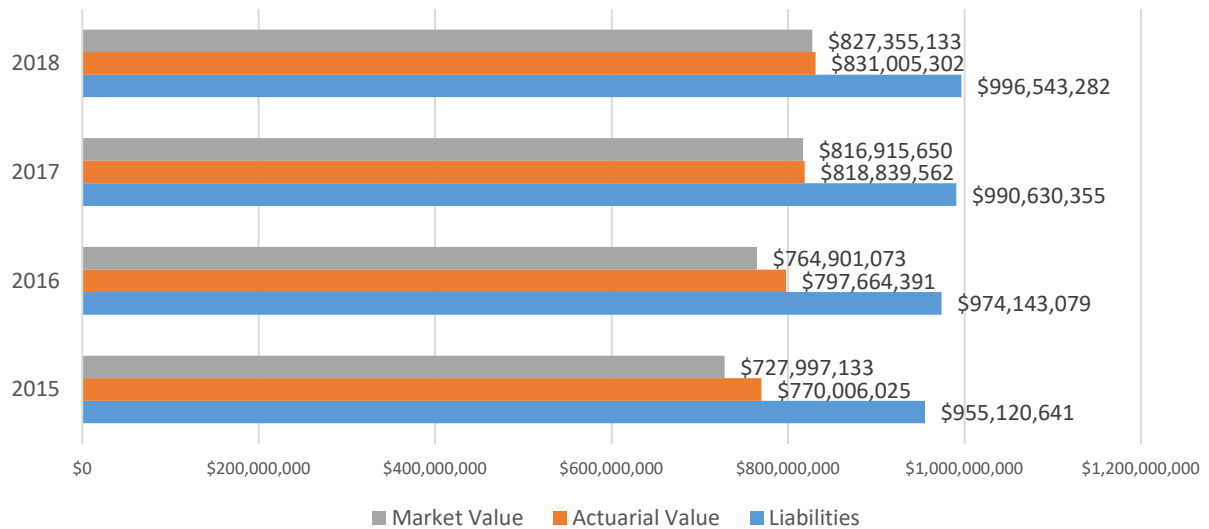
COLA: Annual Amount Maximum: 3.125%

Percent of CPI: 100%

Cap Total Maximum: 25%

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5% Salary: 3%



# ST. LOUIS FIREMEN'S RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 455 Inactive: 959

## CONTRIBUTIONS:

Employer: \$2,715,141 Employee: \$0

## BENEFITS:

### Normal Retirement Formula:

40% of compensation for the first 20 years of service + 2% for each of the next 5 years of service + 5% for each year over 25 years  
Maximum: 30 Years

### Normal Retirement Eligibility:

20 years of service

Social Security Coverage: No

Valuation of Assets: 3 Years

Mortality Table: RP-2014 for Healthy Annuitants, Sex distinct

Vesting: 20 years

COLA: Annual Amount Minimum: 1.5%

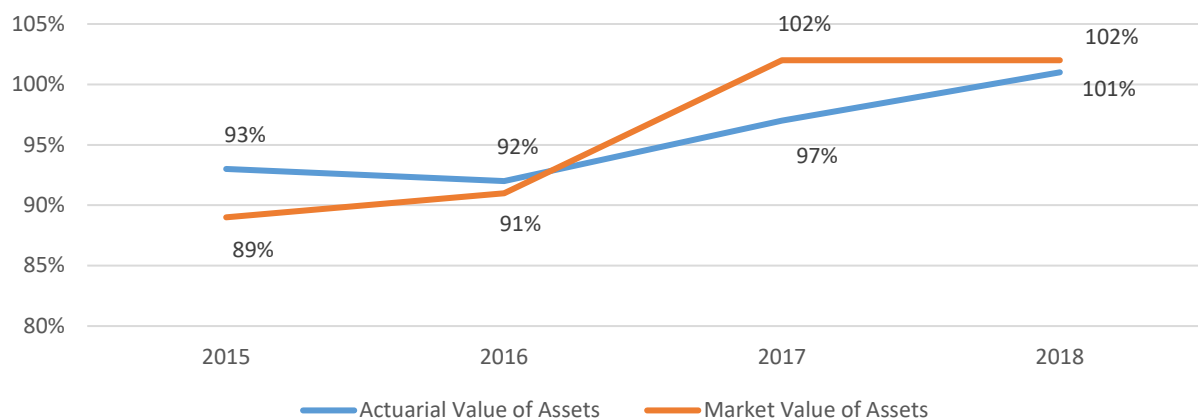
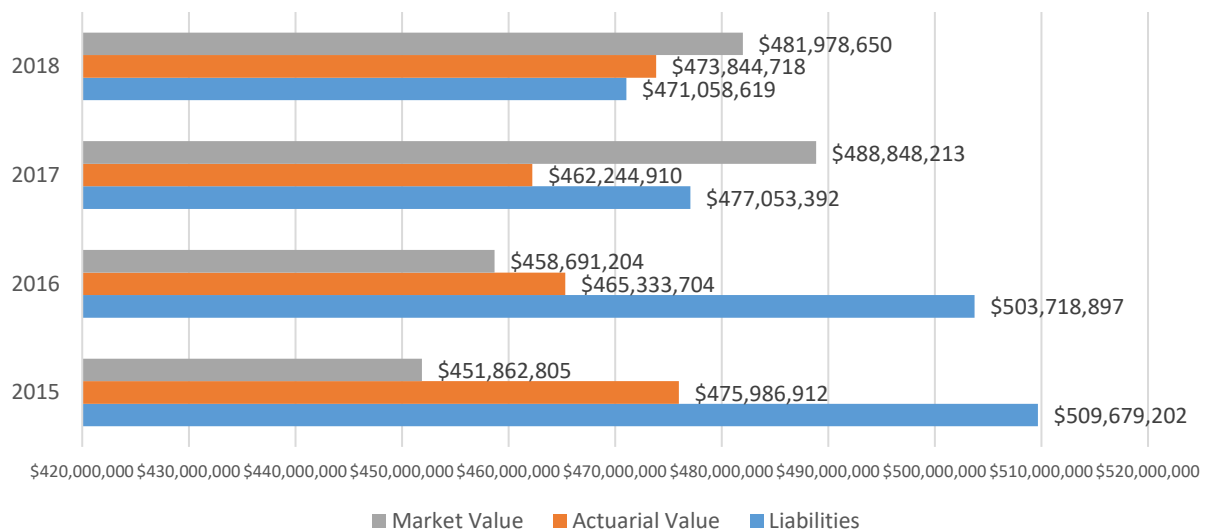
Annual Amount Maximum: 5%

Cap Total Maximum: 25%

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 3%

Plan frozen as of 2/1/13. Employees hired after 2/1/13 are members of Firefighters' Retirement Plan of St. Louis City.



# ST. LOUIS POLICE RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 1,138 Inactive: 2,043

## CONTRIBUTIONS:

Employer: \$33,104,561 Employee: \$4,600,917

## BENEFITS:

### Normal Retirement Formula:

2% of compensation for the first 25 years of service + 4% for the next 5 years of service  
Plus 5% for all service after 30 years  
Maximum: 75% of compensation

### Normal Retirement Eligibility:

Age 55 or 20 years of service  
Mandatory retirement age of 65

**Social Security Coverage:** No

**Valuation of Assets:** 5 Years

**Mortality Table:** RP-2014 Blue Collar projected generationally with Scale MP-2015

**Vesting:** 20 years

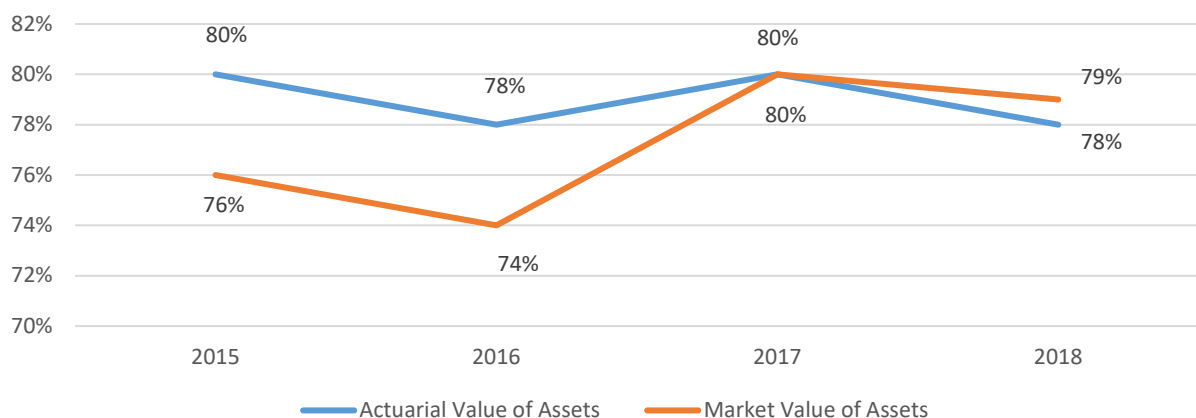
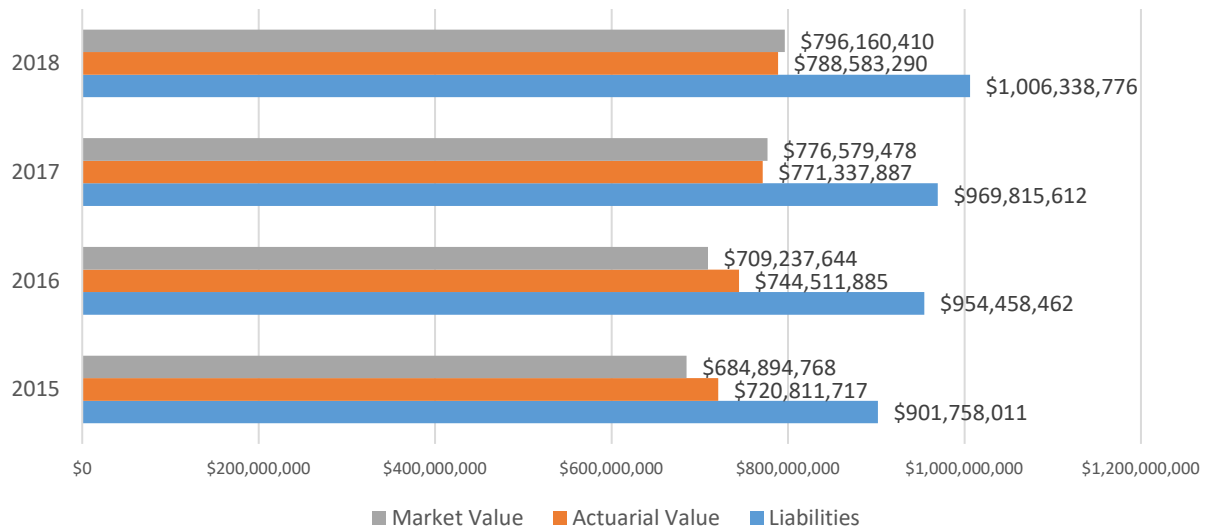
**COLA:** Annual Amount Maximum: 3%

**Percent of CPI:** 100%

**Cap Total Max:** 30%

## ACTUARIAL ASSUMPTIONS:

**Interest:** 7.5% **Salary:** 3 to 6%



# ST. LOUIS PUBLIC SCHOOL RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 5,050 Inactive: 7,386

## CONTRIBUTIONS:

Employer: \$48,797,779 Employee: \$14,248,567

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service

Maximum Benefit: 60% of average final compensation

Members hired for the first time on or after 1/1/18: 1.75% of compensation x years of creditable service. See SB 62 (2017)\*

### Normal Retirement Eligibility:

Age 65

Rule of 85, changed to Rule of 80 on August 28, 2017 (See SB 62)\*

### Social Security Coverage: Yes

### Valuation of Assets: Assumed Yield Method

### Mortality Table: RP-2014 Generational Scale MP-2015

### Vesting: 5 years

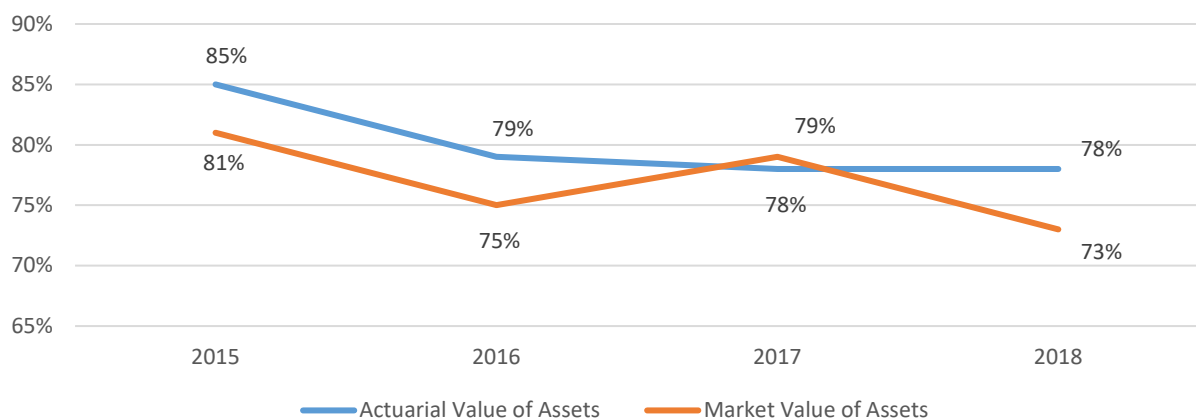
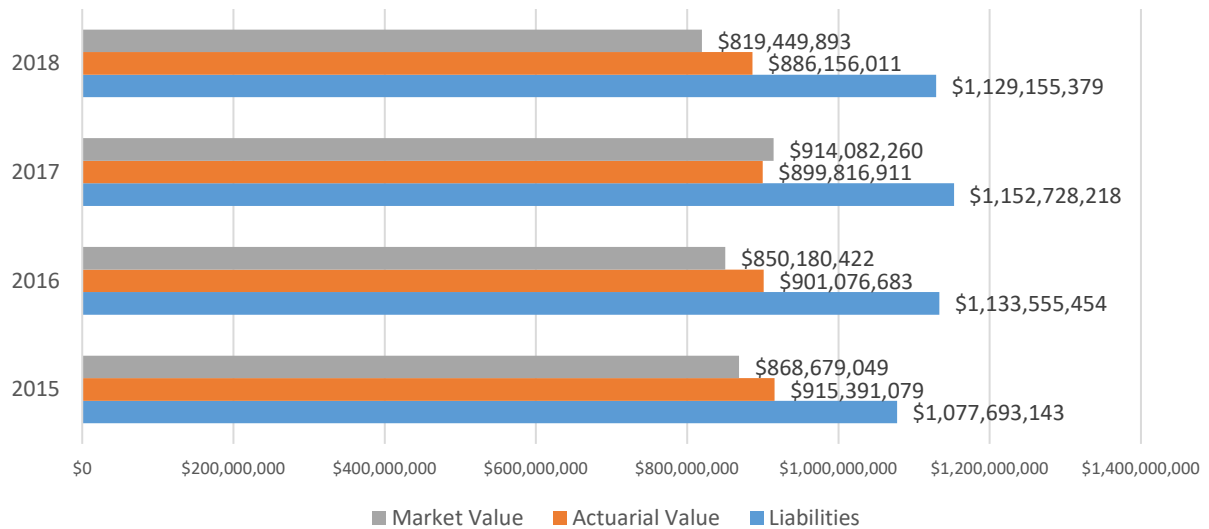
### COLA: Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7.5%

Salary: 5% for the first five years then 3.5%

\*The St. Louis PSRS filed a lawsuit to challenge the changes made in SB 62 (2017). It is on appeal to the Missouri Court of Appeals, Eastern District.



# UNIVERSITY CITY NON-UNIFORMED RETIREMENT PLAN

## MEMBERSHIP:

Active: 137 Inactive: 86

## CONTRIBUTIONS:

Employer: \$880,000 Employee: \$207,064

## BENEFITS:

### Normal Retirement Formula:

1.6% of compensation x years of creditable service  
Plus 0.5% above \$47,000; Maximum 35 years of service

### Normal Retirement Eligibility:

Age 62 with 30 years of service  
Age 65 with 10 years of service

Social Security Coverage: Yes

Valuation of Assets: 5 Years

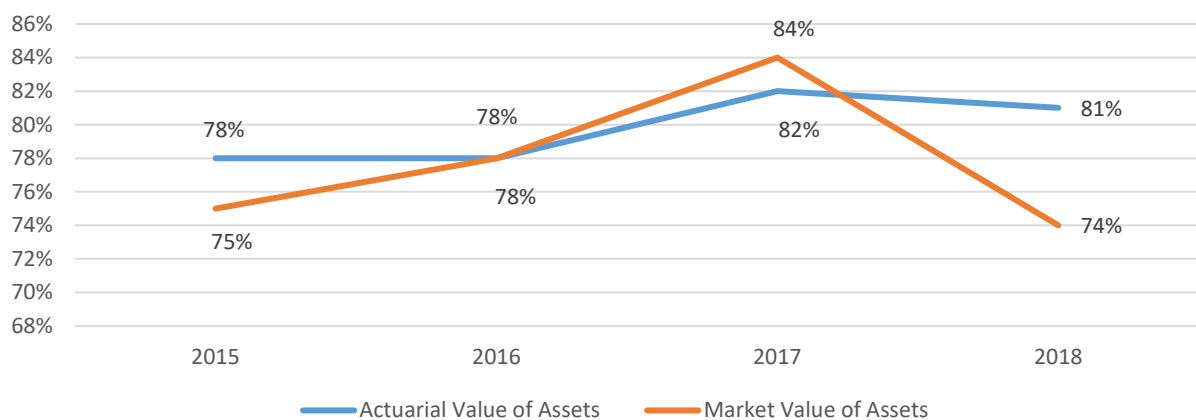
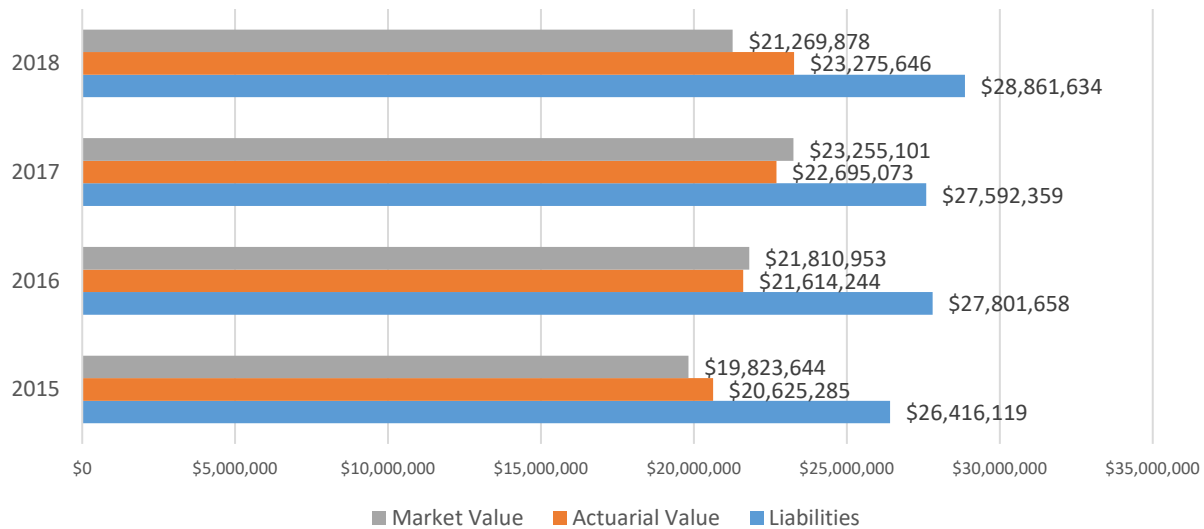
Mortality Table: RP-2014 Generational Scale MP-2017

Vesting: 10 years

COLA: Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 6.5% Salary: 3%



# UNIVERSITY CITY POLICE & FIRE RETIREMENT FUND

## MEMBERSHIP:

Active: 104 Inactive: 112

## CONTRIBUTIONS:

Employer: \$1,003,259 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

65% of compensation for the first 25 years of service + 1% for each of the next 5 years of service  
Maximum: 70% of compensation

### Normal Retirement Eligibility:

Age 50 with 25 years of service

Social Security Coverage: No

Valuation of Assets: 5 Years

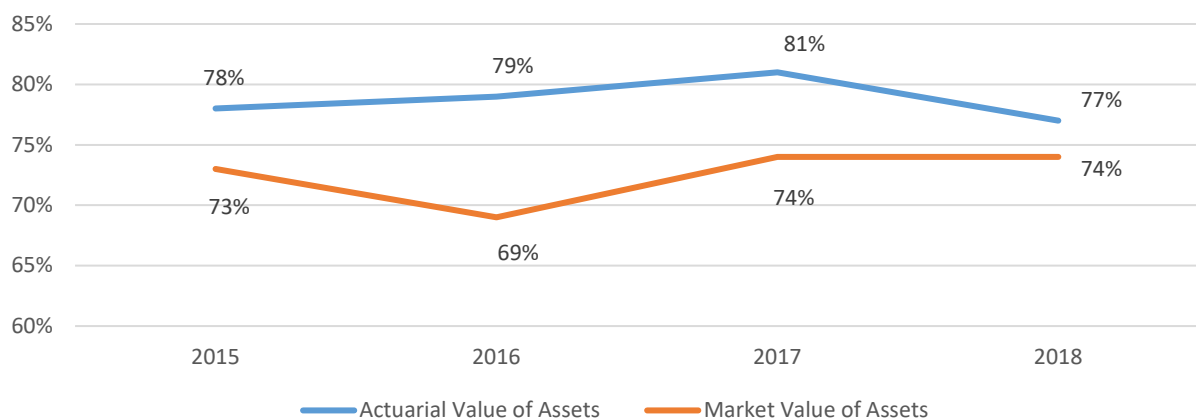
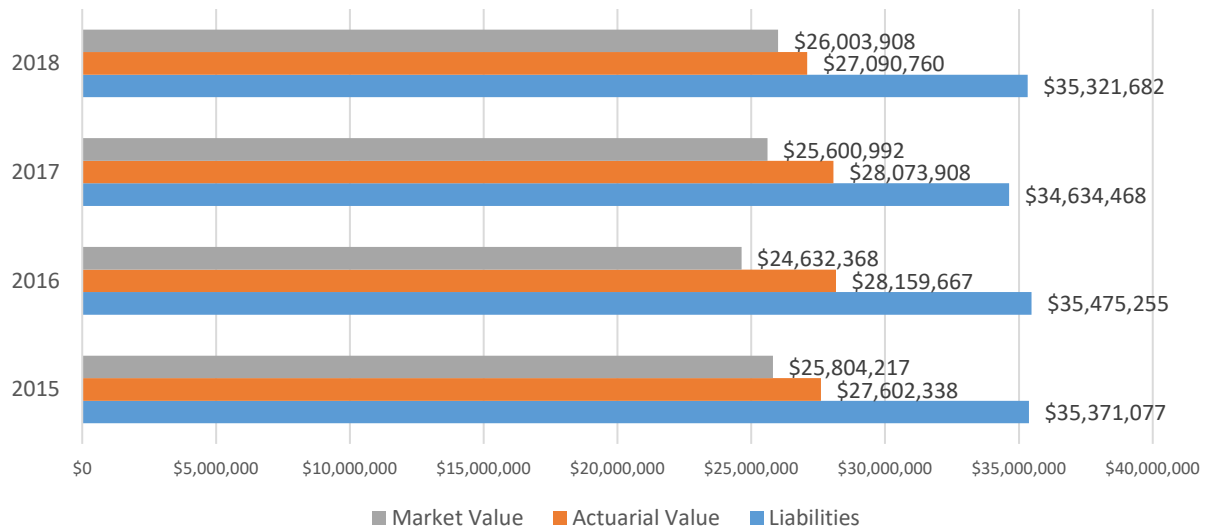
Mortality Table: RP-2014 Blue Collar Generational Scale MP-2017

Vesting: 10 years

COLA: Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 6.5% Salary: 3%





# UNIVERSITY OF MISSOURI RETIREMENT, DISABILITY & DEATH BENEFIT PLAN

## MEMBERSHIP:

Active: 18,102 Inactive: 15,153

## CONTRIBUTIONS:

Employer: \$97,231,969 Employee: \$15,374,474

## BENEFITS:

### Normal Retirement Formula:

2.2% of compensation x years of creditable service

Employees hired for the first time on/after 10/01/12: 1% of compensation x years of creditable service (plus DC account).

### Normal Retirement Eligibility:

Age 65 with 5 years of service

Age 62 with 25 years of service

**Social Security Coverage:** Yes

**Valuation of Assets:** 5 years

**Mortality Table:** RP-2014 projected on a generational basis, Scale MP-2017

**Vesting:** 5 years

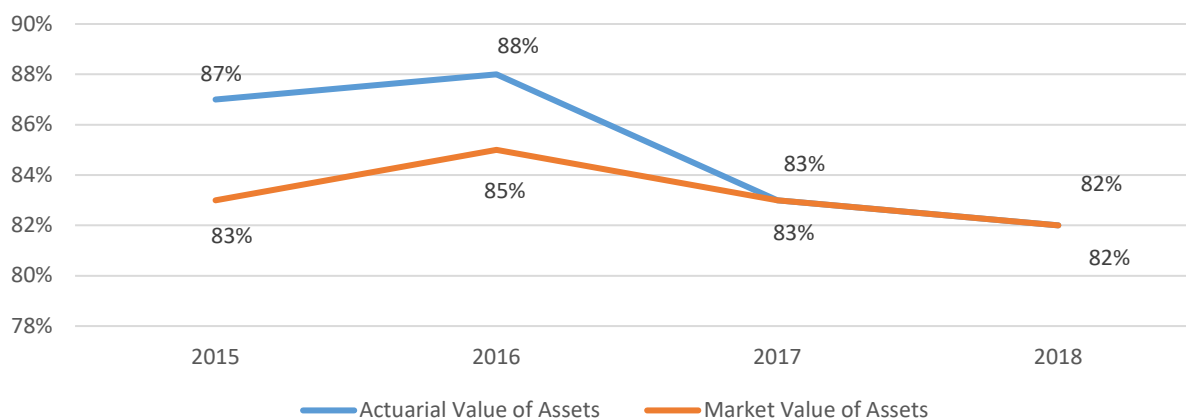
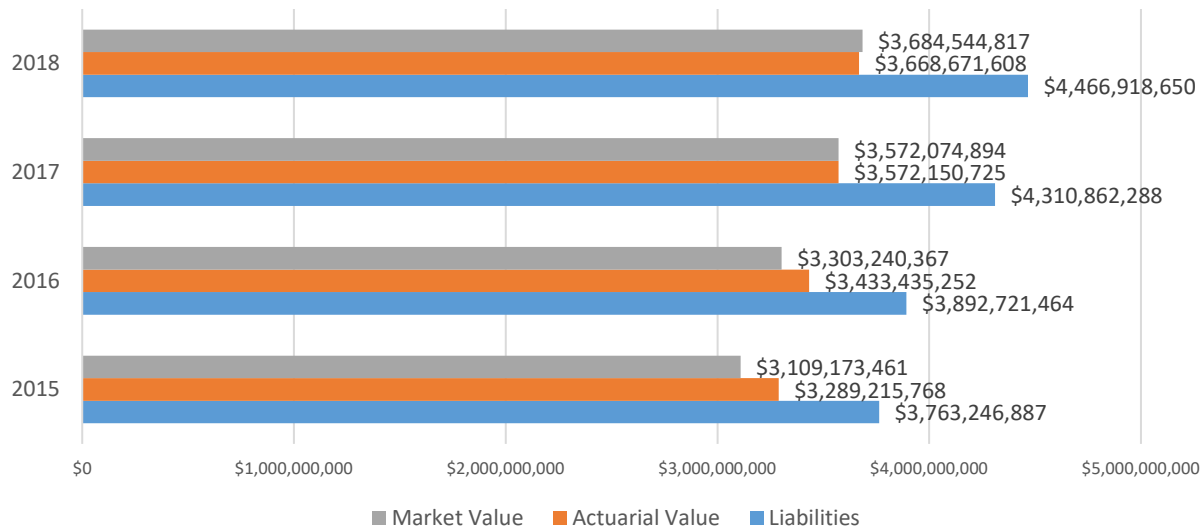
**COLA:** Ad Hoc

## ACTUARIAL ASSUMPTIONS:

Interest: 7.2%

Salary: 2.2%

Hybrid/Defined Contribution account for employees hired for the first time on/after 10/1/12. See Defined Contribution Section.  
Plan closed effective 10/1/19. New hires and returning hires enrolled in a defined contribution plan.



# VALLEY PARK FIRE PROTECTION DISTRICT RETIREMENT PLAN

## MEMBERSHIP:

Active: 28 Inactive: 15

## CONTRIBUTIONS:

Employer: \$208,500 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

2% of compensation x years of creditable service  
Maximum: 30 years of service

### Normal Retirement Eligibility:

Age 55 with 5 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

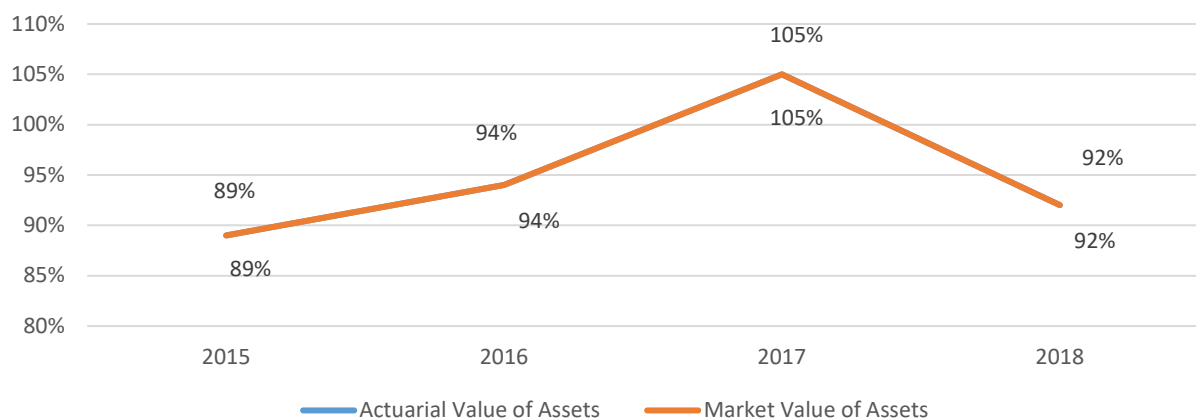
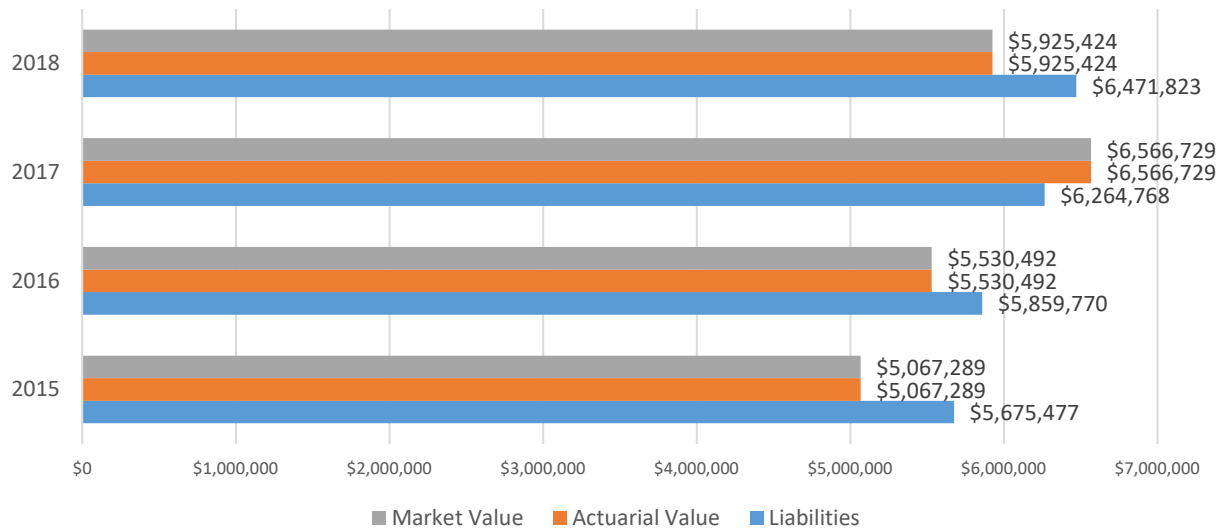
Mortality Table: RP-2000 Scale AA

Vesting: 5 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7% Salary: 4%



# WARRENTON FIRE PROTECTION DISTRICT LENGTH OF SERVICE AWARDS PROGRAM

## MEMBERSHIP:

Active: 17 Inactive: 29

## CONTRIBUTIONS:

Employer: \$15,773 Employee: Non-Contributory

## BENEFITS:

### Normal Retirement Formula:

\$10 per month x years of service; \$200 per month maximum; Life Annuity Guaranteed for 10 Years.

### Normal Retirement Eligibility:

Age 65 with 1 year of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

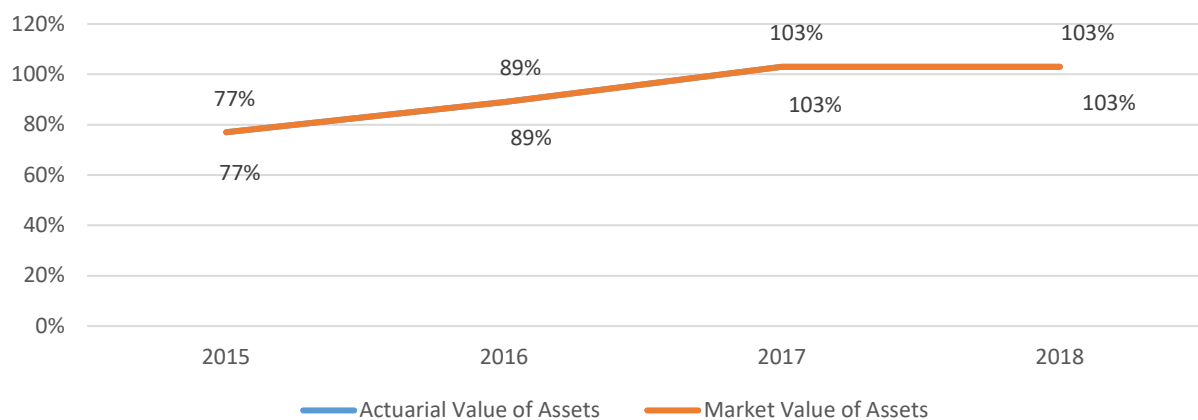
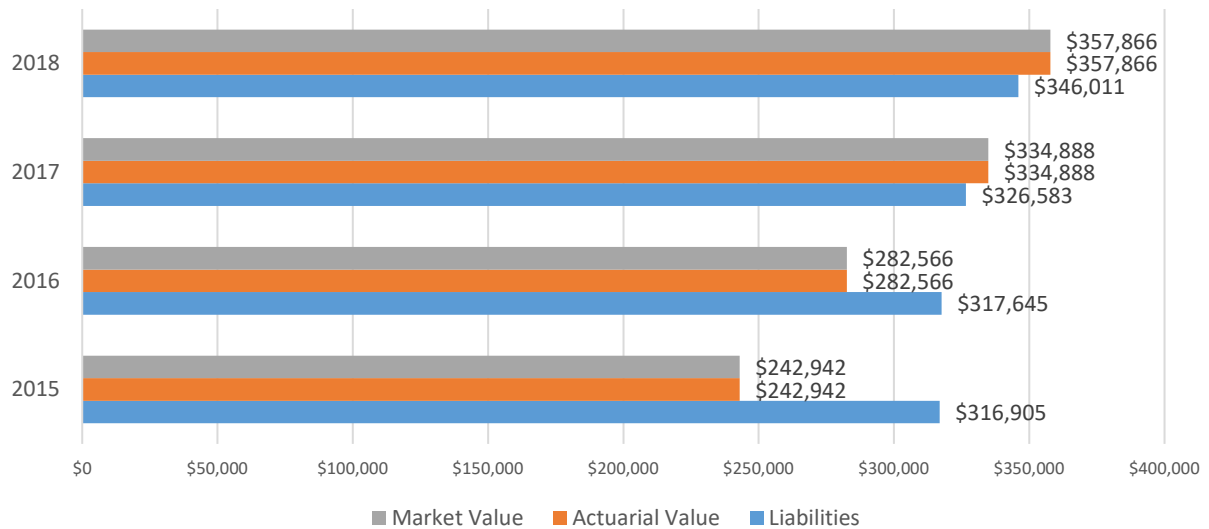
Mortality Table: RP-2000

Vesting: 4 years

COLA: No COLA

## ACTUARIAL ASSUMPTION:

Interest: 4.75%





## **LEGACY PLANS**

**This section pertains to defined benefits plans for which a sponsoring entity has entered into an agreement with the LAGERS board of trustees under section 70.621 where the LAGERS board assumes the duties and responsibilities of operating a prior plan.**

# ANTONIA FIRE PROTECTION DISTRICT PENSION PLAN

## MEMBERSHIP:

Active: 0 Inactive: 19

## BENEFITS:

### Normal Retirement Formula:

2.25% of compensation for first 24 years of service + 1% for next 6 years of service  
formula frozen 1/1/09

### Normal Retirement Eligibility:

Age 55

Social Security Coverage: Yes

Valuation of Assets: Market Value

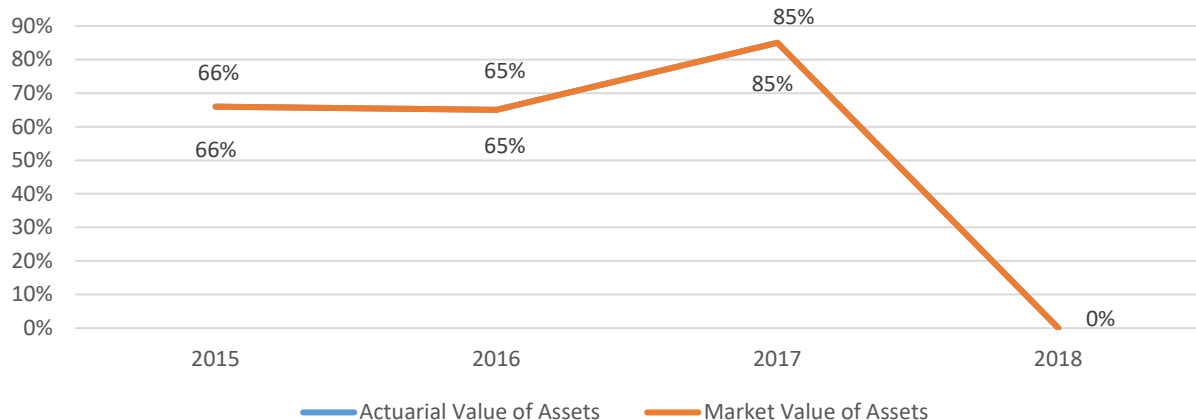
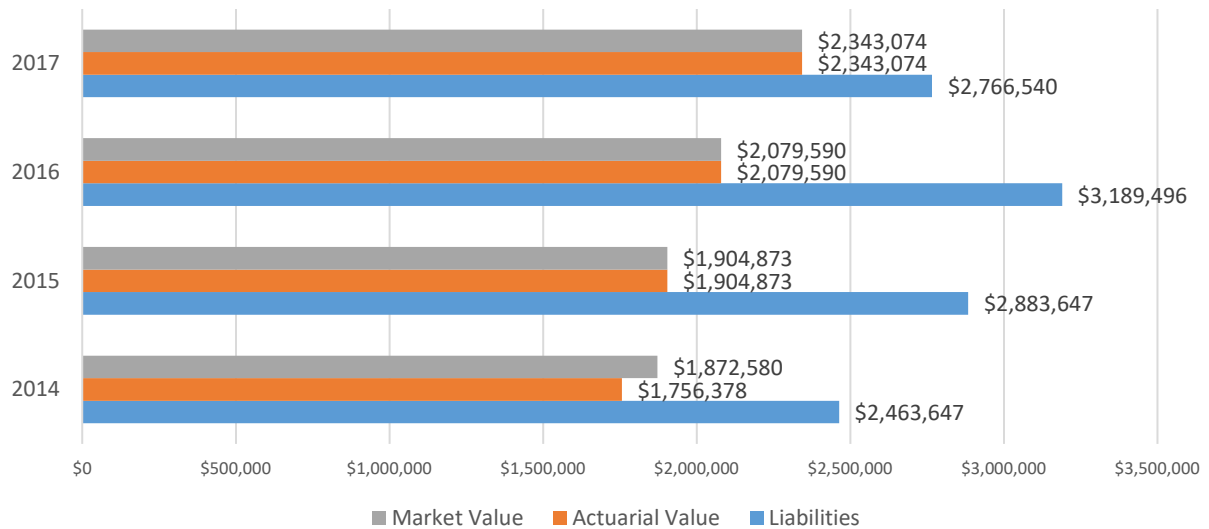
Vesting: Partial 4 / Full 10

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25% Salary: n/a%

Plan frozen effective January 1, 2009. The FPD joined LAGERS in 2012. Effective January 1, 2019, LAGERS assumed administration of the plan under section 70.621. The FPD transferred assets to the LAGERS plan and began making monthly payments to LAGERS beginning in March 2019. The charts below show the status of the plan prior to the transfer to LAGERS.



# JEFFERSON CITY FIREMEN'S RETIREMENT SYSTEM

## MEMBERSHIP:

Active: 0 Inactive: 53

## BENEFITS:

### Normal Retirement Formula:

60% of compensation  
2.5% of compensation x years of creditable service  
Maximum: 85% of compensation

### Normal Retirement Eligibility:

Age 55 with 24 years of service  
Rule of 80

Social Security Coverage: No

Valuation of Assets: Market Value

Mortality Table: RP-2014 Healthy Annuitant

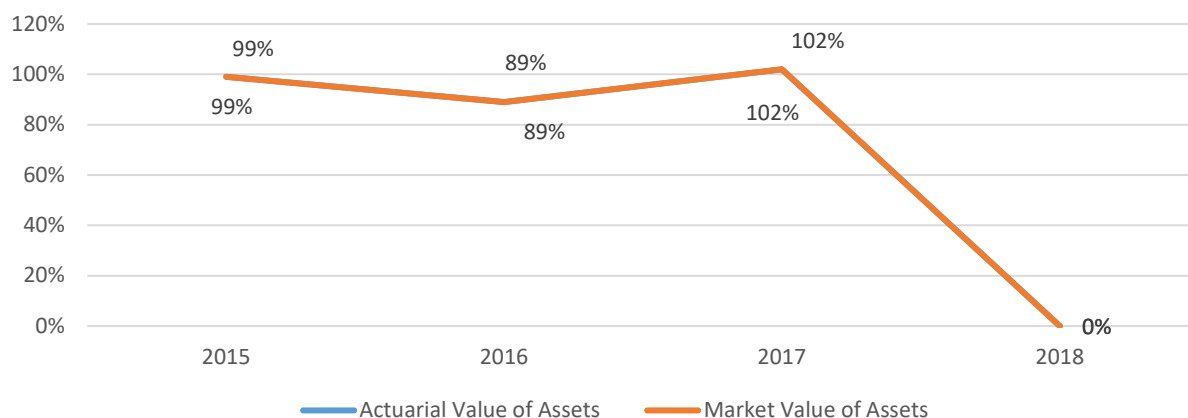
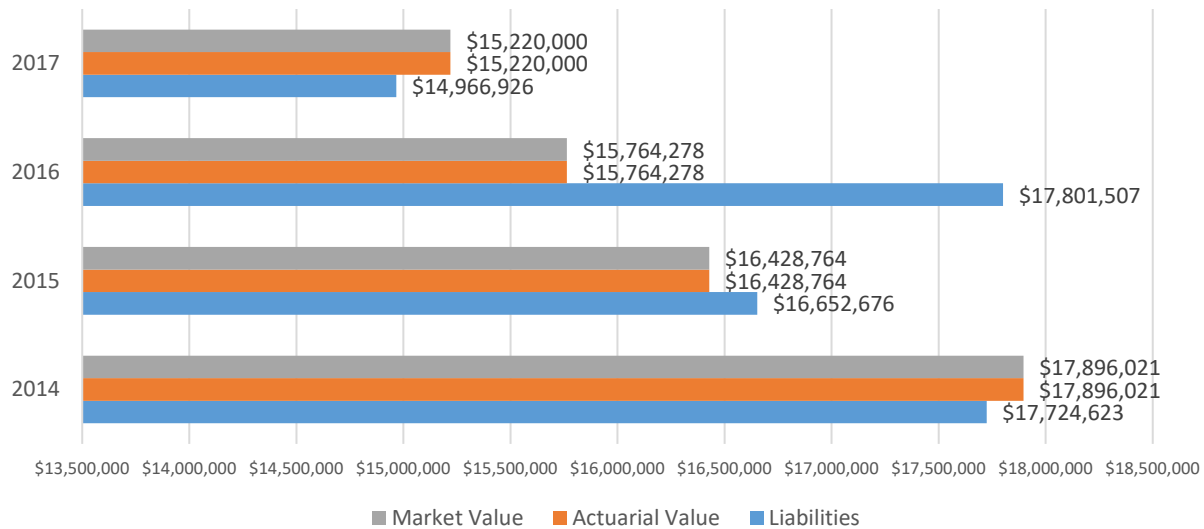
Vesting: 10 years

COLA: Annual Amount: 2%

## ACTUARIAL ASSUMPTION:

Interest: 7.25%

Plan closed effective December 2008. Active members moved to LAGERS. The City transferred administration of the plan to LAGERS on July 1, 2017 under section 70.621. The charts below show the status of the plan prior to the transfer to LAGERS.



# JENNINGS POLICE & FIREMEN'S RETIREMENT FUND

## MEMBERSHIP:

Active: 0 Inactive: 37

## BENEFITS:

### Normal Retirement Formula:

2.25% of compensation x years of creditable service  
Maximum: 50% of compensation

### Normal Retirement Eligibility:

Age 55 with 20 years of service  
Age 65 with 15 years of service

Social Security Coverage: Yes

Valuation of Assets: Market Value

Mortality Table: RP-2014

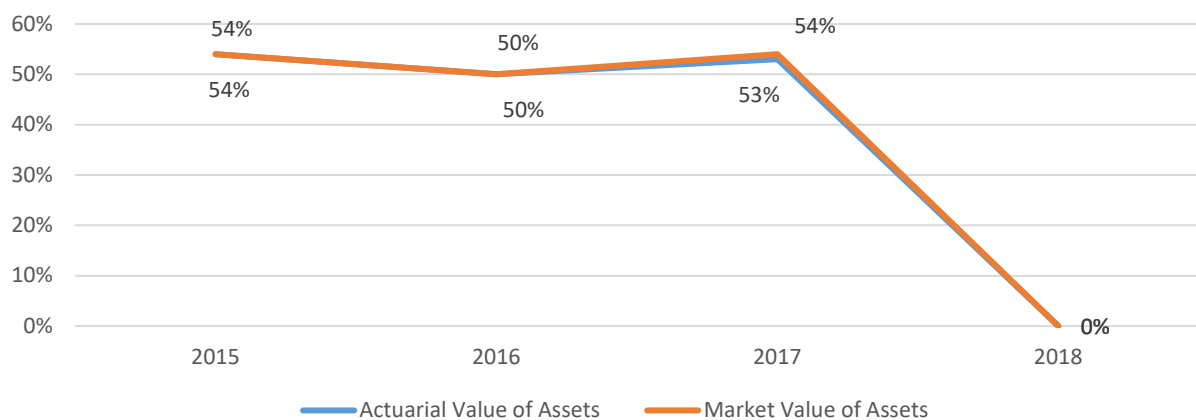
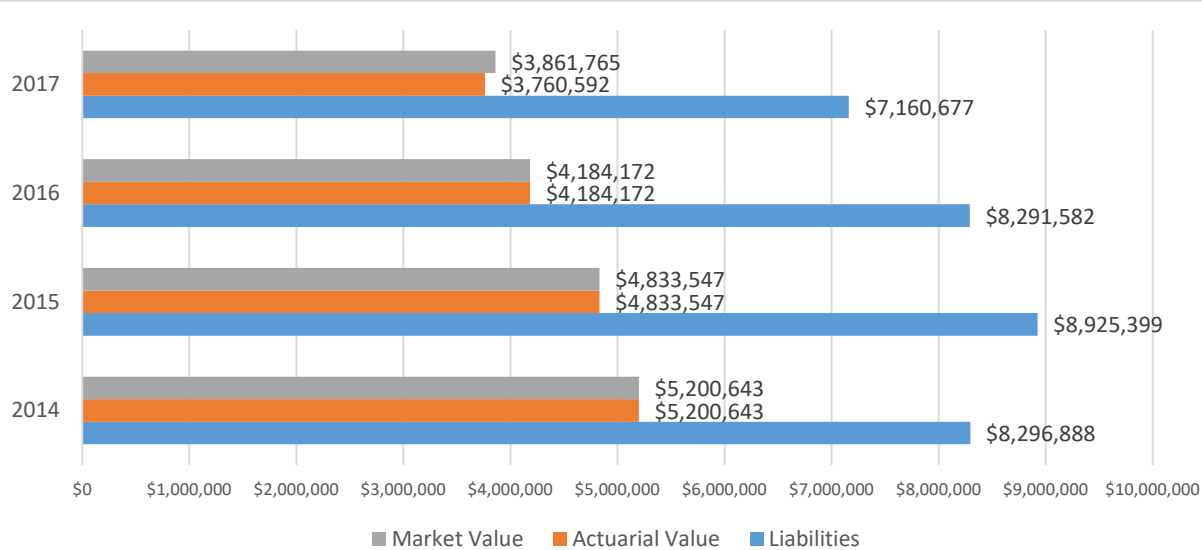
Vesting: 10 years

COLA: No COLA

## ACTUARIAL ASSUMPTIONS:

Interest: 7.25%

Plan closed effective 4/1/87. New hires joined LAGERS. On June 7, 2017, the City's pension board approved an agreement to transfer the plan to LAGERS under section 70.621. As of December 2017, the City transferred the plan's assets to LAGERS and terminated the plan. The City pays a monthly contribution to LAGERS. The charts below show the status of the plan prior to the transfer to LAGERS.







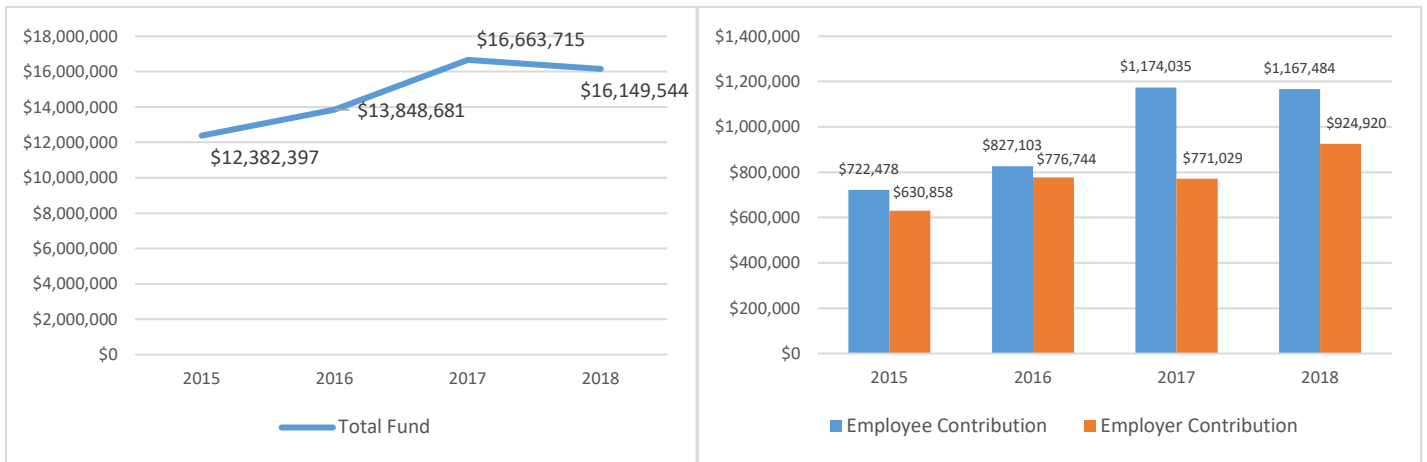
## **DEFINED CONTRIBUTION PLANS**

**Data included  
in this appendix reflects  
PERS information from plan year 2018.**

For purposes of this report, the membership numbers noted for each plan refer to actives only.

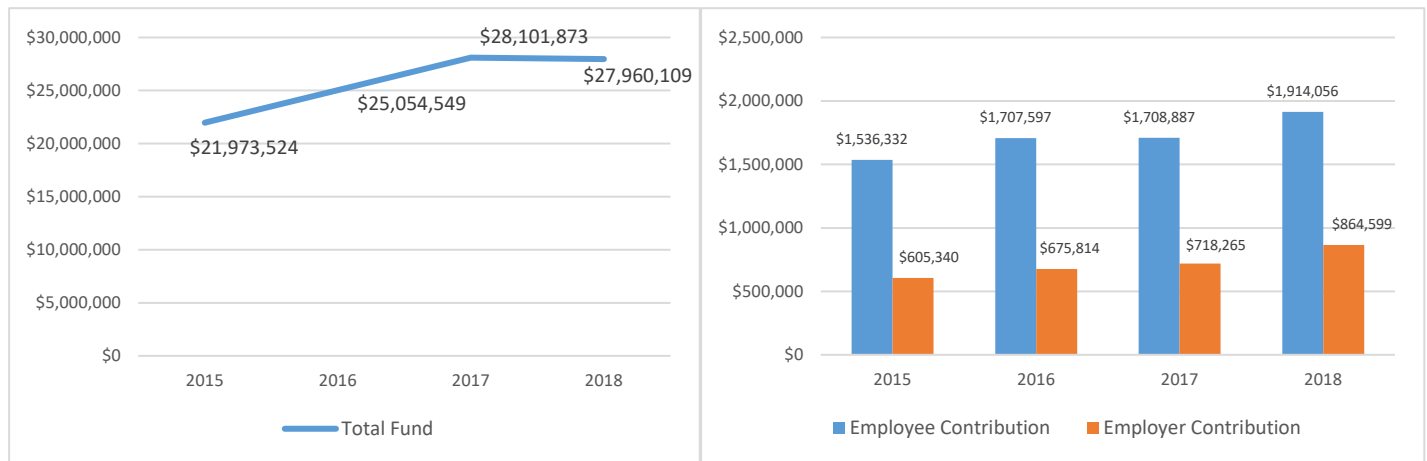


### BATES COUNTY MEMORIAL HOSPITAL EMPLOYEES PROFIT SHARING PLAN



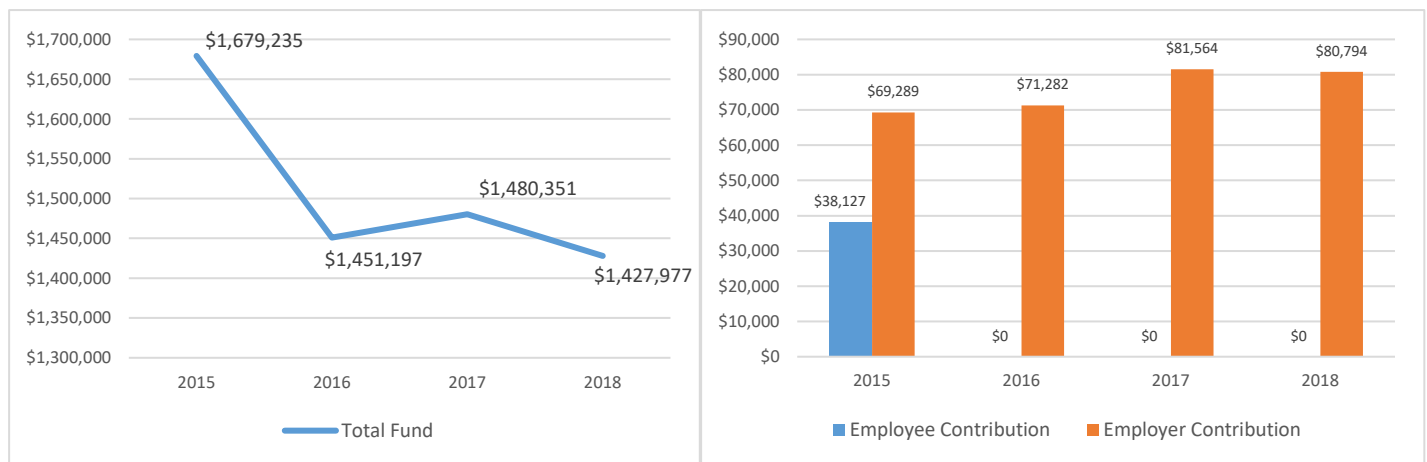
**Active Members: 210 Vesting: 5 years**  
**Notes:** Employee contributions are optional.

### BOTHWELL REGIONAL HEALTH CENTER RETIREMENT PLAN



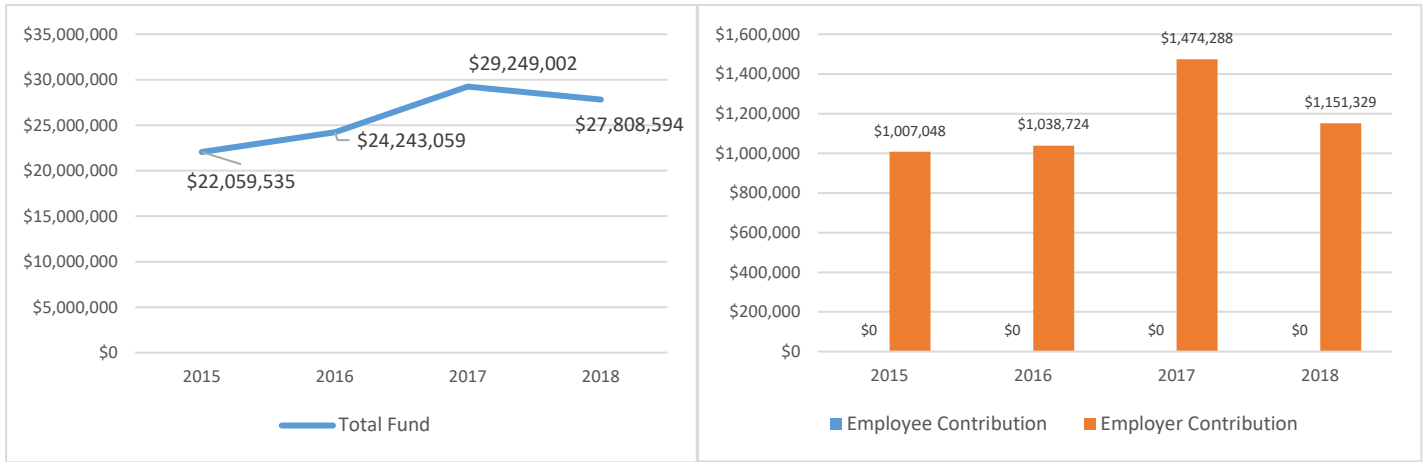
**Active Members: 864**

### CEDAR HILL FIRE PROTECTION DISTRICT MONEY PURCHASE PLAN



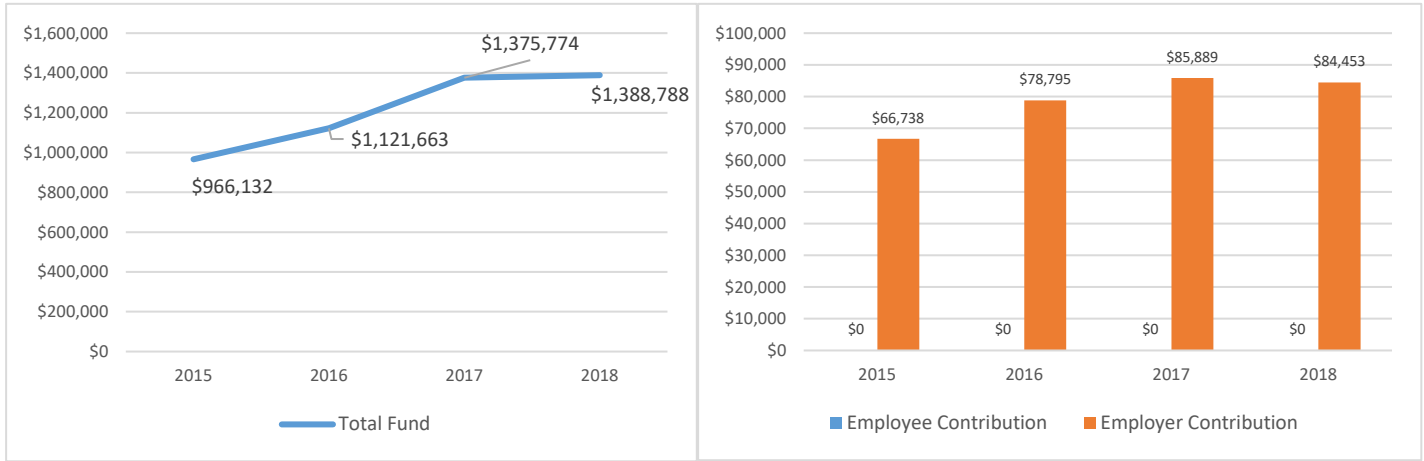
**Active Members: 22 Vesting: 5 years**

### CENTRAL COUNTY FIRE & RESCUE PENSION PLAN



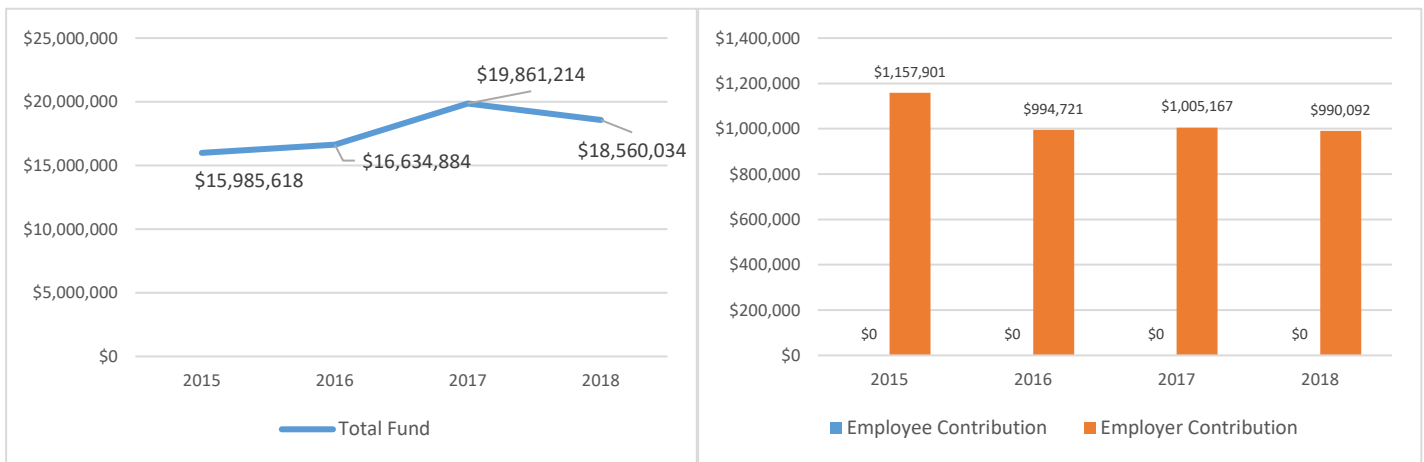
Active Members: 77 Vesting: 1 year

### CERF ADMINISTRATIVE OFFICE 401(A) PLAN



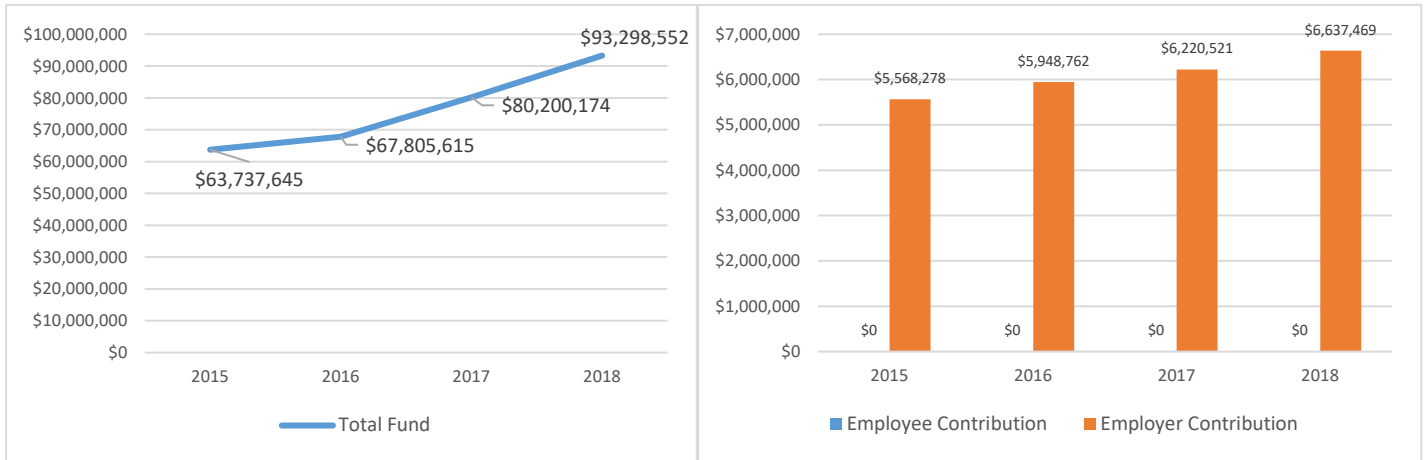
Active Members: 17 Vesting: 5 years

### CHESTERFIELD RETIREMENT PLAN



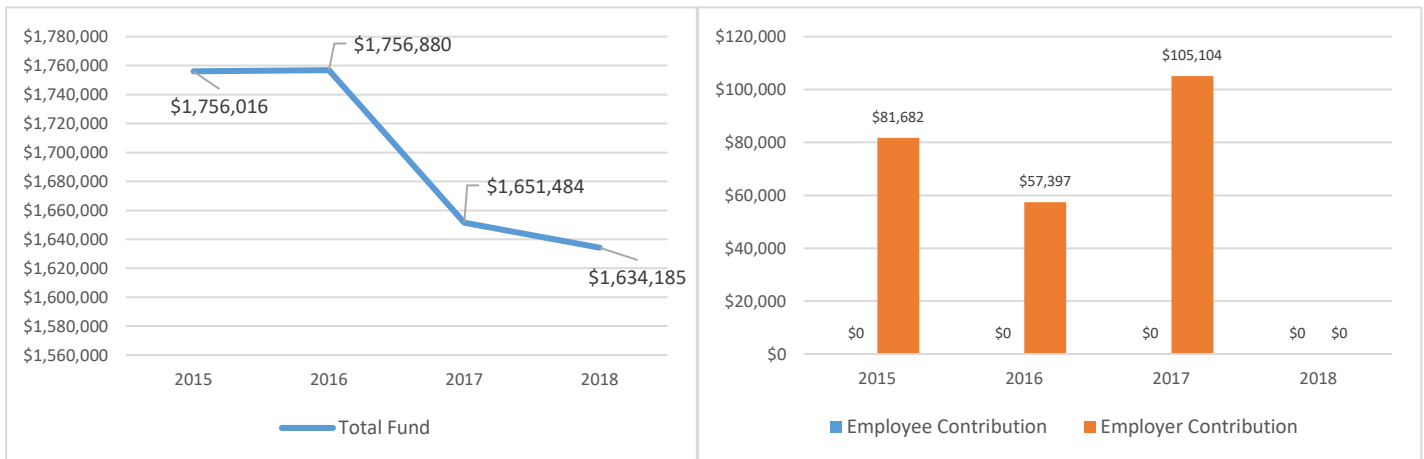
Active Members: 256 Vesting: 5 years

### COLLEGE & UNIVERSITY RETIREMENT PLAN (CURP)



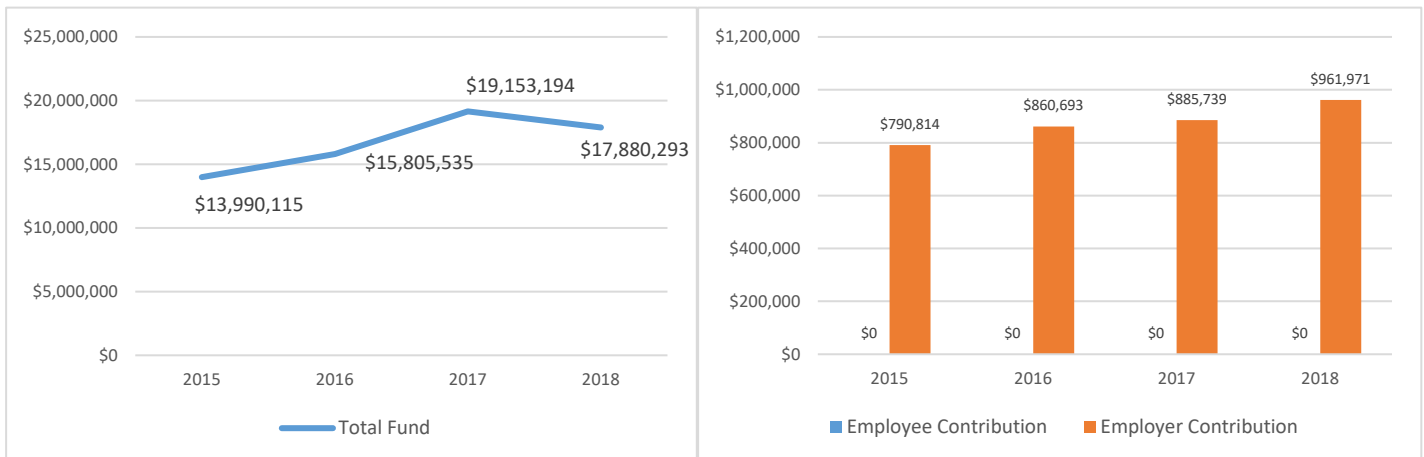
**Active Members:** 2,460 **Vesting:** immediate upon employment. Notes: SB 62 (2017) established an employer contribution rate of 6% of payroll beginning 7/1/18 and requires certain employees to contribute 2% of payroll to the plan.

### COOPER COUNTY MEMORIAL HOSPITAL RETIREMENT PLAN



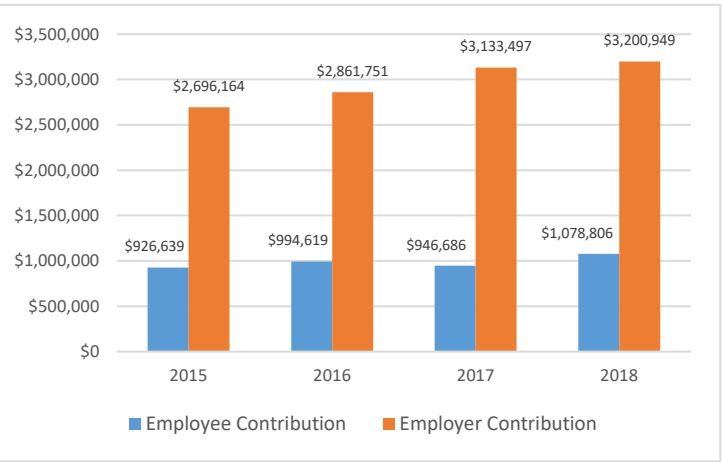
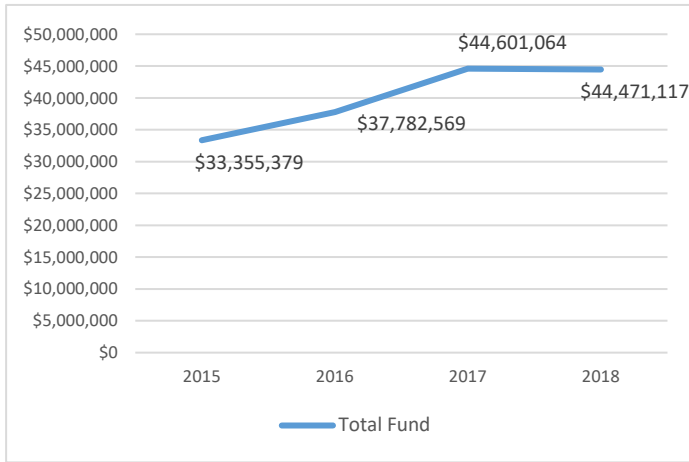
Notes: The County sold the hospital in February 2018 to a private entity. In January 2020, the hospital ceased operations. This is the final time the plan will appear in the JCPER annual report.

### COTTEVILLE COMMUNITY FIRE PROTECTION DISTRICT RETIREMENT PLAN



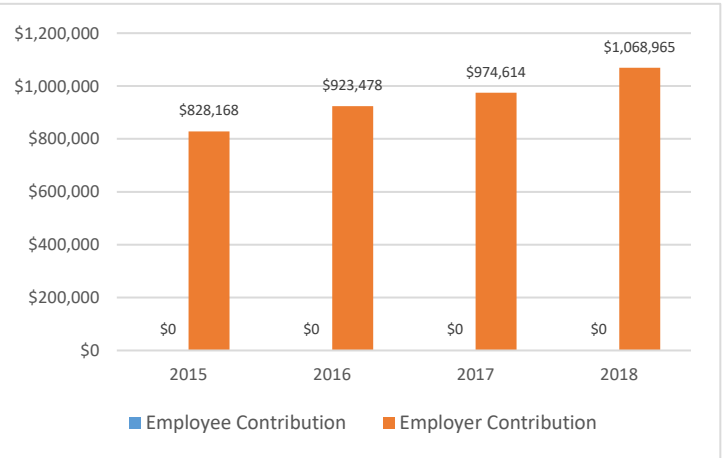
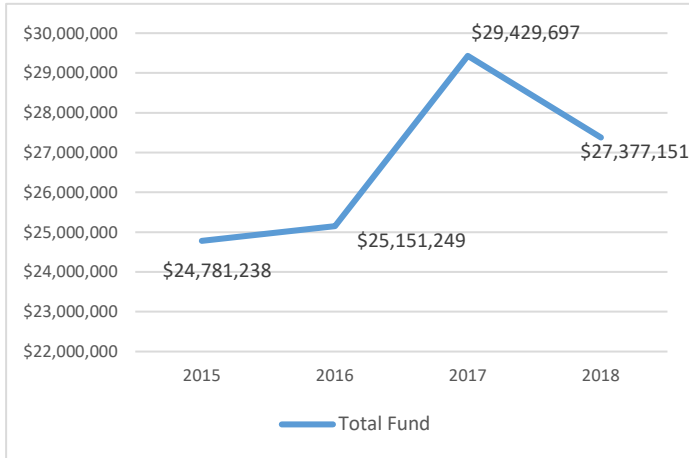
**Active Members:** 57 **Vesting:** Partial 3 / Full 7

### COUNTY EMPLOYEES' RETIREMENT FUND



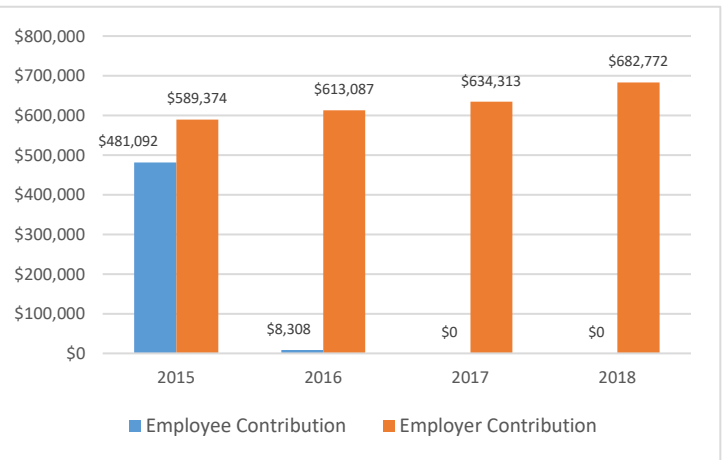
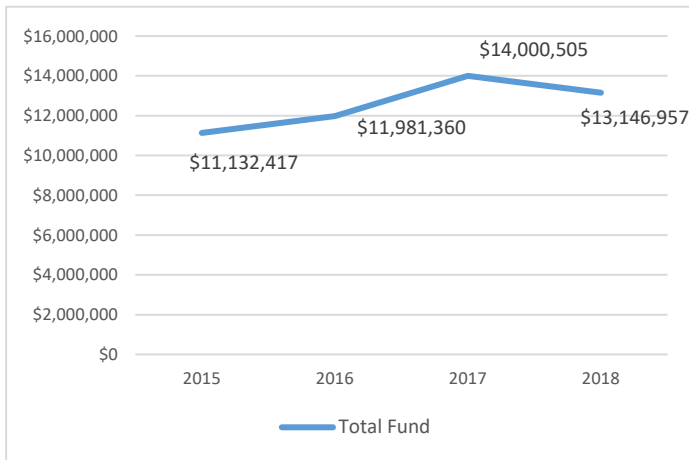
**Active Members:** 8,591 **Vesting:** 5 years

### CREVE COEUR FIRE PROTECTION DISTRICT RETIREMENT PLAN



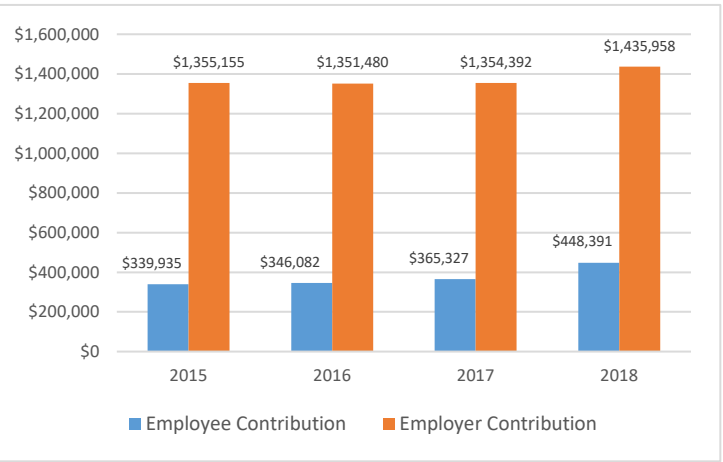
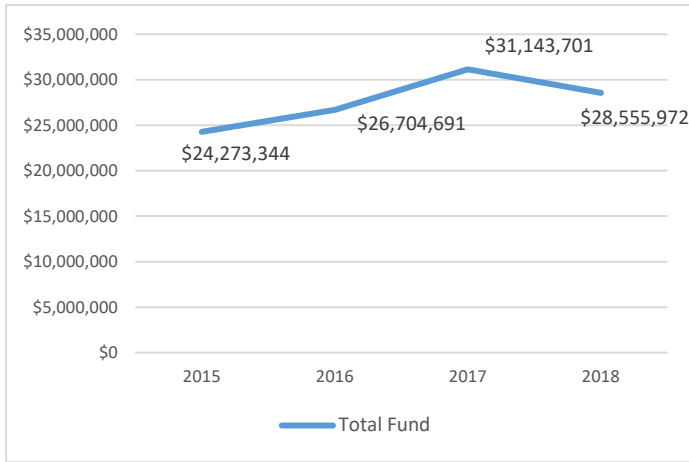
**Active Members:** 55 **Vesting:** Partial 5 / Full 9

### DES PERES RETIREMENT PLAN



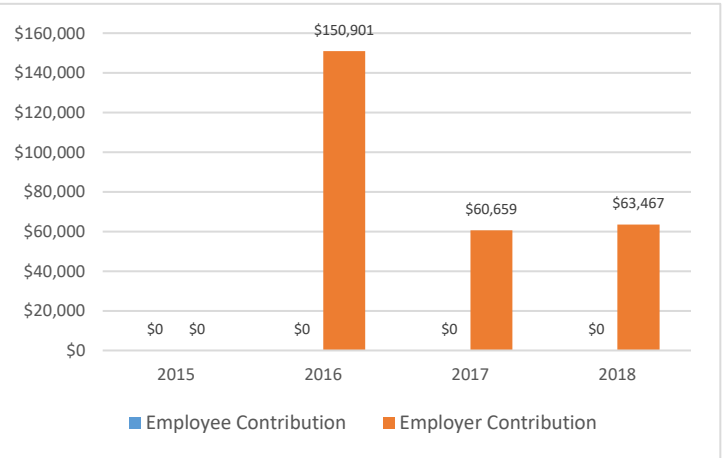
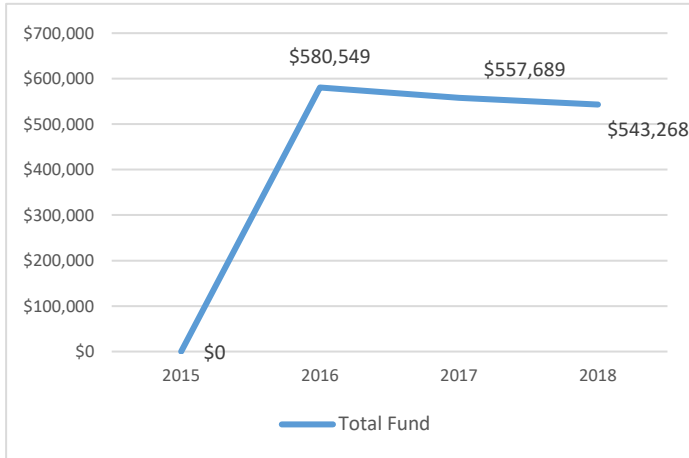
**Active Members:** 104 **Vesting:** 3 years

### FLORISSANT EMPLOYEES PENSION PLAN



**Active Members:** 231 **Vesting:** Partial 3 / Full 7

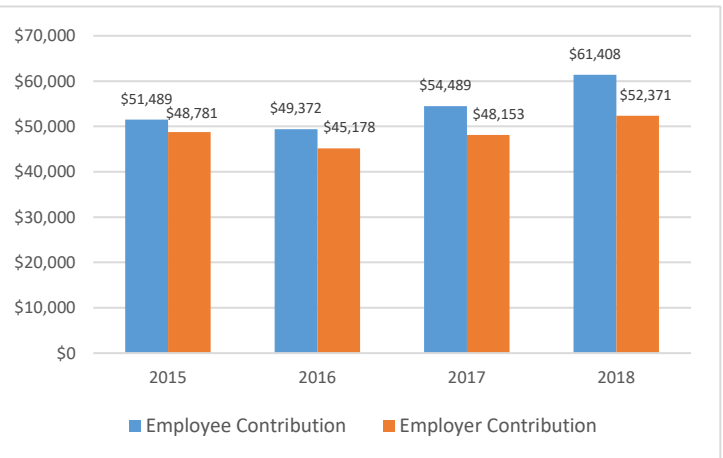
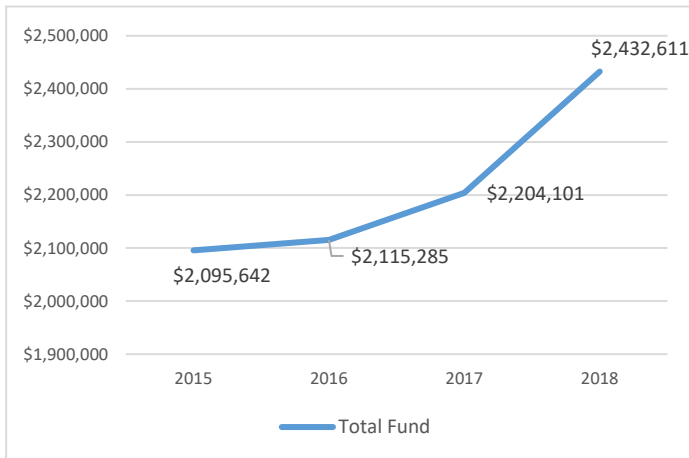
### FRANKLIN COUNTY SB40 RESOURCE BOARD



**Active Members:** 22 **Vesting:** Partial 2 / Full 6

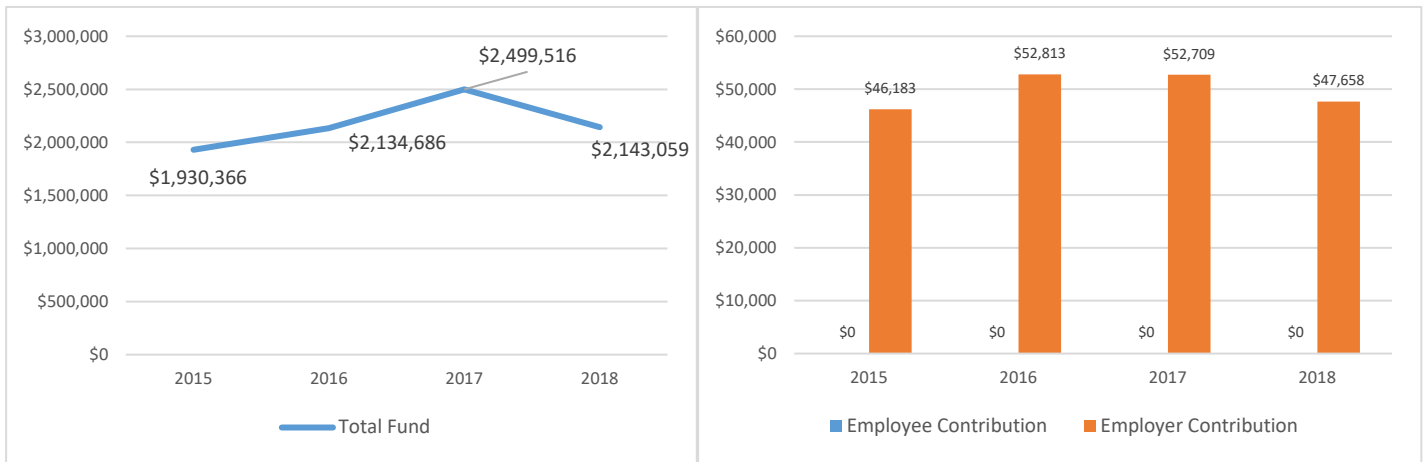
Notes: The plan began reporting to the JCPER in 2016 for the first time.

### JACKSON COUNTY PUBLIC WATER SUPPLY DISTRICT #2



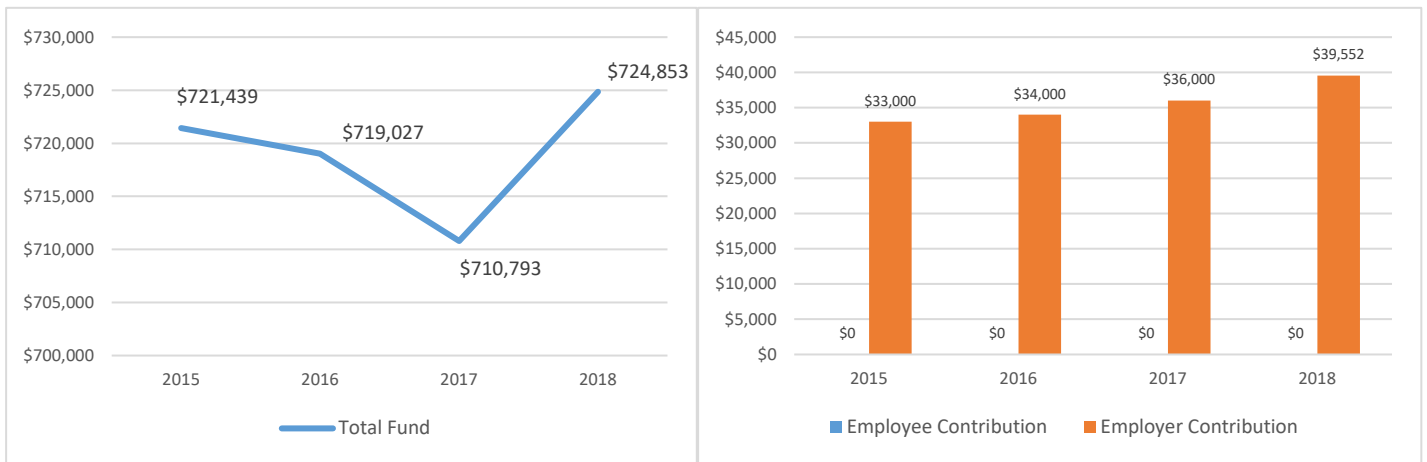
**Active Members:** 12 **Vesting:** 3 years

### JEFFERSON COUNTY CONSOLIDATED WATER DISTRICT C-1



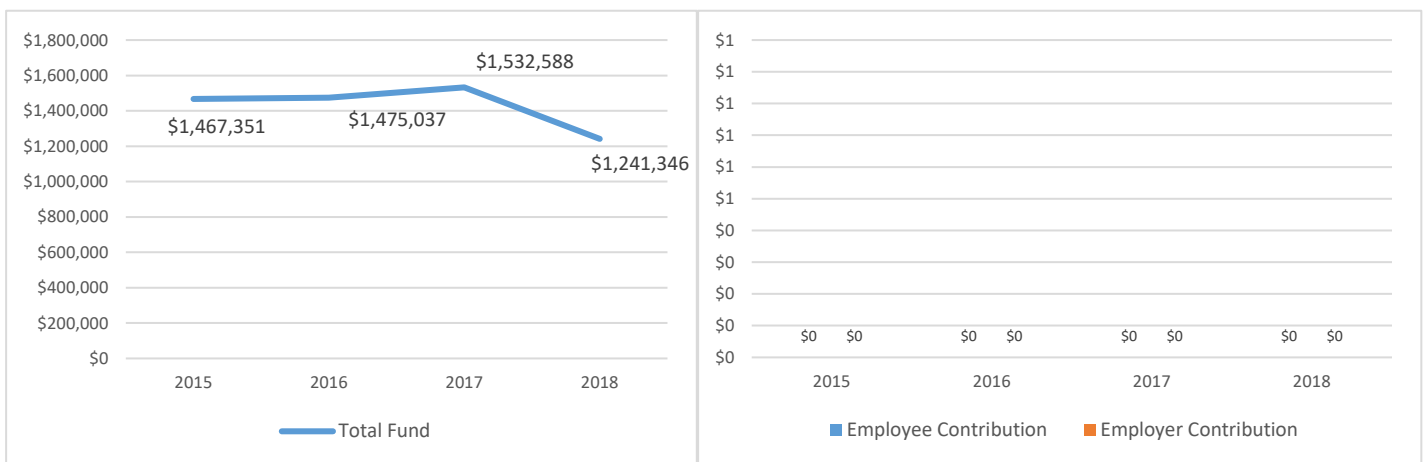
Active Members: 15 Vesting: Partial 4 / Full 11

### JEFFERSON COUNTY PUBLIC WATER SUPPLY DISTRICT #3



Active Members: 16 Vesting: Partial 1 / Full 3

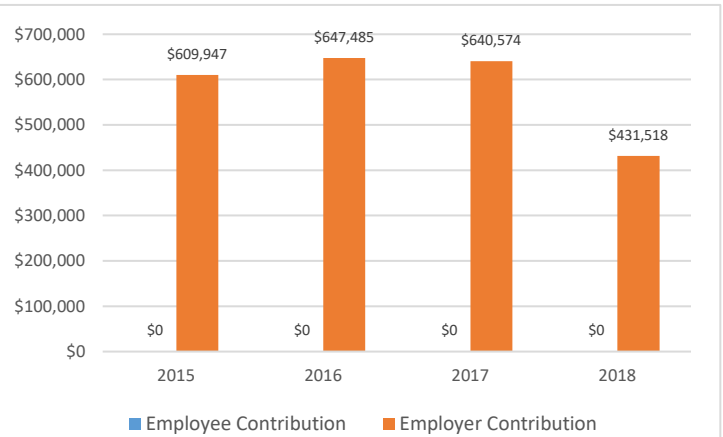
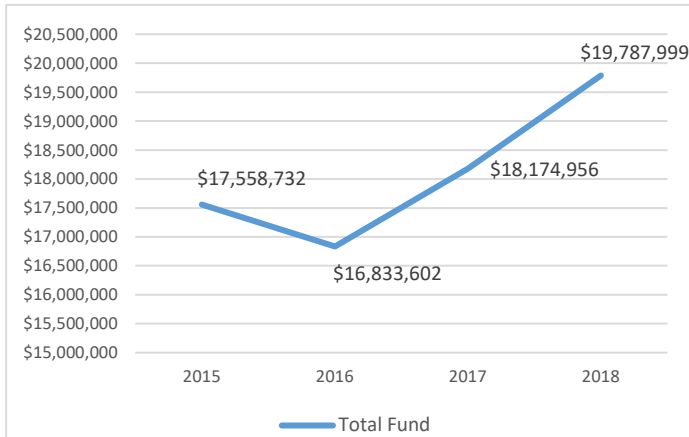
### KANSAS CITY SUPPLEMENTAL RETIREMENT PLAN



Active Members: 5 Vesting: 5 years

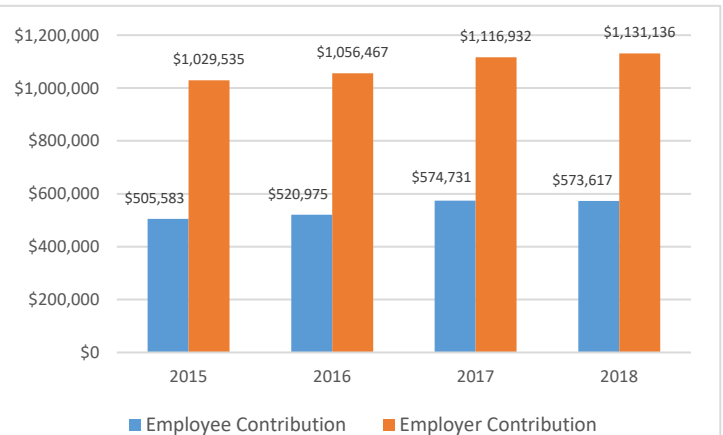
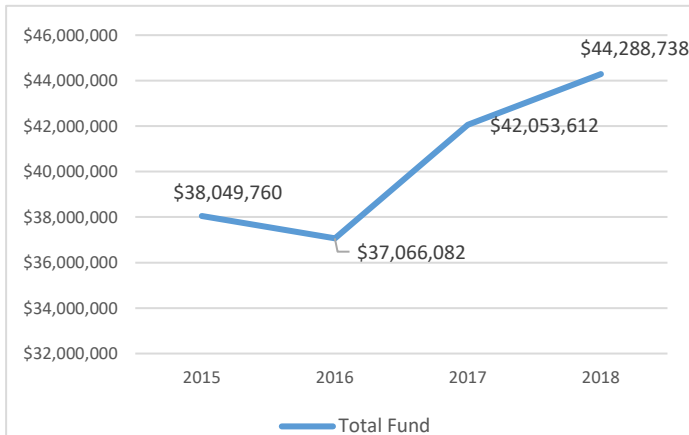
Notes: The City established this plan in 2000 for a select group of employees. The City no longer contributes to the plan.

### KIRKWOOD CIVILIAN EMPLOYEES PENSION PLAN



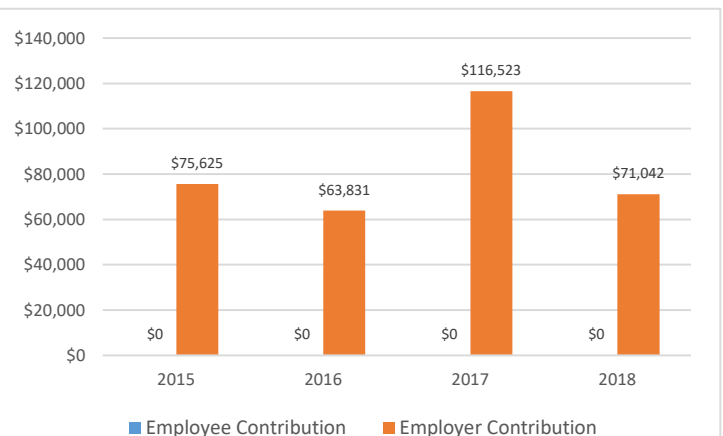
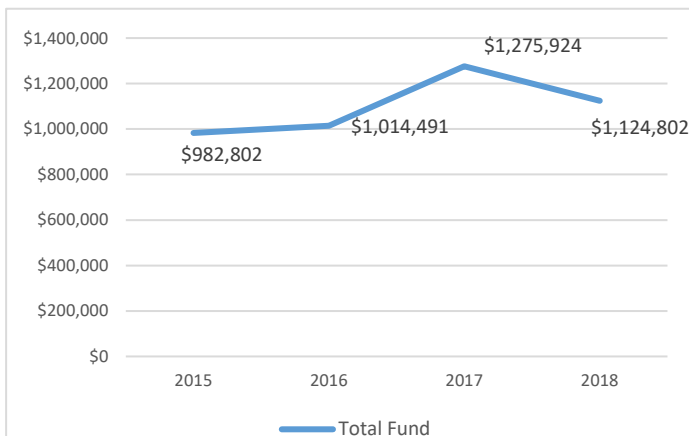
**Active Members: 192 Vesting: 5 years**

### KIRKWOOD POLICE & FIRE PENSION PLAN



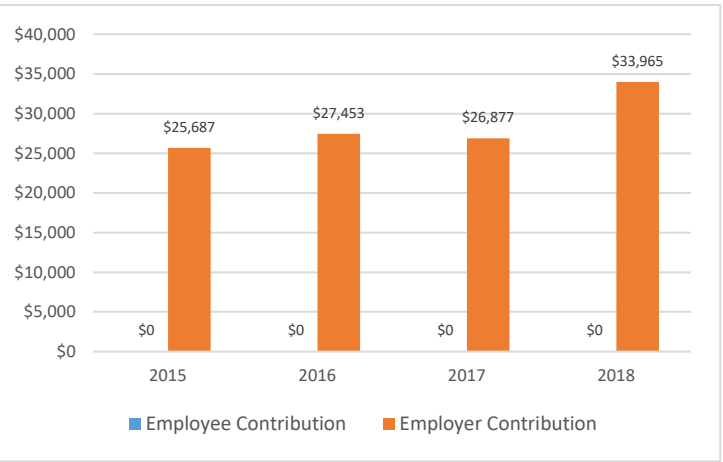
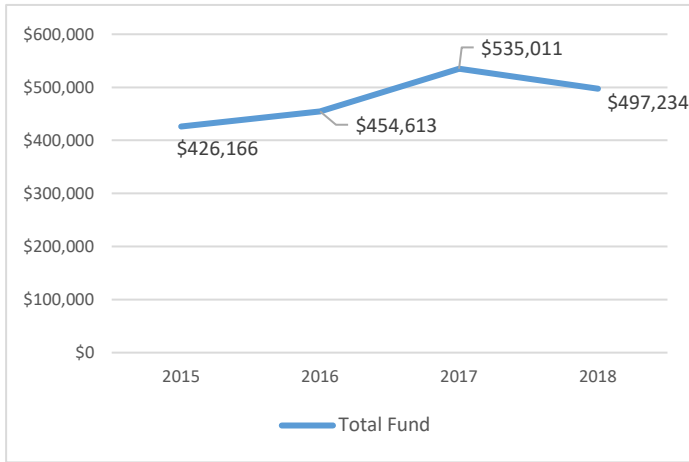
**Active Members: 112 Vesting: 5 years**

### LAKE ST. LOUIS FIRE PROTECTION DISTRICT PROFIT SHARING PLAN



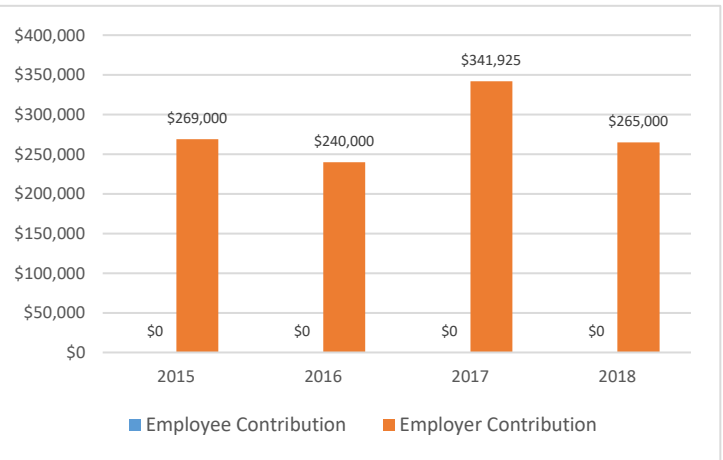
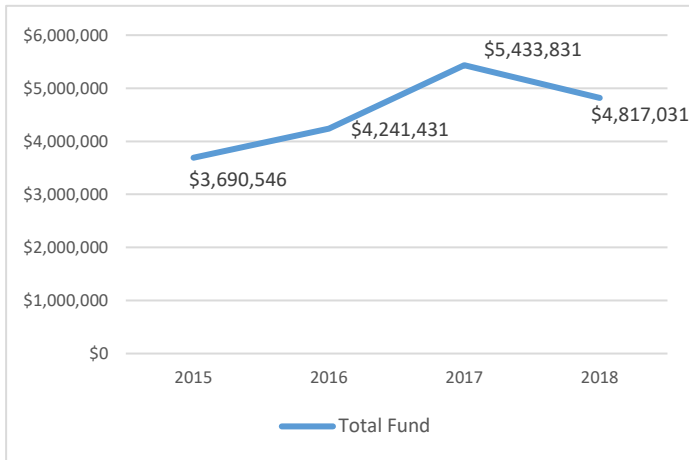
**Active Members: 13 Vesting: Partial 2 / Full 6**

### LAKE WEST AMBULANCE DISTRICT RETIREMENT PLAN



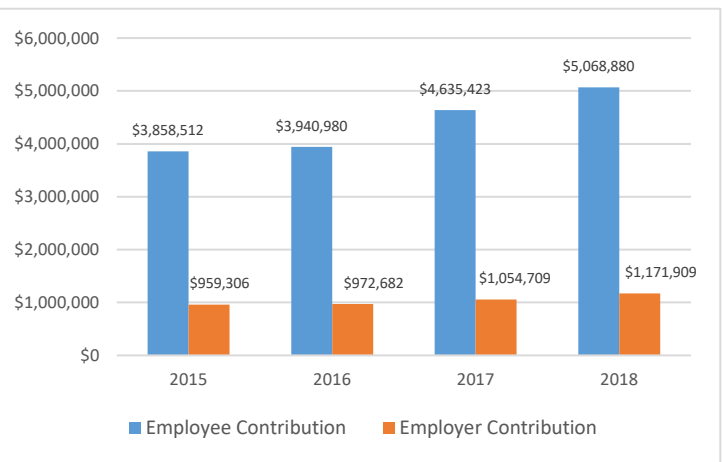
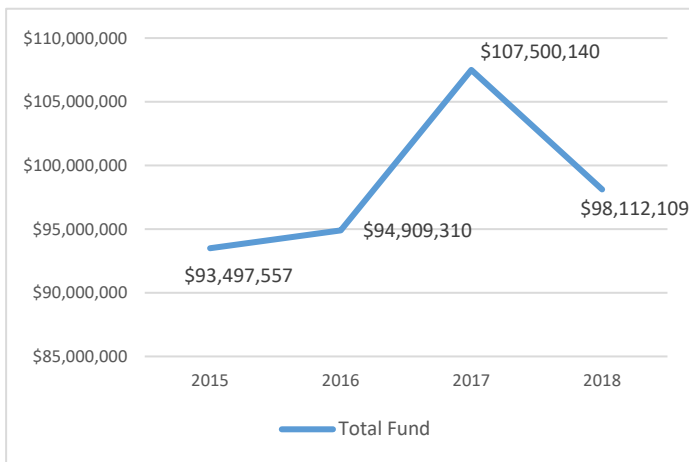
Active Members: 22 Vesting: 3 years

### LEMAY FIRE PROTECTION DISTRICT RETIREMENT PLAN



Active Members: 26 Vesting: Partial 5 / Full 10

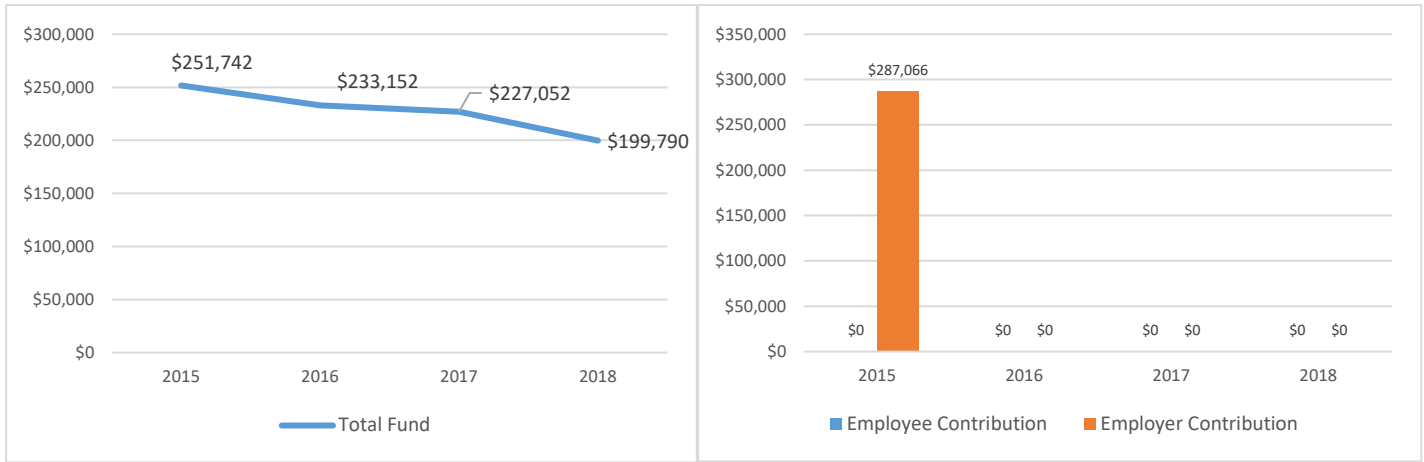
### LIBERTY HOSPITAL RETIREMENT INCOME PLAN



Active Members: 1,365 Vesting: 3 years



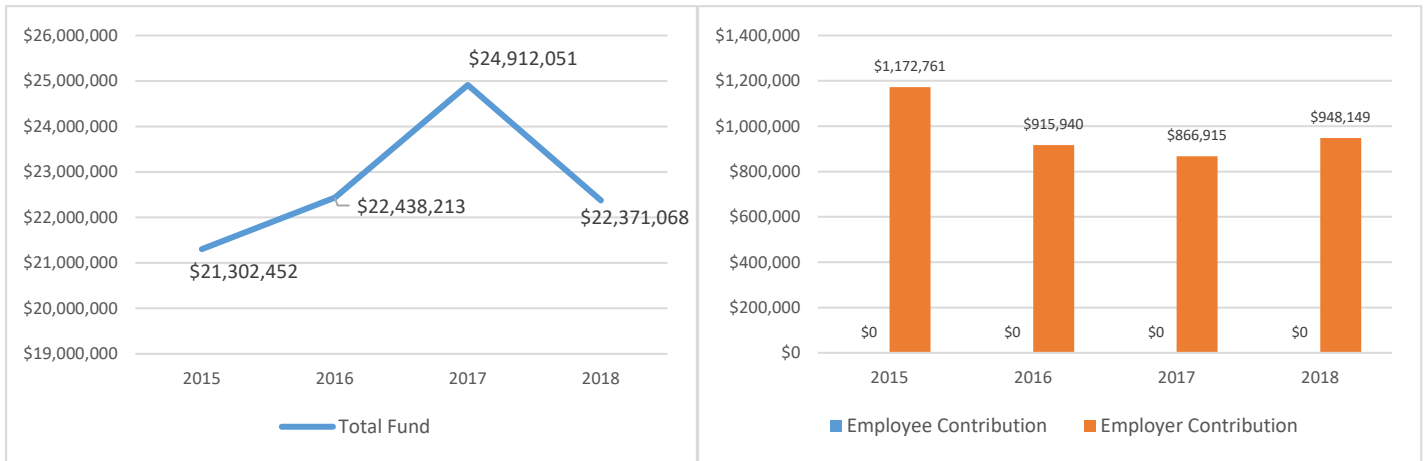
### LINCOLN COUNTY MEMORIAL HOSPITAL RETIREMENT PLAN



**Active Members:** 35 **Vesting:** Partial 3 / Full 4

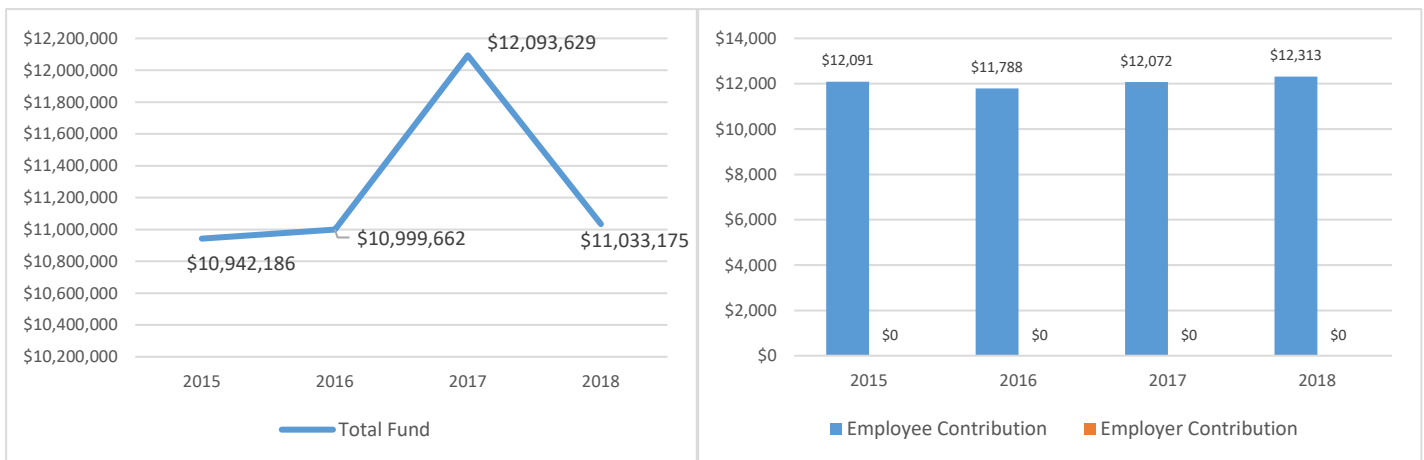
Notes: LCMH operations were sold to Mercy in 3/1/15. As a result, employer contributions to the plan have ceased and most employees have rolled their accounts into the Mercy plan.

### MARYLAND HEIGHTS FIRE PROTECTION DISTRICT RETIREMENT PLAN



**Active Members:** 51 **Vesting:** Partial 1 / Full 5

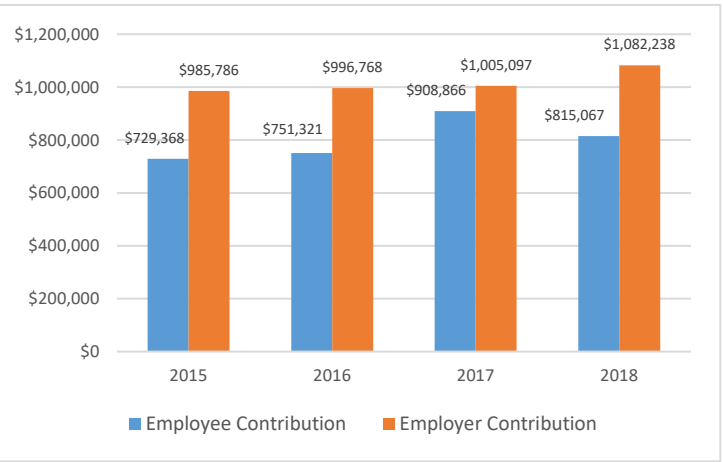
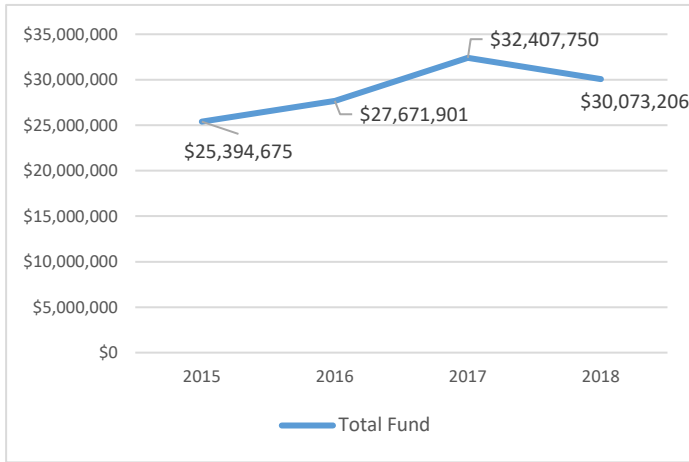
### MARYLAND HEIGHTS PENSION PLAN



**Active Members:** 82 **Vesting:** 3 years

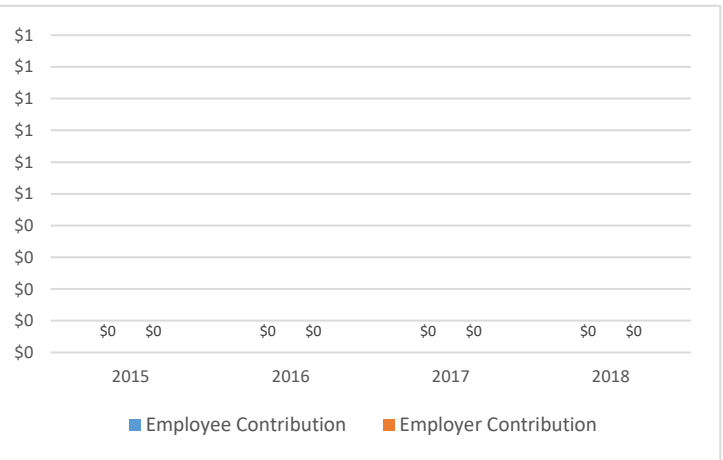
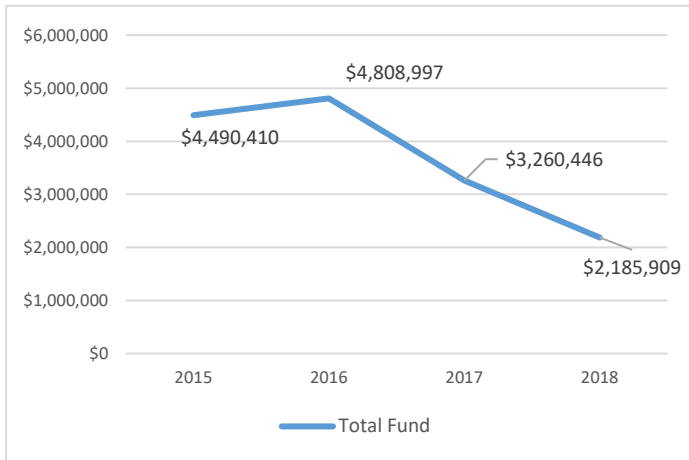
Notes: The City joined LAGERS on 1/1/04. Since then, the City no longer contributes to the plan.

### MEHLVILLE FIRE PROTECTION DISTRICT RETIREMENT PLAN



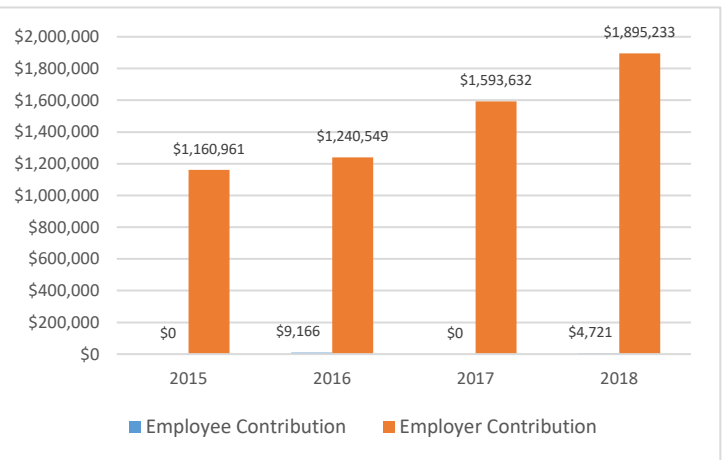
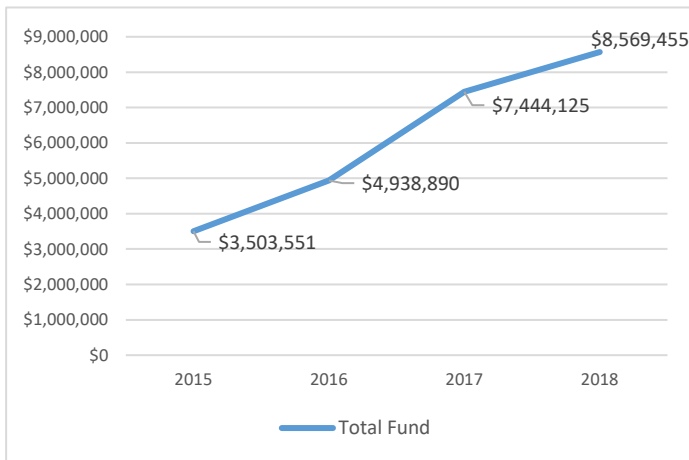
**Active Members:** 139 **Vesting:** immediate upon employment

### METRO NORTH FIRE PROTECTION DISTRICT RETIREMENT PLAN



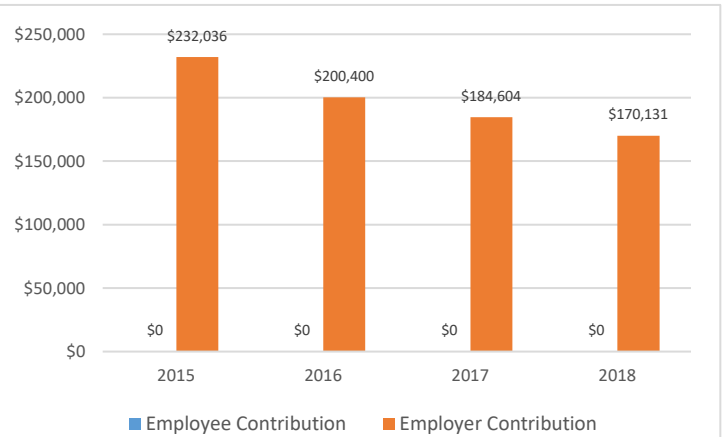
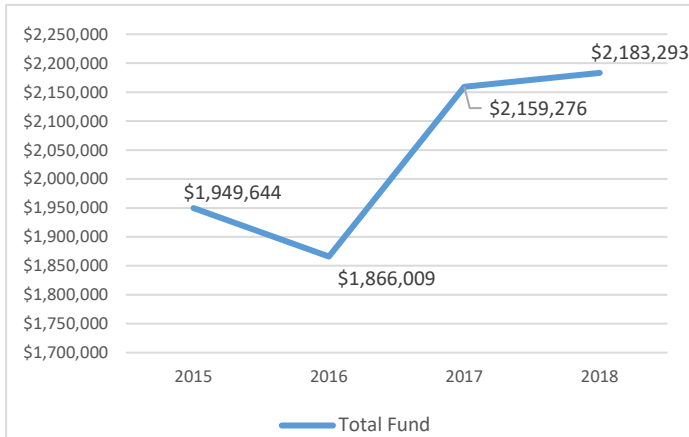
**Active Members:** 9 **Vesting:** immediate upon employment  
Notes: Contributions have not been made to this plan since 2010.

### METROPOLITAN ST. LOUIS SEWER DISTRICT EMPLOYEES PENSION PLAN



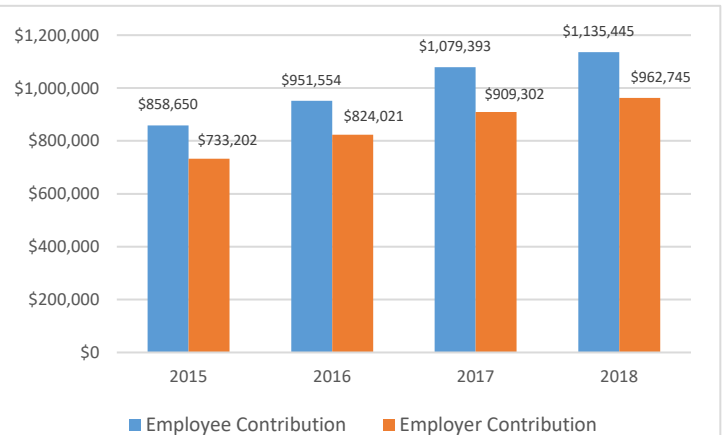
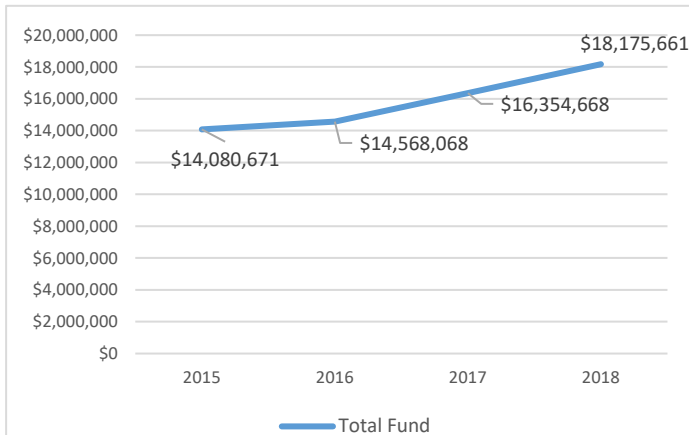
**Active Members:** 399 **Vesting:** Partial 1 / Full 5

### MID-COUNTY FIRE PROTECTION DISTRICT RETIREMENT PLAN



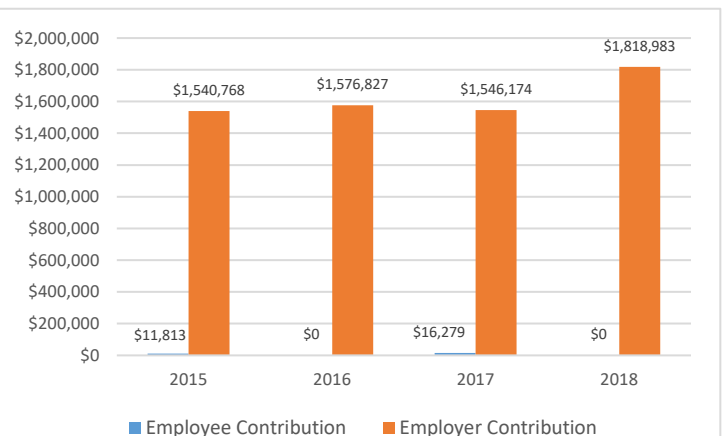
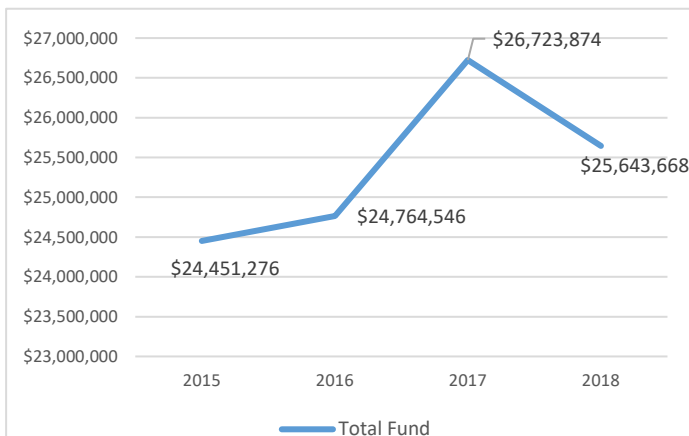
**Active Members: 20 Vesting: Partial 1 / Full 5**

### MISSOURI HIGHER EDUCATION LOAN AUTHORITY PENSION PLAN



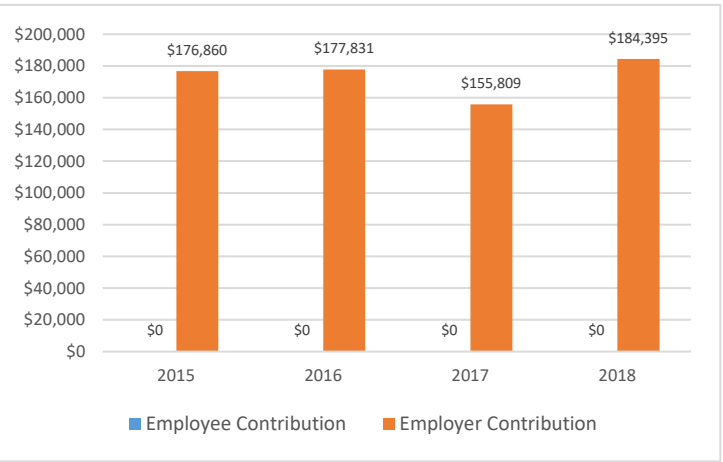
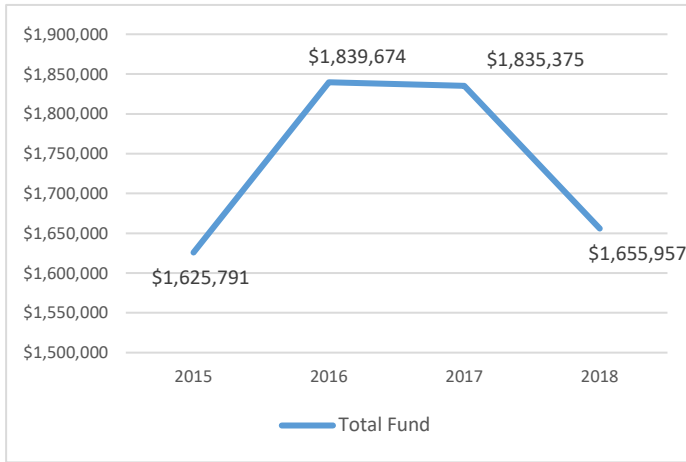
**Active Members: 265 Vesting: Partial 4 / Full 5**

### MONARCH FIRE PROTECTION DISTRICT RETIREMENT PLAN



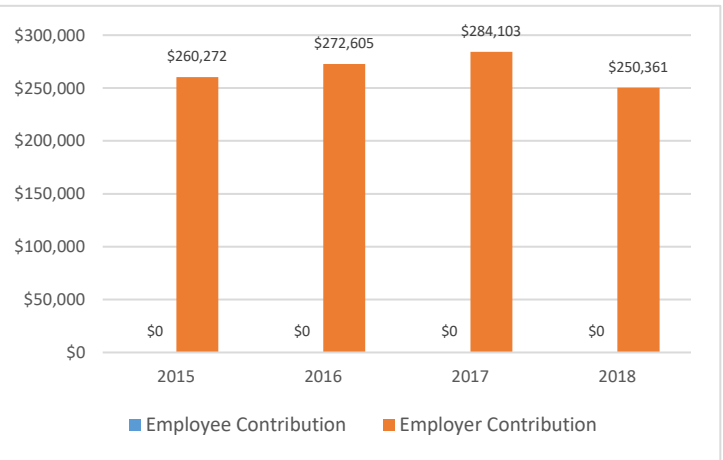
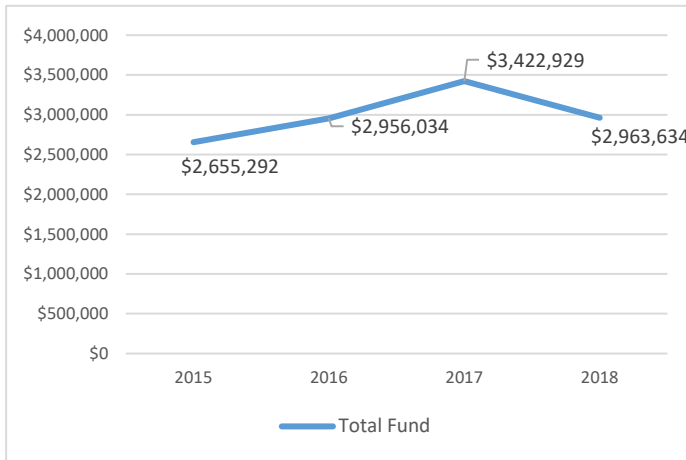
**Active Members: 119 Vesting: Partial 2 / Full 10**

### NORTH JEFFERSON COUNTY AMBULANCE DISTRICT



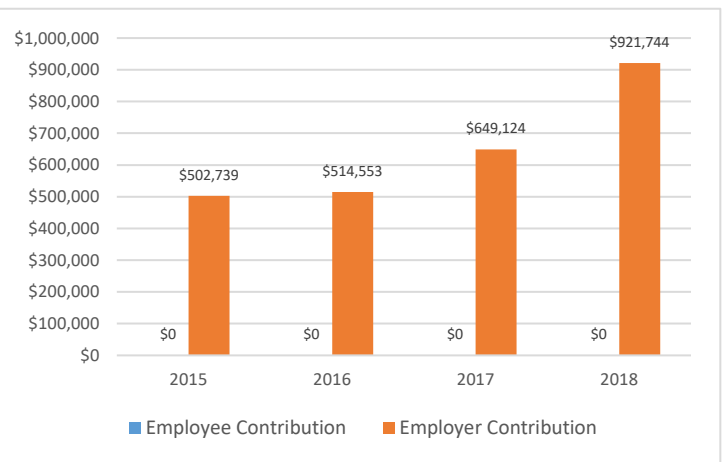
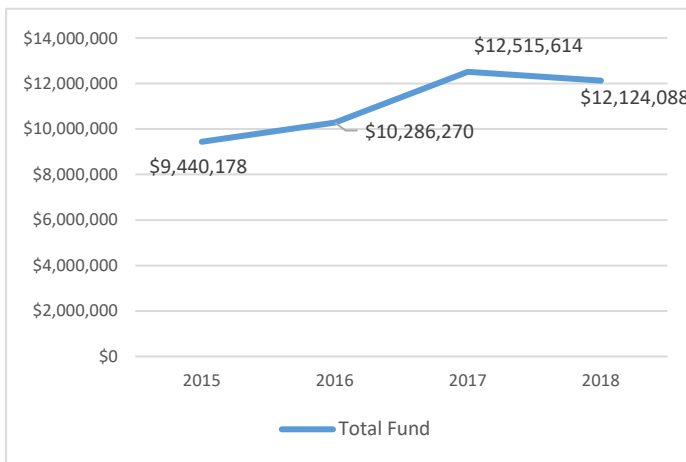
Active Members: 18 Vesting: Partial 1 / Full 5

### NORTHEAST AMBULANCE & FIRE PROTECTION DISTRICT



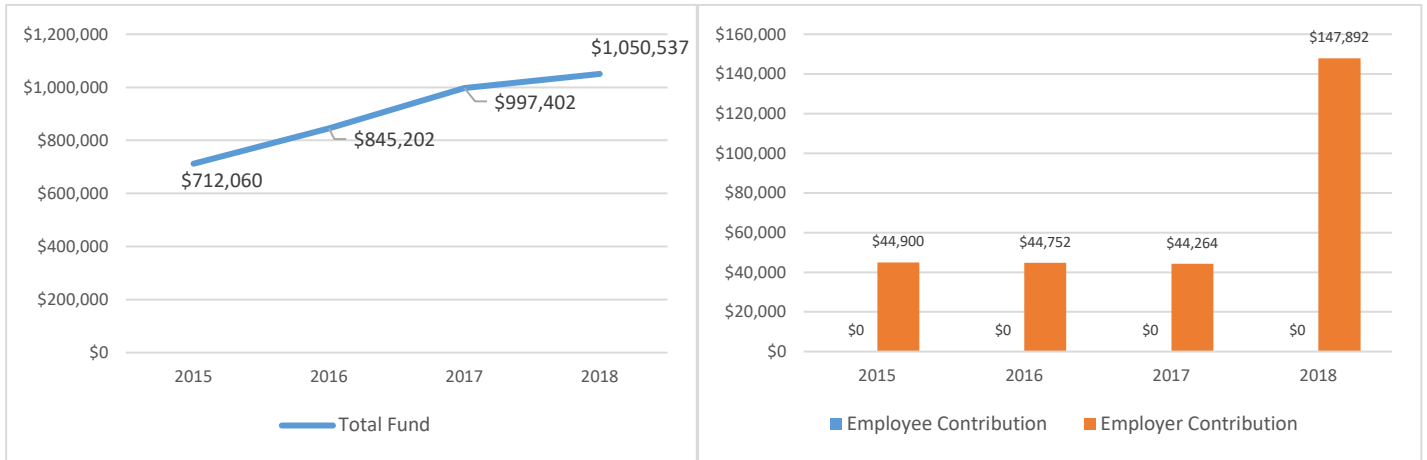
Active Members: 26 Vesting: 1 year

### O'FALLON FIRE PROTECTION DISTRICT RETIREMENT PLAN



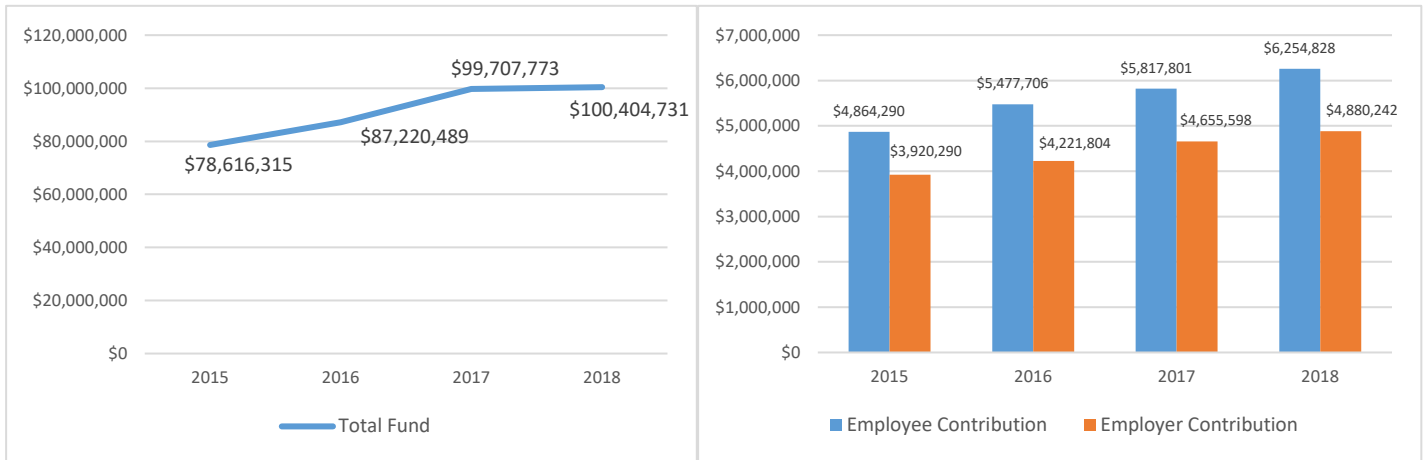
Active Members: 69 Vesting: Partial 1 / Full 5

### PACIFIC FIRE PROTECTION DISTRICT RETIREMENT PLAN



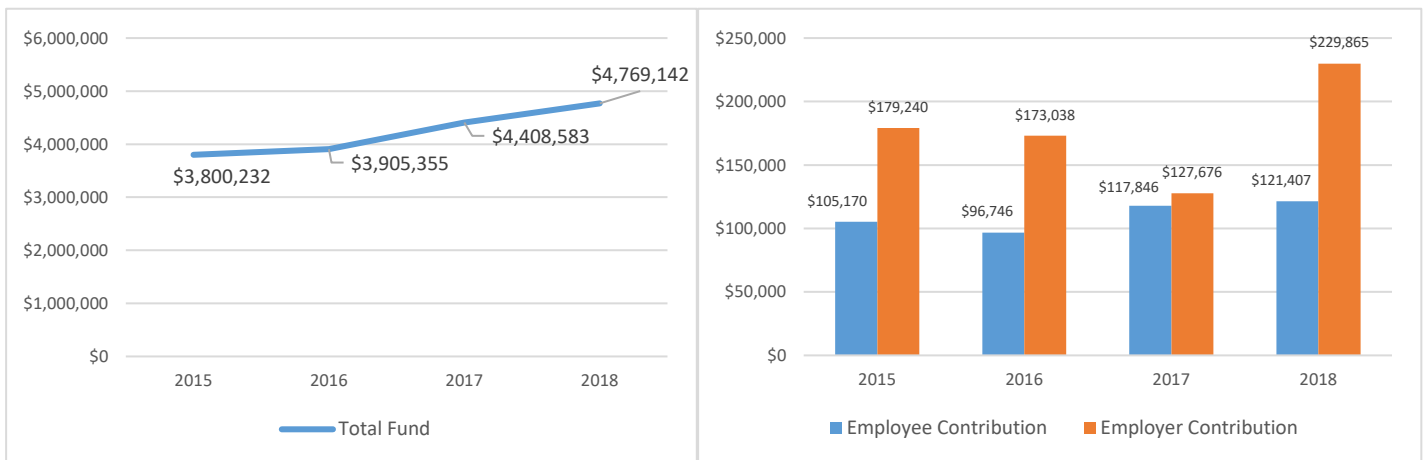
**Active Members:** 18 **Vesting:** Partial 2 / Full 6

### PEHELPS COUNTY REGIONAL MEDICAL CENTER PENSION PLAN



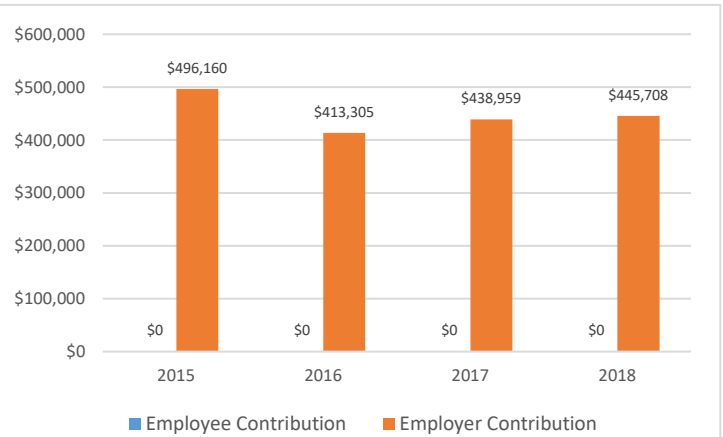
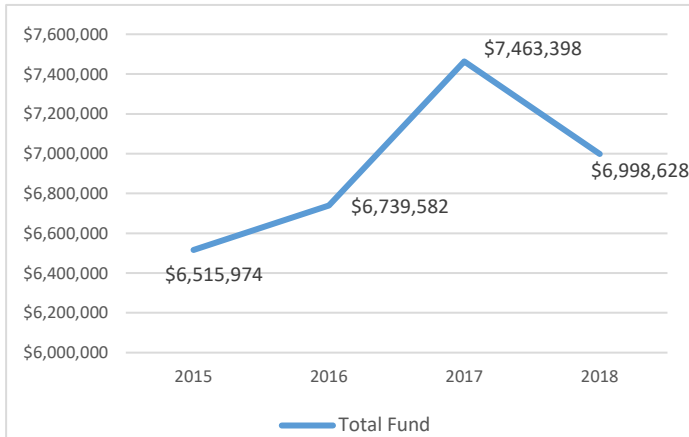
**Active Members:** 1,585 **Vesting:** Partial 2 / Full 6

### PIKE COUNTY MEMORIAL HOSPITAL RETIREMENT PLAN



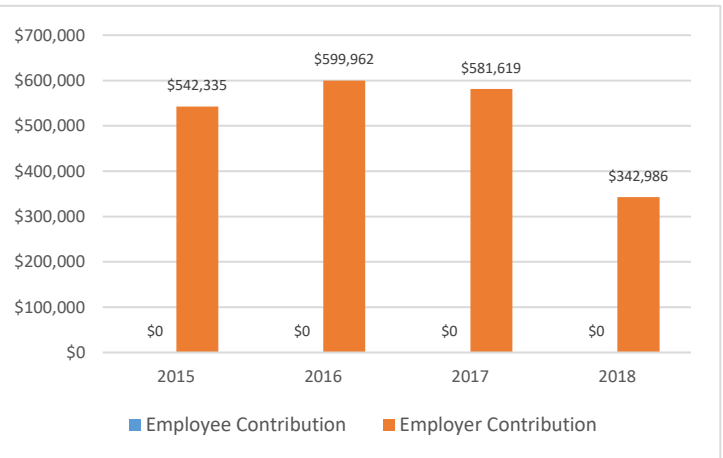
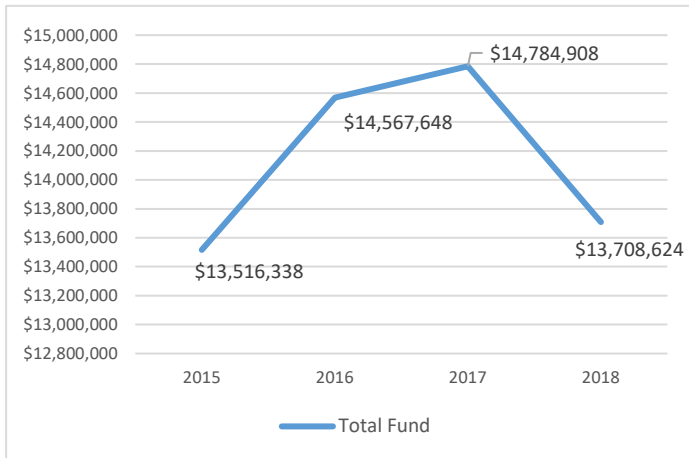
**Active Members:** 121 **Vesting:** 3 years

### RIVERVIEW FIRE PROTECTION DISTRICT RETIREMENT PLAN



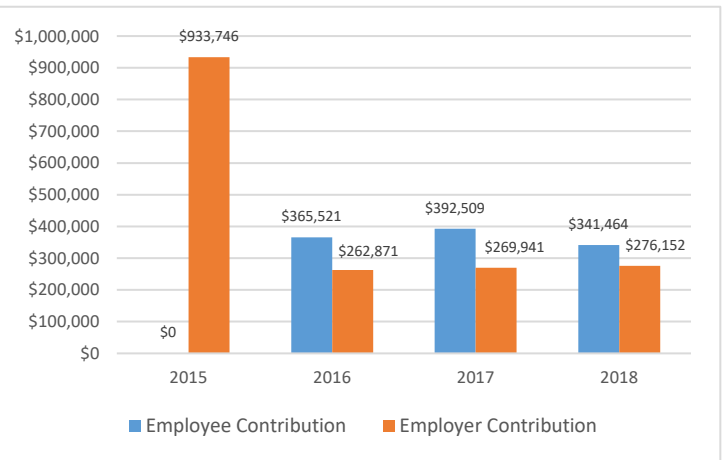
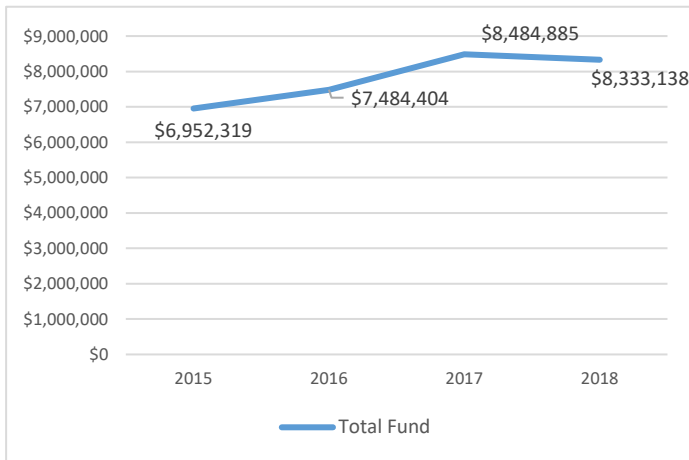
Active Members: 25 Vesting: Partial 5 / Full 10

### ROBERTSON FIRE PROTECTION DISTRICT RETIREMENT PLAN



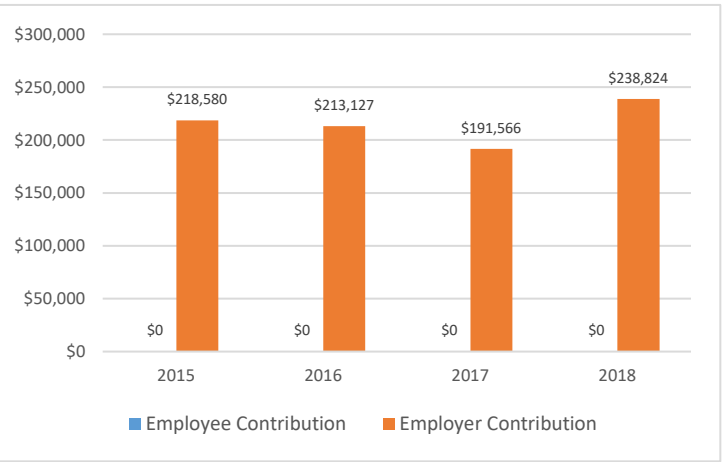
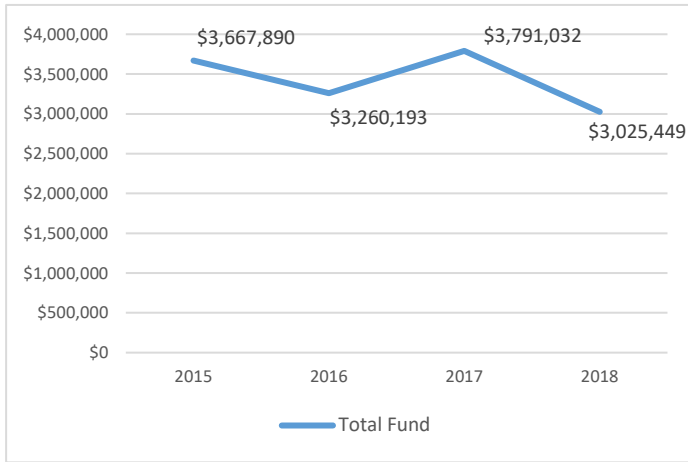
Active Members: 38 Vesting: Partial 5 / Full 9

### SAMARITAN MEMORIAL HOSPITAL PENSION PLAN



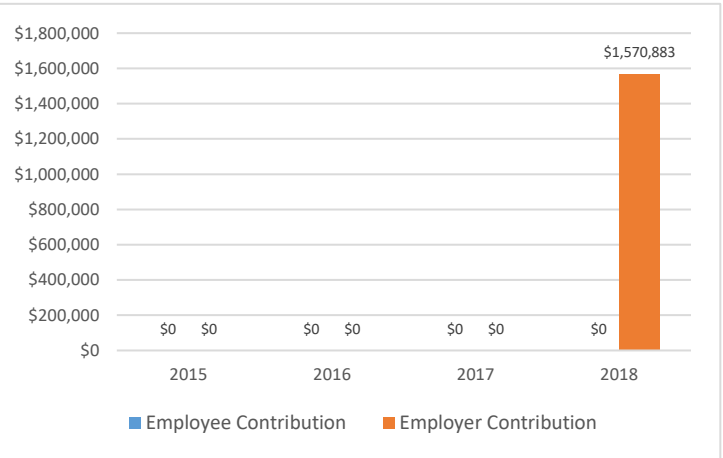
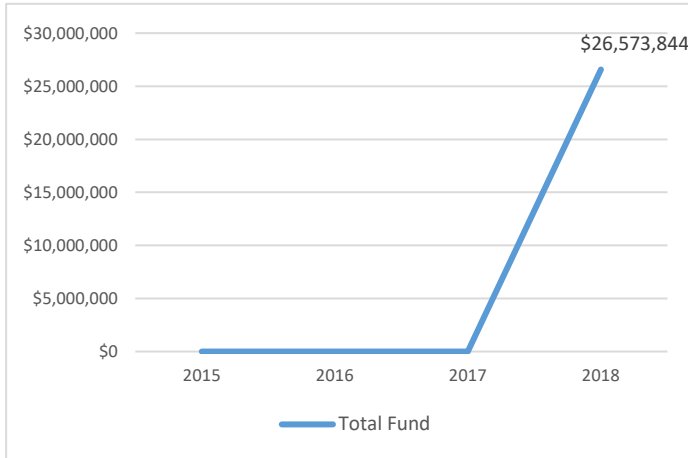
Active Members: 131 Vesting: 2 years

### SPANISH LAKE FIRE PROTECTION DISTRICT RETIREMENT PLAN



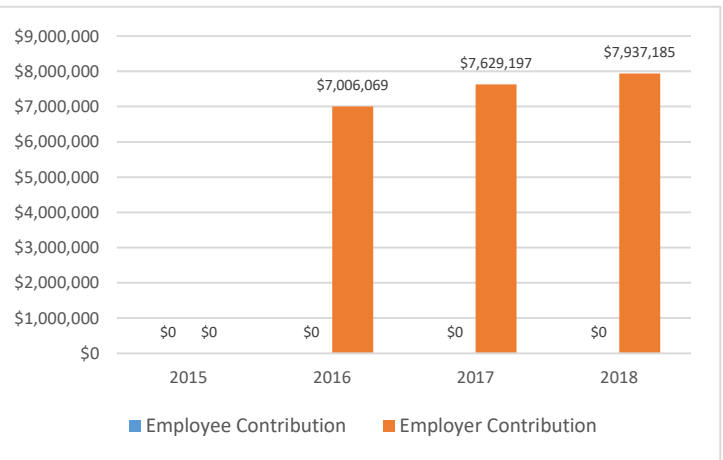
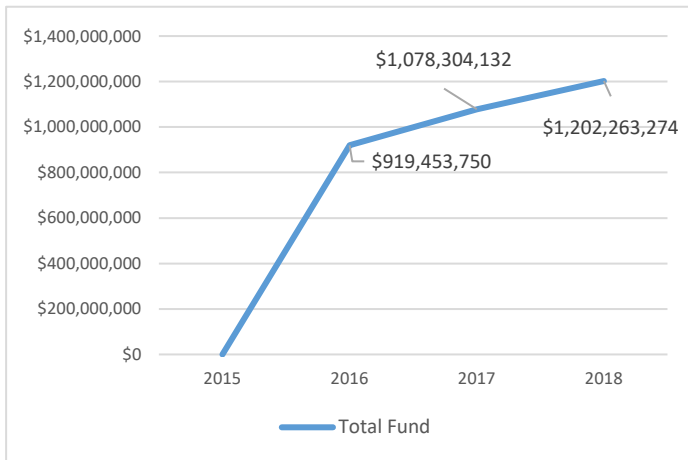
**Active Members:** 16 **Vesting:** 5 years

### ST. CHARLES COUNTY AMBULANCE DISTRICT



**Active Members:** 212 **Vesting:** Partial 1 / Full 5 **Notes:** This is the first year the District has reported to the JCPER.

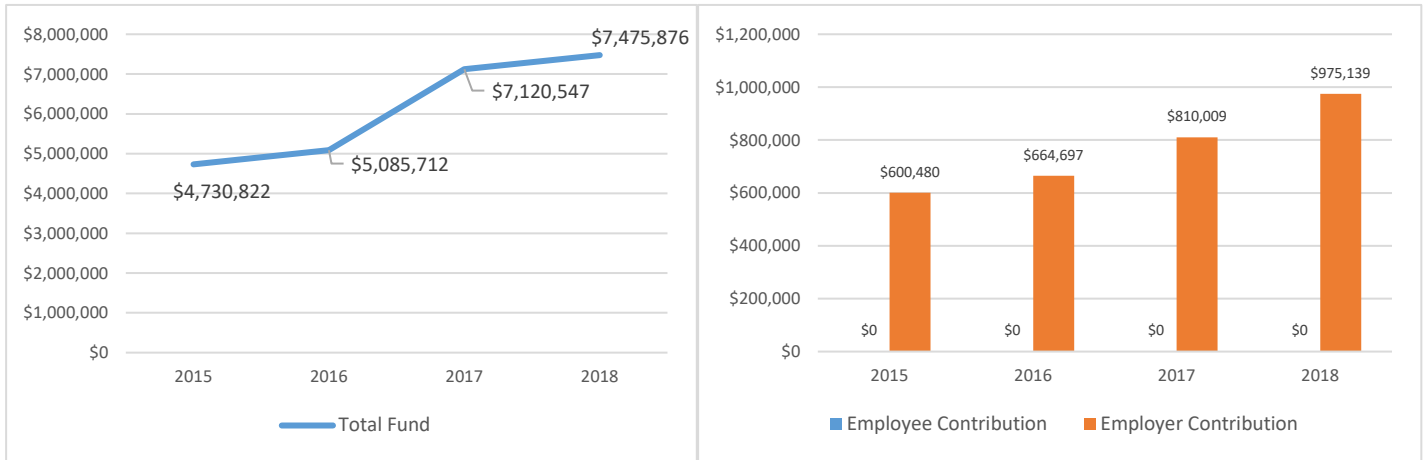
### UNIVERSITY OF MISSOURI RETIREMENT, DISABILITY & DEATH BENEFIT PLAN



**Active Members:** 8,634 **Vesting:** 3 years

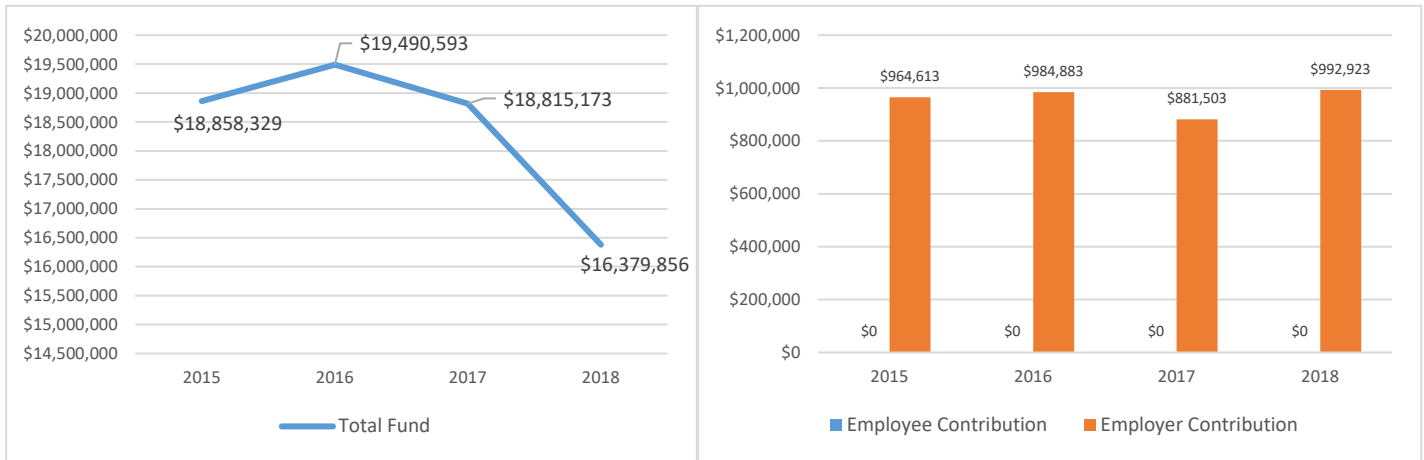
**Notes:** 2016 was the first year information was reported to the JCPER.

### WENTZVILLE FIRE PROTECTION DISTRICT PENSION PLAN



**Active Members:** 61 **Vesting:** immediate upon contribution

### WEST COUNTY EMS & FIRE PROTECTION DISTRICT RETIREMENT PLAN



**Active Members:** 62 **Vesting:** Partial 5 / Full 10