

COMPREHENSIVE  
ANNUAL FINANCIAL REPORT

EMPLOYEES' RETIREMENT SYSTEM  
OF THE CITY OF DANVILLE, VIRGINIA

A Fiduciary Fund of the  
City of Danville, Virginia



For the Fiscal Year Ended  
JUNE 30, 2019

**COMPREHENSIVE  
ANNUAL FINANCIAL REPORT**

**EMPLOYEES' RETIREMENT SYSTEM  
OF THE  
CITY OF DANVILLE, VIRGINIA**

**A Fiduciary Fund of the  
City of Danville, Virginia**

**For the Fiscal Year Ended June 30, 2019**

**Prepared by the  
Employees' Retirement System  
of the  
City of Danville, Virginia**

**Michael L. Adkins  
Executive Secretary**



**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**TABLE OF CONTENTS**  
**June 30, 2019**

---

	<u>Page</u>
<b><u>INTRODUCTORY SECTION</u></b>	
Certificate of Achievement	1
Letter of Transmittal	2
Board of Trustees	6
Administrative Organization	7
Organizational Chart	8
Summary of Plan Provisions	9
<b><u>FINANCIAL SECTION</u></b>	
<b>Independent Auditor's Report</b>	12
<b>Management's Discussion and Analysis</b>	15
<b>Basic Financial Statements:</b>	
<b>Statements of Fiduciary Net Position</b>	20
<b>Statements of Changes in Fiduciary Net Position</b>	21
<b>Notes to Financial Statements (Integral Part of the Financial Statements)</b>	22
<b>Required Supplementary Information:</b>	
Schedule of Changes in the City's Net Pension Liability and Related Ratios	34
Schedule of City Contributions	35
Schedule of Investment Returns	36
<b>Supplementary Information:</b>	
Schedule of Investment Expenses	37
Schedule of Administrative Expenses	37
Schedule of Payments to Consultants	37
<b><u>INVESTMENT SECTION</u></b>	
Financial Consultant Report	38
Outline of Investment Policies	40
Investment Results	41
Asset Allocation	42
List of Largest Assets Held	43
Schedule of Fees and Commissions	44
Schedule of Commissions	45
Investment Summary	46
<b><u>ACTUARIAL SECTION</u></b>	
Actuary's Certification Letter	47
Summary of Principal Plan Provisions	50
Summary of Actuarial Assumptions and Methods	56
Schedule of Active Member Valuation Data	59
Schedule of Retiree and Beneficiary Data	60
Schedule of Funding Progress	61
Solvency Test	62
Analysis of Financial Experience	63
<b><u>STATISTICAL SECTION</u></b>	
Schedule of Changes in Fiduciary Net Position	64
Schedule of Benefit Payments by Type	65
Schedule of Average Benefit Payments	66
Schedule of Retired Members by Type of Benefits	67
<b><u>COMPLIANCE SECTION</u></b>	
Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards	68



**INTRODUCTORY  
SECTION**





Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**Employees' Retirement System  
of the City of Danville, Virginia**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2018**

*Christopher P. Morill*

Executive Director/CEO



**LETTER OF TRANSMITTAL**

November 25, 2019

To the Honorable Mayor and Members of City Council  
City of Danville, Virginia

The comprehensive annual financial report (CAFR) of the Employees' Retirement System of the City of Danville, Virginia (ERS) for the fiscal year ended June 30, 2019, is submitted herewith. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation rests with the management of the ERS.

The Governmental Accounting Standards Board (GASB) requires management to provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This transmittal letter is designed to complement the MD&A and should be read in conjunction with it. The MD&A starts on page 15 of this report.

**Plan History**

The ERS is a defined benefit plan established by City Council on January 1, 1946, for the purpose of providing retirement, disability, and death-in-service benefits to all regular, full-time employees of the City of Danville.

The ERS is a noncontributory plan with all contributions paid by the City of Danville. These contributions, added to the accumulated contributions and investment earnings, provide the funds for benefit payments.

The ERS is governed by the provisions of Chapter 32 of the Code of the City of Danville, Virginia and Ordinances adopted by City Council. The nine-member Board of Trustees has the fiduciary responsibility for the general administration and management of the ERS.

Upon becoming a regular, full-time employee of the City, each employee is classified as a "general employee" or "public safety employee," which includes uniformed police and fire personnel. The two employee groups have different pension benefits and early service retirement allowances.

**Benefits and Services Provided**

The ERS provides normal service retirement and early service retirement benefits for members who attain the age and service requirements. Members are vested after five years of creditable service. Disability benefits for non-occupational injury or illness are provided to members who have five or more years of creditable service but have not attained normal service retirement age. Death-in-service benefits are provided to the designated beneficiary of a member who dies while in service to the City.

The ERS staff provides a Benefit Statement to all members as of June 30 each year and an Annual Report to Members. The staff provides counseling throughout the year to all benefit applicants and makes a presentation at orientations for new employees.

The ERS is considered part of the City of Danville's reporting entity and is included in the City's Comprehensive Annual Financial Report (CAFR) as a pension trust fund. The City's CAFR is available upon request and is being submitted to the Government Finance Officers Association for review under the Certificate of Achievement for Excellence in Financial Reporting program.

## **Economic Conditions and Outlook**

US economic data is largely stable, though it continues to moderate. While some market forecasters point to the (slightly) inverted yield curve as indicative of a downturn, most of the well-known leading indicators remain upbeat. The Federal Reserve, however, did lower its benchmark interest rate three times in the past year, citing weaker global growth, modest inflation, and trade uncertainties. GDP increased 1.9% in the third quarter, a slight decline from the 2nd quarter's 2.0% gain. This expected drop can be attributed to the slump in the ISM Manufacturing Index. In September, the index fell from 49.1 to a decade low of 47.8. Some economists attribute this decline partly to a strike at General Motors, which began in mid-September; yet it remains to be seen if this decline was a one-off or a precursor of things to come. Unemployment remains very low at 3.7% and while wage growth has started to pick up, it is still lower than anticipated. Labor force participation has remained high at 63.2%.

In August 2019, the Congressional Budget Office (CBO) updated its projections for federal tax receipts and disbursements during the period of Fiscal Year (FY) 2019 through FY 2029. For FY 2019, the CBO projects a significant deficit of \$960 billion, which is approximately 4.5% of GDP. This deficit compares to the long run average deficit, running at 2.1% of GDP. Making the assumption that deficits will continue to rise in dollar terms, they should remain fairly stable as a percent of GDP. The American consumer continues to be a bright spot for the economy. Real personal consumption expenditures rose at a 4.6% annual rate. In addition, real government consumption and gross investment grew robustly at both federal and state levels.

## **Major Initiatives**

City Council approved an ordinance amending the City Code to state that retirees will no longer receive COLAs, effective July 1, 2013. City Council also adopted resolutions to implement a new retiree bonus policy, which calls for a one-time bonus for retirees when certain criteria are met and upon City Council approval. Because a pattern has not yet been established under the new policy and management has concluded that the actions of future City Councils are uncertain, no assumptions relative to these future bonuses have been included in the actuary's estimate of the plan's actuarial accrued liability. The effect of removing the COLA assumption, and not incorporating an assumption for the bonus, had the effect of reducing the actuarial accrued liability by \$30,716,477 in 2013. The City awarded one-time bonuses to retirees in November 2014 and June 2019 totaling \$414,613 and \$259,890, respectively; the City sent a contribution to the ERS of the same amount to fund the bonus.

In March 2015, the ERS Board of Trustees adopted a new asset allocation and began deployment to move towards the new allocation. The allocation change is displayed in the Asset Allocation Trend table on page 18.

## **Financial Information**

**Accounting System.** This report has been prepared in accordance with the principles of governmental accounting and reporting promulgated by the Governmental Accounting Standards Board. The accrual basis of accounting is used to record assets, liabilities, revenues, and expenses. Revenues for the ERS are recorded when earned regardless of the date of collection. Expenses are recorded when liabilities are incurred regardless of when payment is made.

**Internal Control.** Management of the ERS is responsible for the adequacy of internal accounting controls. Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from theft, misuse or unauthorized disposition and to ensure that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived, and the valuation of costs and benefits requires estimates and judgments by management. We believe the ERS's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

**Revenues and Expenses.** The revenues required to finance retirement benefits are accumulated through employer contributions and investment income. The following schedule represents a summary of the revenues for the fiscal year ended June 30, 2019, and the amount of increases and decreases relative to prior year revenues:

	2019	Percent of Total	2018	Increase (Decrease) From 2018
Revenue Source:				
Investment income (Net of investment expenses)	\$ 16,641,621	78.0%	\$ 16,591,447	\$ 50,174
Employer contributions	4,782,997	22.0%	3,276,604	1,506,393
	<u>\$ 21,424,618</u>	<u>100.0%</u>	<u>\$ 19,868,051</u>	<u>\$ 1,556,567</u>

The expenses of the ERS relate to the purpose for which it was created, the payment of retirement benefits. The following schedule presents a summary of the expenses for the fiscal year ended June 30, 2019, with the amount of increases and decreases in relation to prior year expenses:

	2019	Percent of Total	2018	Increase (Decrease) From 2018
Benefits paid to participants	\$ 14,013,888	98.8%	\$ 12,716,164	\$ 1,297,724
Refunds to former members	47,136	0.3%	0	47,136
Administrative expenses	121,916	0.9%	86,905	35,011
	<u>\$ 14,182,940</u>	<u>100.0%</u>	<u>\$ 12,803,069</u>	<u>\$ 1,379,871</u>

Benefits paid to participants reflect an increase of \$1,297,724 for the fiscal year ending June 30, 2019, compared to the prior year. The increase in benefits paid is due to the number of participants increasing from 705.

**Investments.** At June 30, 2019, the aggregate account was valued at \$262,304,563, a \$7,241,678 increase from the June 30, 2018 value of \$255,062,885. The total portfolio returned 7.4% for the current fiscal-year-to-date, ranking in the 17th percentile. By engaging multiple advisers and employing a core philosophy, the Board of Trustees has sought to ensure the aggregate fund is well diversified. Investment policies have been established to meet long-term goals that include earning a compounded rate of return of 7%.

### Funding Status

A pension plan is considered adequately funded when sufficient reserves are available to meet all expected future obligations to participants. The ERS's funding objective is to meet long-term benefit payments through annual employer contributions that remain approximately level as a percent of the member payroll. Increased funding improves the ratio of assets and provides greater investment potential. The advantage of a well-funded plan is participants are confident assets are committed to the payment of their current and future benefits. The actuarial accrued liability and the actuarial value of assets of the ERS as of June 30, 2019 amount to \$239,875,524 and \$245,749,803, respectively. This gives the ERS a funded ratio of 102.4% as of June 30, 2019. Additional information relative to the funded status of the ERS is provided in both Management's Discussion and Analysis within the Financial Section and in the Actuarial Section of this report.

The City of Danville is dedicated to providing a financially sound retirement plan for its members, which is illustrated in two schedules in this report. The "Schedule of Funding Progress" on page 60 presents a measure of projected plan liabilities called the actuarial accrued liability. The measure, a disclosure required for public employee pension plans (PERS) by the Governmental Accounting Standards Board, allows the reader of this report to make comparisons among PERS and to assess the progress made by the ERS in accumulating sufficient assets to pay benefits when due. The "Schedule of City Contributions" on page 34 includes information about the annual actuarially determined contributions of the employer and the actual contribution made by the employer in relation to the actuarially determined contributions.

## **Investment Authority and Policy**

The Board of Trustees has adopted a Statement of Policy and Guidelines for investing the funds of the ERS, which the professional investment managers follow. An asset allocation strategy was devised to allow an investment portfolio of approximately 30% domestic equities, 30% fixed income securities, 10% international equities, 10% emerging markets, 10% real estate, 5% private equity and 5% timber real estate. To implement the policy and strategy, the Board presently employs a core investment manager for both equities and bonds and eight specialty managers. In addition, the services of an independent investment consultant are provided to the Board to ensure the objectives of the Policy and Guidelines are accomplished. Quarterly reports are furnished to the Board by the investment consultant for the purpose of evaluating the performance of each investment manager.

Northern Trust Company of Chicago, Illinois serves as custodian for funds managed solely for the benefit of the ERS. Any purchases of units in commingled funds have other designated custodians.

Northern Trust has an insurance policy to secure trust funds for every account held, pledges to the Federal Reserve Bank to cover funds on deposit with their bank, as well as a corporate insurance policy. Further insurance carried by the depository includes coverage against losses occurring on the premises or during transit.

## **Professional Services**

Professional financial managers are appointed by the Board of Trustees to perform services that are essential to the effective and efficient investment of assets. An independent auditor's report and a certification from the actuary are included in this report. The professionals appointed by the Board of Trustees are listed on page 6 of this report.

## **Awards and Acknowledgements**

**Certificate of Achievement.** The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Employees' Retirement System of the City of Danville for its comprehensive annual financial report for the fiscal year ended June 30, 2018. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report (CAFR), whose contents conform to the program standards. The CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The Employees' Retirement System of the City of Danville has received a Certificate of Achievement for the last twenty-five consecutive years. We believe our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

**Acknowledgements.** The compilation of this report reflects the combined effort of the ERS staff. On behalf of the Board of Trustees, we would like to take this opportunity to express our gratitude to the staff who has worked diligently to assure the successful operation of the ERS. This report is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and for determining responsible stewardship of the funds of the ERS.

The Board greatly appreciates the support of City Council and we look forward to another challenging year.

Sincerely,

*/ E. Linwood Wright /*

E. Linwood Wright  
Chairman, Board of Trustees

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**BOARD OF TRUSTEES**  
**June 30, 2019**

---

E. Linwood Wright, Chairman  
Citizen Trustee  
Retired, Dan River Inc.  
Term Expires: December 31, 2019

Gus S. Dolianitis  
Citizen Trustee  
Vice President, First Citizens Bank  
Term Expires: December 31, 2019

Michael L. Adkins, Executive Secretary  
Director of Finance  
City of Danville, Virginia  
Ex-Officio Trustee

Gina S. Craig  
Member Trustee  
Division Director, Parks & Recreation Department  
Term Expires: December 31, 2020

Kenneth F. Larking  
City Manager  
City of Danville, Virginia  
Ex-Officio Trustee

Norman Campbell  
Member Trustee  
Fire Captain, Fire Department  
Term Expires: December 31, 2019

Sherman M. Saunders  
City Council Member  
City of Danville, Virginia  
Ex-Officio Trustee

Joyce Obstler, Vice Chairman  
Member Trustee  
Asst. Director, Information Technology Department  
Term Expires: December 31, 2019

Lenard D. Lackey, Jr.  
Citizen Trustee  
Retired, Danville/Pittsylvania County  
Community Services Board  
Term Expires: December 31, 2020

**MEDICAL BOARD**

Dr. Thomas Alabanza  
Dr. Gregory Alba  
Dr. Steven Bridges  
Dr. Vinit Jalandhara

Dr. Sanjay Jaswani  
Dr. Rachel McGee  
Dr. Scott Oaks  
Dr. Anupreet Oberoi

Dr. Nilay Patel  
Dr. Paul Settle  
Dr. James Turner

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**ADMINISTRATIVE ORGANIZATION**  
**June 30, 2019**

---

**ADMINISTRATIVE STAFF**

Michael L. Adkins  
Director of Finance/Executive Secretary

Joanne Hickey  
Human Resources Consultant

Sara B. Weller  
Director of Human Resources

Henrietta Weaver  
Accountant/Retirement Secretary

W. Clarke Whitfield, Jr.  
City Attorney/Legal Advisor

**PROFESSIONAL SERVICES**

Actuary  
Boomershine Consulting Group, LLC  
Consultants/Actuaries  
Ellicott City, Maryland

Auditor  
Brown, Edwards & Company, LLP  
Certified Public Accountants  
Lynchburg, Virginia

**INVESTMENT MANAGERS**

Loomis, Sayles & Company, L.P.  
Boston, Massachusetts

Northern Trust Asset Management  
Chicago, Illinois

Hamilton Lane  
Bala Cyn Wyd, Pennsylvania

PanAgora Asset Management, Inc.  
Boston, Massachusetts

American Realty Advisors  
Glendale, California

Lazard Asset Management  
New York, New York

Rothschild Asset Management Inc.  
New York, New York

BTG Pactual Timberland Investment  
Group, LLC  
Winston-Salem, North Carolina

HGK Asset Management  
Jersey City, New Jersey

Intercontinental Real Estate Corporation  
Boston, Massachusetts

The Molpus Woodlands Group, LLC  
Jackson, Mississippi

**INVESTMENT CONSULTANT**

Dahab Associates, Inc.  
Bay Shore, New York

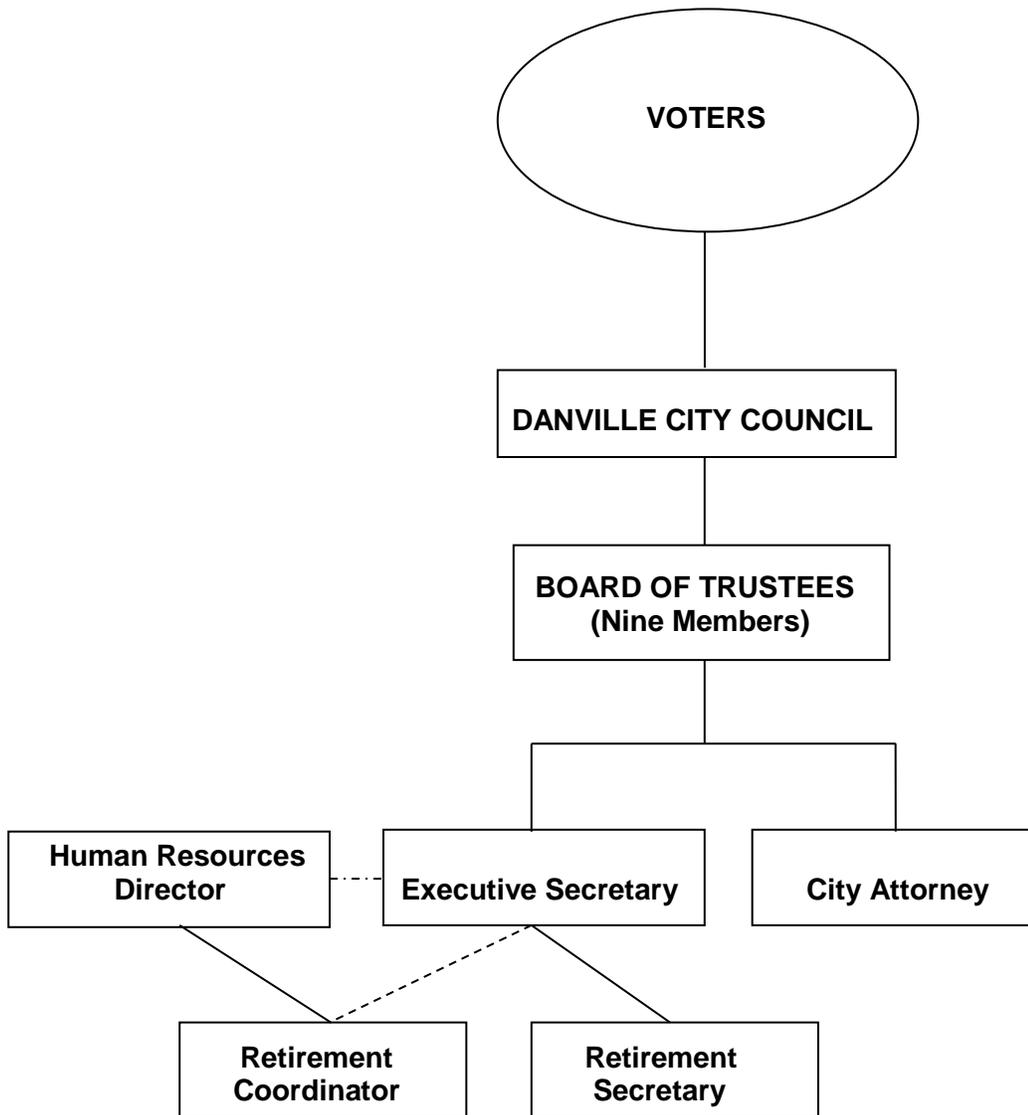
**INVESTMENT CUSTODIAN**

The Northern Trust Company  
Chicago, Illinois

The Schedule of Fees and Commissions (page 43) details fees paid to investment professionals who provided service to the ERS.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
ORGANIZATIONAL CHART  
June 30, 2019**

---



----- Denotes the position is not a direct report

———— Denotes the position is a direct report

----- Denotes a collaborative position

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PLAN PROVISIONS**  
**June 30, 2019**

---

Prior to October 1, 1991, regular full-time employees of the City of Danville became members of the Employees' Retirement System (ERS) after one year of continuous service. Members hired prior to October 1, 1991 are eligible for a refund of the balance of the Annuity Savings Account at termination of employment for reasons other than retirement. Regular full-time employees hired on or after October 1, 1991 become members of the ERS at the time of employment and no Annuity Savings Account is established for these members. Effective September 1, 2019, new hires and rehires have mandatory employee contributions, which total the lesser of 50% of the City's adopted annual contribution rate or the Virginia Retirement System's (VRS) hybrid plan's current contribution rate. Pension benefits for these members will be paid entirely from the pension funds accumulated by the ERS from City and employee contributions and earnings. There are two groups of employees covered by the ERS:

Group 1 - General Employees

Group 2 - Public Safety Employees (uniformed police and fire personnel)

The operational provisions are the same for both groups of employees; however, the benefits are different. Public safety employees have higher benefits because they do not participate in the Social Security System. Public safety personnel employed after April 1, 1986 are covered by the Medicare provisions of the Social Security Act, but are not eligible for any retirement benefits under the Act.

**Group 1 General Employees Retirement Benefits**

The basic formula for calculating retirement benefits is an annuity equal to the amount provided by the contributions of the member up to the time of his or her retirement, plus a pension which will total an amount equal to 1.42% of \$9,500, plus 1.82% of the part of the three-year average salary in excess of \$9,500, multiplied by the number of years of creditable service.

Normal service retirement is age 65, or age 55 and at least 30 years creditable service. For members hired after December 7, 1999 normal service retirement is the later of the age at which the member has five or more years of creditable service or age 65.

Early retirement is as early as age 55 with less than 30 years creditable service. Reduction factors are applied to the basic formula for early retirement.

Non-occupational disability retirement benefits are available after five years of creditable service and prior to normal retirement age 65. The basic formula is used to calculate benefits with two exceptions: the actual service is doubled, not to exceed the creditable service the employee would have accumulated if he had worked to age 60, and there is no reduction in benefits prior to normal retirement age.

Occupational disability claims are processed by the Human Resources Department through workers' compensation if disability or injury occurs prior to normal retirement age regardless of length of service.

Death-in-service benefits are provided to the spouse, parent, or minor child of an employee who dies while in service to the City. The factors used to calculate benefits are: age of member and beneficiary, average final compensation, and years of creditable service.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PLAN PROVISIONS**  
**June 30, 2019**

---

Provisions of Option 3 apply if death occurs before age 55, and provisions of Option 2 apply if death occurs at, or after, age 55. In lieu of monthly benefits, the beneficiary may elect to receive a lump sum distribution if the deceased member was employed prior to October 1, 1991.

**Group 2 Public Safety Employees Retirement Benefits**

The basic formula for calculating retirement benefits is the average final compensation (highest three consecutive years) times 2% times the number of years creditable service equals the annual pension. Effective September 1, 2018, the basic formula for calculating retirement benefits is the average final compensation (highest three consecutive years) times 2.2% times the number of years creditable service equals the annual pension.

Normal service retirement is age 60, or age 55 and at least 30 years creditable service. For members hired after December 7, 1999 normal service retirement is the later of the age at which the member has five or more years of creditable service or age 60. Effective September 1, 2018, normal service retirement is age 60, or age 50 and at least 25 years creditable service.

Early retirement is as early as age 55 with less than 30 years creditable service. Effective September 1, 2018, early retirement is as early as age 50 with less than 25 years creditable service. Reduction factors are applied to the basic formula for early retirement.

Non-occupational disability retirement benefits are available after five years of service and prior to the normal service retirement age 60. The basic formula is used to calculate benefits with two exceptions: the actual service is doubled, not to exceed the creditable service the employee would have accumulated if he had worked to age 60, and there is no reduction in benefits prior to normal retirement age. Occupational disability claims are processed by the Human Resources Department through workers' compensation if disability or injury occurs prior to normal retirement age.

Death-in-service benefits are provided to the spouse, parent or minor child of an employee who dies while in service to the City. The factors used to calculate benefits are: age of member and beneficiary, average final compensation, and years of creditable service. Provisions of Option 3 apply if death occurs before age 55, and provisions of Option 2 apply if death occurs at, or after, age 55. In lieu of monthly benefits the beneficiary may elect to receive a lump sum distribution if the deceased member was employed prior to October 1, 1991.

**General Provisions Applicable to Group 1 and Group 2**

Retirement benefits are vested after five years of service. A vested benefit means a member is entitled to retirement benefits at some future date even if they terminate employment before retirement eligibility.

The retirement ordinance and subsequent amendments take precedence over any question that may arise concerning benefit information or calculation. The Retirement Coordinator is available to answer member questions and assist in the retirement application process.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PLAN PROVISIONS**  
**June 30, 2019**

---

Monthly benefits are provided throughout the lifetime of the retired member with survivor benefit options available.

Option 1. Basic benefit, provides the maximum allowance payable throughout the lifetime of the retiree, and upon death, the designated beneficiary receives the annuity reserve balance, if any, in a lump sum distribution. The refund of an annuity reserve balance is available only to the beneficiaries of members employed prior to October 1, 1991.

Option 2. 100% survivor benefit, provides a reduced allowance throughout the lifetime of the retiree, and upon death, the designated beneficiary will receive the same monthly benefit paid to the member.

Option 3. 50% survivor benefit, provides an allowance less than the basic benefit but more than the 100% survivor option payable throughout the lifetime of the retiree, and upon death, the designated beneficiary will receive 50% or one-half of the monthly benefit paid to the member.

Option 4. Alternative option, provides a reduced allowance payable throughout the lifetime of the retiree, and upon death, some other actuarial equivalent benefit is paid to the designated beneficiary. Use of this option is subject to approval by the Board of Trustees.

Option 5. Social Security option provides a greater monthly benefit until age 65 that is approximately equal to the combined ERS and social security amount. At age 65, when the retiree begins to receive social security, the ERS benefit is reduced by the amount of the social security benefit. This option provides the retiree a more level income throughout retirement.

There are no mandatory retirement provisions for City employees. All retirement dates are effective the first day of the month following the month of eligibility.

The employee/member also has the option at retirement to increase service credit by applying up to one year of unused sick leave.



**FINANCIAL  
SECTION**



## INDEPENDENT AUDITOR'S REPORT

To the Board of Trustees  
Employees' Retirement System of the  
City of Danville, Virginia  
Danville, Virginia

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Employees' Retirement System of the City of Danville, Virginia (the "System"), as of and for the year ended June 30, 2019, and the related notes to the financial statements, as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2019, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Report on Summarized Comparative Information**

We have previously audited the System's 2018 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 28, 2018. In our opinion, the summarized comparative information presented herein, as of and for the year ended June 30, 2018 is consistent, in all material respects, with the audited financial statements from which it has been derived.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that management's discussion and analysis and certain schedules related to postemployment benefits as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the System's basic financial statements. The accompanying schedule of administrative expenses, schedule of investment expenses, schedule of payments to consultants, introductory section, the investment section, the actuarial section, and the statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedule of administrative expenses, schedule of investment expenses, and schedule of payments to consultants were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information referenced above is fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory section, the investment section, the actuarial section, and the statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated November 25, 2019 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

*Brown, Edwards & Company, L.L.P.*

CERTIFIED PUBLIC ACCOUNTANTS

Lynchburg, Virginia  
November 25, 2019

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
For the Year Ended June 30, 2019**

---

The discussion and analysis of the financial performance of the Employees' Retirement System (ERS) of the City of Danville, Virginia provides an overview of the financial activities and funding conditions for the fiscal years ended June 30, 2019, 2018, and 2017. Please review it in conjunction with the transmittal letter and the financial statements.

**FINANCIAL HIGHLIGHTS**

- ❖ The Plan's net position increased by \$7,241,678 (2.8%) as a result of activities for the fiscal year ended June 30, 2019. Net position restricted for pension benefits totaled \$262,304,563 at June 30, 2019 compared to \$255,062,885 at June 30, 2018. The increase is primarily attributable to the fluctuations in the fair value of investments.
- ❖ Employer contributions to the defined benefit plan increased \$1,506,393 (46%) from fiscal year 2018 due to the increase in the contribution rates in fiscal year 2019.
- ❖ Net investment income of \$16,641,621 for the fiscal year ended June 30, 2019, represents an increase of \$50,174, compared to the net investment income of \$16,591,447 for the fiscal year ended June 30, 2018.
- ❖ Benefit payments increased \$1,297,724 (10.2%) from fiscal year 2018 to fiscal year 2019 due to the increased number of retirees receiving benefit payments. Benefit payments increased \$541,176 (4.4%) from fiscal year 2017 to fiscal year 2018 due to the increased number of retirees receiving benefit payments.

**USING THE COMPREHENSIVE ANNUAL FINANCIAL REPORT**

The financial statements reflect the activities of the Employees' Retirement System and are reported in the Statements of Fiduciary Net Position (page 20) and the Statements of Changes in Fiduciary Net Position (page 21). These statements are presented on a full accrual basis of accounting and reflect all trust activities as incurred.

**STATEMENTS OF FIDUCIARY NET POSITION**

The focus of the Statement of Fiduciary Net Position is cash, investments, and net position restricted for pension benefits at the end of the fiscal year, as illustrated in the following condensed comparative Summary of Fiduciary Net Position.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
For the Year Ended June 30, 2019**

**SUMMARY OF FIDUCIARY NET POSITION  
(in thousands)**

	June 30,		
	2019	2018	2017
Cash and investments	\$ 262,443	\$ 255,239	\$ 248,138
Receivables	54	42	42
Total assets	<u>262,497</u>	<u>248,180</u>	<u>232,213</u>
Accounts payable	192	218	183
Total liabilities	<u>192</u>	<u>218</u>	<u>183</u>
Net position restricted for pension benefits	<u>\$ 262,305</u>	<u>\$ 255,063</u>	<u>\$ 247,997</u>

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**

The Statement of Changes in Fiduciary Net Position focuses on the financial activity of the trust for the fiscal year. The following table presents a condensed comparative summary of the changes in fiduciary net position.

**SUMMARY OF CHANGES IN FIDUCIARY NET POSITION  
(in thousands)**

	Years Ended June 30,		
	2019	2018	2017
Additions			
Contributions	\$ 4,783	\$ 3,277	\$ 2,858
Investment income – net	16,642	16,591	25,415
Total additions	<u>21,425</u>	<u>19,868</u>	<u>28,273</u>
Deductions			
Pension benefits	14,014	12,716	12,175
Other	169	87	136
Total deductions	<u>14,183</u>	<u>12,803</u>	<u>12,311</u>
Net increase (decrease) in net position restricted for pension benefits	<u>\$ 7,242</u>	<u>\$ 7,065</u>	<u>\$ 15,962</u>

Benefit payments are a function of changing payments to retirees, beneficiaries, and new retirements during the period. The increase in pension benefits in fiscal year 2019 is due in part to the increased number of retirees receiving benefit payments. The increase in pension benefits from fiscal years 2017 and 2018 is also attributable to an increase in the number of retirees.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
For the Year Ended June 30, 2019**

---

**PLAN MEMBERSHIP**

The table below reflects the plan membership as of June 30, 2019, 2018, and 2017.

	<b>PLAN MEMBERSHIP</b>			Change	
	June 30,				
	2019	2018	2017	2019	2018
Active participants					
Vested	561	585	607	-4.1 %	-3.6 %
Non-vested	368	340	337	8.2 %	0.9 %
Retirees and beneficiaries	705	665	652	6.0 %	2.0 %
Terminated vested	318	305	286	4.3 %	6.6 %
Total	1,952	1,895	1,882	3.0 %	0.7 %

**FUNDED STATUS**

Of primary concern to most pension plan participants is the amount of money available to pay benefits. Historically, defined benefit pension plans have been underfunded when the employer failed to make annual actuarially required contributions. The City has traditionally contributed the actuarially determined contribution (ADC) as determined by the ERS's actuary. The City contributed \$70,398 more than the ADC in fiscal year 2019.

Funded status is the ratio of the actuarial value of assets to the actuarial accrued liability. An increase in this percentage over time usually indicates a plan is becoming financially stronger. However, a decrease will not necessarily indicate a plan is in financial decline. Changes in actuarial assumptions can significantly impact the actuarial present value of future benefits. Performance in the equity and fixed income markets can have a material impact on the actuarial value of assets.

The actuary uses a five-year smoothing of market value to establish the actuarial value of the assets, which is used to determine the funded ratio. The ERS's funded status was 102.4%, 101.9%, and 100.4% as of June 30, 2019, 2018, and 2017, respectively. The ERS's unfunded actuarial liability (asset) was (\$5,874,279), (\$4,257,924), and (\$895,033), as of June 30, 2019, 2018, and 2017, respectively.

As of June 30, 2019, the market value of assets was \$262,304,563 and the actuarial value of assets was \$245,749,803 which resulted in a valuation adjustment of \$16,554,760.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
For the Year Ended June 30, 2019**

---

**NET PENSION LIABILITY OF THE CITY**

As disclosed in note 12, the City of Danville, Virginia (City) had a net pension asset of \$28,196,661 and \$24,547,520 as of June 30, 2019 and 2018, respectively. This is based on the market value of ERS assets of \$262,304,563 and \$255,062,885 at June 30, 2019 and 2018, respectively.

**ASSET ALLOCATION**

The table below indicates the policy trend asset allocation for June 30, 2019, 2018, and 2017. The target allocation was amended in fiscal year 2019 as shown below.

**ASSET ALLOCATION TREND**

	<u>Target Allocation</u>			<u>Actual Allocation</u>		
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
<b>Equity</b>						
Domestic	30%	30%	30%	33%	31%	35%
International	10%	10%	10%	10%	12%	12%
Emerging Markets	10%	10%	10%	12%	12%	12%
Private Equity	5%	5%	5%	3%	3%	2%
<b>Bonds</b>	30%	30%	30%	26%	26%	23%
<b>Real Estate</b>	10%	10%	10%	14%	13%	13%
<b>Real Estate – Timber</b>	5%	5%	5%	1%	2%	2%
<b>Cash</b>	-	-	-	1%	1%	1%
<b>Total</b>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

**INVESTMENT ACTIVITIES**

Investment income is vital to the Plan's current and continued financial stability. Therefore, trustees have a fiduciary responsibility to act prudently and discreetly when making Plan investment decisions. To assist the Board in this area, a comprehensive formal investment policy is updated periodically. As managers and asset classes have been added, specific detailed investment guidelines have been developed, adopted and included as an addendum to each manager's Investment Agreement. The plan is governed by the Code of the City of Danville.

Portfolio performance is reviewed quarterly by the Board and its consultants. Performance is evaluated individually by money manager style, collectively by investment type and for the aggregate portfolio. Investment types include both domestic and international equities, emerging market equity, private equity, fixed income, and real estate.

A schedule reflecting the current year and five-year average performance is available on page 40.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
For the Year Ended June 30, 2019**

---

**ECONOMIC FACTORS**

Since the primary function of the pension trust is to (a) appropriately award and pay benefits and (b) manage investments, the demonstration of opportunities available considering various investment choices is invaluable in the asset allocation and money manager oversight.

Growth in the market resulted in a net appreciation in the fair value of investments of \$15,572,029 in fiscal year 2019 and \$15,725,698 in fiscal year 2018.

**CONTACTING THE PLAN'S FINANCIAL MANAGEMENT**

The financial report is designed to provide citizens, taxpayers, plan participants and the marketplace's credit analysts with an overview of the Plan's finances and the prudent exercise of the Board's oversight. If you have any question regarding this report or need additional financial information, please contact the City's Director of Finance, P.O. Box 3300, Danville, Virginia 24543.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**STATEMENTS OF FIDUCIARY NET POSITION**  
As of June 30, 2019

	<b>2019</b>	<b>(For Comparative Purposes Only) 2018</b>
<b>ASSETS</b>		
Cash	\$ 33,602	\$ 96,541
Receivables		
Accrued interest and dividends	50,787	37,791
Other receivables	2,869	4,133
	53,656	41,924
Investments - at fair value		
Common stocks and common stock funds	117,061,190	109,203,049
Corporate bonds and bond funds	51,595,751	48,272,143
Foreign stock funds	26,958,637	30,276,126
U.S. Government bond funds	16,441,599	18,263,122
Real estate	36,012,184	33,792,811
Real estate - timberland and timberland funds	3,948,916	5,350,914
Temporary cash investments	2,309,951	2,744,199
Private equity funds	8,081,186	7,240,441
	262,409,414	255,142,805
Total investments		
	262,496,672	255,281,270
<b>LIABILITIES</b>		
Accounts payable	192,109	218,385
<b>Net position restricted for pension benefits</b>	<b>\$ 262,304,563</b>	<b>\$ 255,062,885</b>

*The accompanying notes are an integral part of these financial statements.*

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**  
**For the Year Ended June 30, 2019**

	<b>2019</b>	<b>(For Comparative Purposes Only) 2018</b>
<b>Additions</b>		
Employer contributions	\$ 4,782,997	\$ 3,276,604
Investment income		
Net appreciation in fair value of investments	15,572,029	15,725,698
Interest	101,699	67,759
Dividends	1,722,123	1,594,890
Total investment income	17,395,851	17,388,347
Less - investment expense	(754,230)	(796,900)
Net investment income	16,641,621	16,591,447
Total additions	21,424,618	19,868,051
<b>Deductions</b>		
Benefits paid to participants	14,013,888	12,716,164
Refunds to former members	47,136	-
Administrative expenses	121,916	86,905
Total deductions	14,182,940	12,803,069
<b>Net change</b>	7,241,678	7,064,982
<b>Net position restricted for pension benefits:</b>		
Beginning of year	255,062,885	247,997,903
End of year	\$ 262,304,563	\$ 255,062,885

*The accompanying notes are an integral part of these financial statements.*

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

**1. Plan Description**

The *Employees' Retirement System of the City of Danville, Virginia* (ERS), a single-employer defined benefit plan, was established on January 1, 1946, and was placed under the management of the Board of Trustees for the purpose of providing retirement, disability, and death benefits for full-time permanent employees in accordance with Chapter 32 of the Danville City Code. The City makes contributions to the ERS, which acts as administrator of a single-employer defined benefit pension plan. As such, the ERS functions as an investment and administrative agent for the City with respect to the plan. The ERS is a fiduciary fund and is included in the City's Comprehensive Annual Financial Report as a pension trust fund.

All full-time employees of the City, excluding School Board employees and elected officials and their employees (who are covered under the Virginia Retirement System), are eligible to participate. Upon becoming a regular, full-time employee of the City, each employee is classified as a "general employee" or as a "public safety employee" (uniformed police and fire personnel). The two employee classes have different pension benefits and early service retirement allowances. As of June 30, 2019 employee membership in the ERS was as follows:

	<b>General Employees</b>	<b>Public Safety Employees</b>	<b>Total</b>
Retirees and beneficiaries currently receiving benefits	523	182	705
Terminated employees entitled to benefits but not yet receiving them	247	71	318
	770	253	1,023
Active plan participants:			
Vested	401	160	561
Non-vested	301	67	368
	702	227	929
	1,472	480	1,952

The pension plan provides retirement, disability, and death benefits. After five years of creditable service, general employees who attain the age of 65, or who accumulate at least 30 years of creditable service and attain the age of 55, may retire with full benefits. Public safety employees who attain age 60, or age 55 with at least 30 years of creditable service are eligible for retirement with full benefits. Effective September 1, 2018, public safety employees who attain age 60, or age 50 with at least 25 years of creditable service are eligible for retirement with full benefits.

For a general employee, the retirement allowance consists of an annuity equal to the amount provided by the contributions of the member up to the time of his or her retirement, plus a pension which will total an amount equal to 1.42% of \$9,500, plus 1.82% of the part of the three-year average salary in excess of \$9,500, multiplied by the number of years of creditable service. A general employee with at least five years of service may retire early after reaching the age of 55 and receive reduced benefits.

The retirement allowance for a public safety employee consists of an annuity equal to the amount provided by the contributions of the member up to the time of his or her retirement, plus a pension

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

which will total an amount equal to 1/50th or 2% of the final three-year average salary multiplied by the number of years of creditable service. A public safety employee, with at least five years of service, may retire early after reaching the age of 55 and receive reduced benefits.

Effective September 1, 2018, the retirement allowance for a public safety employee consists of an annuity equal to the amount provided by the contributions of the member up to the time of his or her retirement, plus a pension which will total an amount equal to 2.2% of the final three-year average salary multiplied by the number of years of creditable service. A public safety employee, with at least five years of service, may retire early after reaching the age of 50 and receive reduced benefits.

Pension provisions include disability benefits whereby a member who becomes totally and permanently incapacitated and who has completed five years of creditable service is eligible to receive a disability retirement allowance. The allowance begins at the time of the disability and is based on creditable service to date and a projection of creditable service assuming no disability. The allowance is offset by any workers' compensation benefits if the disability is work-related.

If, after five years of service, an active member should die at any time prior to retirement, a retirement allowance shall be payable to either the spouse, minor child, or parent of the member. Such retirement allowance will be continued during the lifetime of such person, or in the case of a minor child, until such time as the child dies or attains majority. For members employed prior to October 1, 1991, the beneficiary may elect to receive as a lump sum the member's accumulated contributions, with interest, in lieu of any other benefits under the ERS.

Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

## **2. Summary of Significant Accounting Policies**

### **The Reporting Entity**

The ERS is financially dependent on the City of Danville, Virginia to provide such amounts as necessary, based on actuarial determinations, to provide the ERS with assets sufficient to cover the plan's current costs and to fund any past service costs. The Board is comprised of nine members: three are appointed by Danville City Council, three members elected by City employees who are members of the ERS, the Mayor or his designee, the City Manager, and the Director of Finance. The ERS provides services solely to the City. The ERS has no component units as defined by accounting principles generally accepted in the United States of America.

### **Basis of Accounting**

The financial statements of the ERS are prepared on the accrual basis of accounting in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, which provides financial reporting guidance for pension plans that are administered through trusts or equivalent arrangements. Contributions from the City are recognized as revenue when due, pursuant to formal commitments, as well as statutory or contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investment income is recognized as it is earned. The net appreciation or depreciation in the fair value of investments held by the ERS is recorded as an increase or decrease in investment income based on the valuation of investments as of the date of the statement of fiduciary net position.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

**Investments**

Investments are reported at fair value. Temporary cash investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at quoted market prices as of the date of the statement of fiduciary net position. The real estate and real estate – timberland funds are reported at net asset value (NAV) from the investment manager which is based on independent appraisals. Commingled funds are reported at NAV, based on the quoted market prices of the underlying securities of the fund. Private equity partnerships are valued using their respective NAV. The most significant input into the NAV of such an entity is the estimated fair value of its investment holdings. These holdings are valued by the general partners on a quarterly basis and audited annually, in accordance with applicable financial reporting standards.

**Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

**Costs of Administering the Plan**

Certain administrative expenses are now being paid from the trust fund. The costs of administering the plan are financed by investment revenues. These expenses are not considered to be material and are not explicitly stated in the valuation.

**4. Protection of Public Deposits**

At year end, the carrying value of the ERS' deposits with banks was \$33,602 and the bank balance was \$125,575. The bank balance was covered by federal depository insurance.

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in amount from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

**5. Investments**

All investments are to adhere to the Board of Trustees Statement of Policy and Guidelines adopted on August 13, 1997, as amended. The Investment Consultant and the Executive Secretary of the Board will review compliance with these policies and guidelines on a regular basis. They shall report to the Trustees on a timely basis any violations, exceptions, required reports, and/or requests made by the investment managers with respect to the stated policies.

In accordance with these guidelines, investments are reported at fair value. Temporary cash investments are reported at cost, which approximates fair value. Each advisor has been apportioned funds assuming that they will be fully invested in his assigned sector with no more than 5-10% in cash equivalents. Securities traded on national or international exchanges are valued at

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

quoted market prices as of the date of the statement of fiduciary net position. The fair value of the real estate investment and the real estate - timberland investment is based on an independent appraisal.

Based on an asset allocation study completed in 2015, the Trustees implemented the following asset deployment (based upon market value) to best achieve the long term goals of the ERS in terms of compound total rate of return and assumed risk:

Domestic Equities	30%
Bonds	30%
International Equities	10%
Emerging Markets	10%
Real Estate	10%
Real Estate – Timber	5%
Private Equity	5%

This target mix has been chosen for the aggregate total portfolio. From time to time, the actual mix will fluctuate based on market conditions, performance, and cash flow considerations. However, it is desired that the fluctuations be kept to a minimum. From time to time, the Trustees may redeploy assets among the managers to balance the portfolio in accordance with the above target. As the portfolio grows, additional specialties may be used in addition to the ones above. The aggregation of domestic and international equities will be considered as part of the total equity allocation and real estate will be considered as part of the bond allocation for these purposes.

For the year ended June 30, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 6.69%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

**Fair Value Measurements**

The ERS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and are described as follows.

- Level 1 inputs are quoted prices in active markets for identical assets;
- Level 2 inputs are significant other observable inputs;
- Level 3 inputs are significant unobservable inputs.

The ERS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

The ERS has the following recurring fair value measurements as of June 30, 2019:

	<u>6/30/2019</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
<b>Investments by fair value level</b>				
Equity securities				
Domestic equity	\$ 117,061,190	\$ 117,061,190	\$	\$
International equity	26,958,637	26,958,637		
Total equity securities	<u>144,019,827</u>	<u>144,019,827</u>		
Debt securities				
Corporate bonds	51,275,952		51,275,952	
U.S. Government bond funds	16,441,599		16,441,599	
Collateralized mortgage obligation	319,799		319,799	
Total debt securities	<u>68,037,350</u>		<u>68,037,350</u>	
Total investments by fair value level	<u>\$ 212,057,177</u>	<u>\$ 144,019,827</u>	<u>\$ 68,037,350</u>	<u>\$</u>
<b>Investments measured at net asset value (NAV)</b>				
Real Estate				
Real estate funds	\$ 36,012,184			
Real estate funds - timberland	3,948,916			
Total real estate funds	<u>39,961,100</u>			
Private Equity				
Private equity funds	8,081,186			
Total investments measured at NAV	<u>48,042,286</u>			
Total investments measured at fair value	<u>\$ 260,099,463</u>			

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Government bonds, corporate bonds, and collateralized mortgage obligations classified in Level 2 of the fair value hierarchy are valued on the basis of evaluated prices provided by independent pricing services when such prices are believed to reflect the fair value of such securities. Such prices may be determined by taking into account a security's price, yield, maturity, call feature, rating, institutional-size trading in similar groups of securities and developments related to specific securities.

**Investments Measured at NAV**

The valuation method for investments measured at net asset value (NAV) per share (or its equivalent) is presented on the following table.

	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If currently eligible)</u>	<u>Redemption notice period</u>
Real estate funds	\$ 36,012,184	\$	Not eligible	N/A
Real estate funds - timberland	3,948,916		Not eligible	N/A
Private equity funds	8,081,186	3,602,110	Not eligible	N/A
Total investments measured at NAV	<u>\$ 48,042,286</u>	<u>\$ 3,602,110</u>		

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

*Real estate funds.* This type includes open-end diversified core real estate commingled funds which primarily invests in institutional quality industrial, multi-family, office and retail properties located throughout the US. The fair values of the investments have been determined using NAV per share (or its equivalent) based on valuations from the fund managers using appraisals from independent appraisers, using various valuation methods, including the income approach, cost basis approach and discounted cash flow method. In most cases, a combination of these methods is used.

*Real estate funds – timberland.* This type includes two funds which were established to invest and reinvest assets of members primarily in interests in real property, which is to be timberland and timber; contracts or agreements for the cutting and/or use of timber on timberland; and in such other assets as deemed appropriate to establish proper portions of liquid assets for the Funds. The fair values of the investments have been determined using NAV per share (or its equivalent) based on valuations from the fund managers which uses appraisals from independent appraisers which determine the value using cost approach, sales comparison approach or income approach.

*Private equity funds.* This type includes three closed-end commingled funds that take private ownership of companies. The fair values of the investments have been determined using the NAV per share (or its equivalent) of the ERS's ownership interest in partners' capital. All of the investments are generally considered to be illiquid investments. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will have a life from six to twelve years from inception. It is also possible for the investments to be sold in the secondary market.

**Interest Rate Risk**

The ERS had the following investments subject to interest rate risk as of June 30, 2019:

Investment Type	Fair Value	Investment Maturities (in years)			
		Less than 1	1 – 6	6 – 10	More than 10
Non-government backed CMOs	\$ 319,799	\$ -	\$ -	\$ -	\$ 319,799
		\$ -	\$ -	\$ -	\$ 319,799
Temporary cash investments– maturity not determined	2,309,951				
Bond funds– maturity not determined	67,717,551				
Total – subject to interest rate risk	<u>\$ 70,347,301</u>				

Market or interest rate risk is the risk that interest rate changes will adversely affect the value of a debt security, because the price of a debt security typically moves in the opposite direction of the change in market interest rates.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

The ERS does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates.

**Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The ERS's formal investment policy requires a minimum rating of A by Standard and Poor's for any corporate bond.

The ERS's exposure to credit risk as of June 30, 2019 is as follows:

Investment Type / Rating	D	U.S Government Guaranteed	Not rated	Total
Non-Government Backed CMOS	\$ -	\$ -	\$ 319,799	\$ 319,799
Government Bond Funds	-	16,441,599	-	16,441,599
Corporate Bond Funds	-	-	51,275,952	51,275,952
Short-term Investments	-	-	2,309,951	2,309,951
Total	<u>\$ -</u>	<u>\$ 16,441,599</u>	<u>\$ 53,905,702</u>	<u>\$ 70,347,301</u>

**Concentration of Credit Risk**

The ERS's formal policy limits investments in any corporate entity to 5% of the outstanding shares in a company or 15 times the average daily trading volume for that stock. The policy prohibits any one corporate bond holding from exceeding 10% of the portfolio, at market value. The policy also limits total bond holdings in any corporation to 10% of the long-term indebtedness of that corporation. The ERS did not have any single investment over 5% of the total investments of the system.

**Foreign Currency Risk**

All foreign investments are valued in United States dollars. The asset allocation policy of the ERS allows the managers to invest in equity securities of any developed country provided that no more than 20% of the total assets are in any one developed country except Japan where the maximum is 25%.

**Unfunded Commitments**

The ERS had non-marketable alternative investments that have associated unfunded commitments at June 30, 2019. These investments were in private equity funds, which had a fair value of \$8,081,186 and unfunded commitments of \$3,602,110 at June 30, 2019.

Unfunded commitments are drawn down throughout the life of the investment based on the cash needs of each individual limited partnership or real estate manager. Limited partnerships with unfunded commitments generally have remaining lives of 4 to 10 years.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

**6. Contribution Information**

Contributions made by the City on behalf of active members are established by the City of Danville, based on actuarial estimates (performed annually on July 1) of future plan benefits to be paid. Since March 1, 1979, employees' contributions have been paid by the City. Contributions for employees hired after September 30, 1991 are considered to be 100% City contributions. These contributions, like the City's portion of pre-October 1, 1991 employees, vest after five years of creditable service. The annuity contribution rate made on behalf of active members is currently 5% of compensation for general employees and 6.5% of compensation for public safety employees.

The portion of contributions to the plan made by the City on behalf of members vests immediately with the employees. The remainder of the contributions vests after five years of creditable service.

For the year ended June 30, 2019, the City's total payroll for all employees was \$53,643,331 and the City's total covered payroll amounted to \$42,945,709, of which \$30,657,937 was for general employees and \$12,287,772 was for public safety employees. Covered payroll refers to all compensation paid by the City to active employees covered by the ERS on which contributions to the plan are based.

Contributions to the pension plan are determined on an actuarial basis using the entry age normal method. Under this method, actuarial gains or losses are reflected immediately through a change in the unfunded actuarial accrued liability. Normal cost is funded on a current basis. The unfunded actuarial accrued liability is funded over a 30-year period. Periodic contributions are on the level percentage of payroll method. The funding strategy for normal cost and the unfunded actuarial accrued liability should provide sufficient resources to pay employee pension benefits on a timely basis.

Total contributions to the pension plan for the year ended June 30, 2019 amounted to \$4,782,997, of which \$342,729 was made by the City on behalf of its employees and \$259,890 represented a contribution to fund a one-time bonus awarded to retirees in June 2019. The contributed amounts were based on a percentage of actuarially determined amounts as described above and were based on an actuarial valuation for the prior period. The total pension contributions represent funding for normal cost. Contributions made by the City represent 11% of covered payroll for the year, and includes amounts paid on behalf of employees.

A variety of significant actuarial assumptions are used to determine the pension contribution requirements. These assumptions are summarized below:

- a. The present value of future pension payments was computed by using a discount rate of 7.0%, compounded annually. The discount rate is equal to the estimated long-term rate of return on current and future investments of the pension plan.
- b. Future pension payments reflect an assumption of a 2.75% salary increase attributable to inflation. For general employees an increase of 3% is attributable to seniority/merit for the first 15 years of service and then 1% per year. For public safety employees an increase of 2.5% is attributable to seniority/merit for all years. The percentage increases are compounded annually, for both general and public safety employees.
- c. An annual cost-of-living adjustment of 0% per year is assumed. In December 2012, Danville City Council approved an ordinance amending the Code of the City of Danville, Virginia to state that retirees will no longer receive cost-of-living adjustments.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

- d. The RP-2000 Mortality Table, with one year set back for males and one year set forward for females, is used to determine the rate of mortality for healthy lives. The RP-2000 Mortality Table For Disabled Lives is used to determine mortality for disabled lives.
- e. The rate of disability for general employees is 300% of the United Auto Workers Disability rates. The rate for public safety employees is 400%.
- f. It is assumed that general employees will retire by the age of 70 and that public safety employees will retire by the age of 65. The probability of early retirement is considered for general employees between the ages of 55 and 70 and for public safety employees between the ages of 55 and 65.
- g. For the purpose of valuing death benefits, all male employees are assumed to be married to a spouse three years younger, and all females are assumed to be married to a spouse three years older.
- h. For purposes of determining projected benefits payable from member contributions, those contributions are assumed to earn 5% compounded annually.

**7. Soft Dollar Transactions**

Portfolio managers for the ERS reported there were approximately \$19,415 soft dollar transaction commissions (as defined by the Code of VA Section 51.1-1000) for the year ended June 30, 2019 and \$20,402 for the year ended June 30, 2018.

**8. Plan Termination**

The Employees' Retirement System of the City of Danville, Virginia is administered in accordance with the provisions of the Code of the City of Danville, 1962, as amended by Section 32.1. Should the retirement plan be terminated, or contributions to the plan be completely discontinued, the rights of each member to benefits accrued to the date of such termination or discontinuance, to the extent then funded, or the rights of each member to the amounts credited to his account at such time, are nonforfeitable.

**9. Tax Status of Plan**

All plan changes to the ERS are reviewed by the actuaries and based on this review, management believes the ERS's plan to be qualified under Section 401 of the Internal Revenue Code and the trust to be exempt from income tax on related business income under Section 501 (a).

**10. Risk Management**

The ERS is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters.

For all other risks of loss, the ERS participates in the City of Danville, Virginia's insurance coverage. The fleet insurance, public official and commercial general liability insurance is provided under a pooled agreement with the Virginia Municipal Liability Pool (a public entity risk pool). The pool has paid policy dividends on a regular basis. If the pool should be in a deficit condition, it may levy an

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

additional pro-rata assessment to members of the pool, which may not exceed twice the members' annual contributions. In each of the past three years, there have been no settlements that exceeded insurance coverage.

**11. Risks and Uncertainties**

The Plan invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and such changes could materially affect the amounts reported in the statements of net position available for benefits.

Plan contributions are made and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

**12. Net Pension Liability (Asset) of the City**

The components of the net pension liability (asset) at June 30, 2019 are as follows:

Total pension liability	\$	234,107,902
Plan fiduciary net position		<u>262,304,563</u>
City's net pension liability (asset)		<u>(28,196,661)</u>
Plan fiduciary net position as a percentage of the total pension liability		112.0%

*Actuarial assumptions.* The total pension liability was determined by an actuarial valuation as of July 1, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	General: 5.75% for the first 15 years; 3.75% after Police and Fire: 5.25%, including inflation
Investment rate of return	7.00%, net of investment expense, including inflation
Cost-of-living adjustments	None assumed

Mortality rates were based on the RP-2000 Mortality Table with one year setback for males and one year setback for females projected to 2025 using Scale BB.

The actuarial assumptions used in the July 1, 2018 valuation were based on the results of an actuarial experience analysis during the 2011 to 2015 time period.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

*Long-term expected rate of return.* The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. This is then modified through a Monte-Carlo simulation process, by which a downward risk adjustment is applied to the baseline expected return. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2019 (see the discussion of the pension plan's investment policy) and the final investment return assumption are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>	<u>Target Allocation</u>
Domestic equity	5.75%	40.00%
International equity	6.25%	10.00%
Fixed Income – U.S. Investment Grade	1.65%	30.00%
Real estate	4.80%	10.00%
Private equity/Timber	5.50%	10.00%
Cash Equivalents	0.40%	0.00%
<b>Total weighted average real return</b>	<b>4.45%</b>	<b>100.00%</b>
Plus inflation	2.75%	
Total return without adjustment	7.20%	
Risk adjustment	(0.20%)	
<b>Total expected return</b>	<b>7.00%</b>	

*Discount rate.* The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that City contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

*Sensitivity of the net pension liability (asset) to changes in the discount rate.* The following presents the net pension liability (asset) of the City, calculated using the discount rate of 7.00%, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1.00% lower (6.00%) or 1.00% higher (8.00%) than the current rate:

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
City's net pension liability (asset)	(\$ 1,884,838)	(\$ 28,196,661)	(\$ 50,396,820)

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**NOTES TO FINANCIAL STATEMENTS**  
**June 30, 2019**

---

**13. Subsequent Events**

Effective September 1, 2019, newly hired or rehired full-time employees of the City of Danville contribute the lesser of 50% of City Council's annually adopted contribution rate or the Virginia Retirement System's Hybrid Plan's current contribution rate to be deducted each pay period. These contributions shall be pre-tax contributions and will continue until the employee ceases to be a full-time employee of the City of Danville. City Council's annually adopted contribution rate is reviewed and adopted effective July 1 of each fiscal year. Interest is not earned on employee contributions. Upon retirement, these employee contributions shall be distributed based upon the option selected by the participant.

\*\*\*\*



**REQUIRED  
SUPPLEMENTARY INFORMATION  
SECTION**

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF CHANGES IN THE CITY'S NET PENSION LIABILITY AND RELATED RATIOS**  
**Year Ended June 30, 2019**

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
<b>Total pension liability</b>						
Service cost	\$ 3,141,494	\$ 3,259,683	\$ 3,400,557	\$ 4,089,278	\$ 4,043,431	\$ 4,205,168
Interest	12,480,764	12,984,495	13,747,123	14,637,265	15,757,522	15,946,626
Changes of benefit terms	-	-	-	-	5,636,323	-
Differences between expected and actual experience	-	2,432,640	6,118,120	1,681,266	256,406	(2,498,233)
Changes of assumptions	-	-	-	5,105,391	-	-
Benefit payments, including refunds of member contributions	(10,380,124)	(11,594,274)	(11,623,173)	(12,200,073)	(12,716,164)	(14,061,024)
<b>Net change in total pension liability</b>	<u>5,242,134</u>	<u>7,082,544</u>	<u>11,642,627</u>	<u>13,313,127</u>	<u>12,977,518</u>	<u>3,592,537</u>
<b>Total pension liability - beginning</b>	<u>180,257,415</u>	<u>185,499,549</u>	<u>192,582,093</u>	<u>204,224,720</u>	<u>217,537,847</u>	<u>230,515,365</u>
<b>Total pension liability - ending (a)</b>	<u>\$ 185,499,549</u>	<u>\$ 192,582,093</u>	<u>\$ 204,224,720</u>	<u>\$ 217,537,847</u>	<u>\$ 230,515,365</u>	<u>\$ 234,107,902</u>
<b>Plan fiduciary net position</b>						
Employer contributions	\$ 5,849,278	\$ 3,998,392	\$ 2,937,843	\$ 2,857,851	\$ 3,276,604	\$ 4,782,997
Net investment income	38,756,248	5,204,202	645,251	25,415,340	16,591,447	16,641,621
Benefit payments, including refunds of member contributions	(10,380,124)	(11,594,274)	(11,623,173)	(12,200,073)	(12,716,164)	(14,061,024)
Administrative expenses	(109,411)	(143,714)	(125,428)	(111,095)	(86,905)	(121,916)
Other	-	-	-	-	-	-
<b>Net change in plan fiduciary net position</b>	<u>34,115,991</u>	<u>(2,535,394)</u>	<u>(8,165,507)</u>	<u>15,962,023</u>	<u>7,064,982</u>	<u>7,241,678</u>
<b>Plan fiduciary net position - beginning</b>	<u>208,620,790</u>	<u>242,736,781</u>	<u>240,201,387</u>	<u>232,035,880</u>	<u>247,997,903</u>	<u>255,062,885</u>
<b>Plan fiduciary net position - ending (b)</b>	<u>\$ 242,736,781</u>	<u>\$ 240,201,387</u>	<u>\$ 232,035,880</u>	<u>\$ 247,997,903</u>	<u>\$ 255,062,885</u>	<u>\$ 262,304,563</u>
<b>City's net pension liability (asset) - ending (a) - (b)</b>	<u>\$ (57,237,232)</u>	<u>\$ (47,619,294)</u>	<u>\$ (27,811,160)</u>	<u>\$ (30,460,056)</u>	<u>\$ (24,547,520)</u>	<u>\$ (28,196,661)</u>
<b>Plan fiduciary net position as a percentage of the total pension liability (asset)</b>	130.9%	124.7%	113.6%	114.0%	110.6%	112.0%
<b>Covered payroll</b>	\$ 38,027,568	\$ 39,745,625	\$ 42,444,501	\$ 43,309,556	\$ 43,151,947	\$ 42,945,709
<b>City's net pension liability (asset) as a percentage of covered payroll</b>	-150.5%	-119.8%	-65.5%	-70.3%	-56.9%	-65.7%

See Notes to Required Supplementary Information on page 35.

This was a new schedule required to be presented beginning in fiscal year 2014 by Governmental Accounting Standards Board Statement No. 67. Data is not readily available for the fiscal years preceding fiscal year 2014 and is, therefore, not presented. As data is accumulated in the following years, it will be presented here in a schedule of the last ten fiscal years.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF CITY CONTRIBUTIONS**  
**Last Ten Fiscal Years**  
**Year Ended June 30, 2019**

	<u>2014</u>	<u>2015 *</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019**</u>
Actuarially determined contribution	\$ 6,228,799	\$ 3,583,779	\$ 2,937,843	\$ 2,857,851	\$ 4,078,291	\$ 4,712,599
Contributions in relation to the actuarially determined contribution	5,849,278	3,998,392	2,937,843	2,857,851	3,276,604	4,782,997
Contribution (deficiency) / excess	<u>\$ (379,521)</u>	<u>\$ 414,613</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (801,687)</u>	<u>\$ 70,398</u>
Covered payroll	\$ 38,027,568	\$ 39,745,625	\$ 42,444,501	\$ 43,309,556	\$ 43,151,947	\$ 42,945,709
Contributions as a percentage of covered payroll	15.38%	10.06%	6.92%	6.60%	7.59%	11.14%

See Notes to Required Supplementary Information.

\* The excess contribution in 2015 is due to an additional contribution sent from the City of \$414,613 to fund one-time retiree bonuses awarded during the fiscal year.

\*\* The excess contribution in 2019 is partly due to an additional contribution sent from the City of \$259,890.26 to fund one-time retiree bonuses awarded during the fiscal year.

This was a new schedule required to be presented beginning in fiscal year 2014 by Governmental Accounting Standards Board Statement No. 67. Data is not readily available for the fiscal years preceding fiscal year 2014 and is, therefore, not presented. As data is accumulated in the following years, it will be presented here in a schedule of the last ten fiscal years.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF INVESTMENT RETURNS**  
**Year Ended June 30, 2019**

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Annual money-weighted rate of return, net of investment expense	19.0%	2.2%	0.45%	11.39%	6.83%	6.69%

This was a new schedule required to be presented beginning in fiscal year 2014 by Governmental Accounting Standards Board Statement No. 67. Data is not readily available for the fiscal years preceding fiscal year 2014 and is, therefore, not presented. As data is accumulated in the following years, it will be presented here in a schedule of the last ten fiscal years.

**Notes to Required Supplementary Information:**

Valuation date:

Actuarially determined contribution rates are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates (these have changed from the prior year):

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Remaining amortization period	30 years
Asset valuation method	Five-year moving average
Inflation	2.75%
Salary increases	General Employees: 5.75% per year for the first 15 years of service, then 3.75% per year, including inflation  Police and Fire Employees: 5.25%, including inflation
Investment rate of return	7.00%
Retirement age - general employees	3% at age 55 increasing to 100% at age 70+
Retirement age - police and fire employees	5% at age 55 increasing to 100% at age 65
Mortality	RP-2000 Mortality Tables, with one year setback for males and one year set forward for females, projected to 2025 using Scale BB  For pre-retirement deaths, 75% of these rates are used. For disabled members, the RP 2000 Disabled tables are used.

**SUPPLEMENTARY INFORMATION**

**SECTION**



**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULES OF EXPENSES**  
Year Ended June 30, 2019

**SCHEDULE OF INVESTMENT EXPENSES**

Investment management services	\$	664,025
Investment consultant services		62,500
Investment custodial services		27,705
		754,230
Total investment expenses	\$	754,230

**SCHEDULE OF ADMINISTRATIVE EXPENSES**

Staff salaries	\$	43,996
Payments to consultants		44,061
General liability insurance		17,777
Employer's retirement contributions		3,412
Postage		6,972
Office supplies		1,705
Employer's social security		3,311
Travel and training		525
Printing and publications		157
		121,916
Total administrative expenses	\$	121,916

**SCHEDULE OF PAYMENTS TO CONSULTANTS**

<u>Firm</u>	<u>Fee</u>	<u>Service</u>
Boomershine Consulting	\$ 32,344	Actuary
Brown, Edwards and Company, LLP	11,200	Audit
Various doctors	517	Medical
	44,061	
Total payments to consultants	\$ 44,061	

**INVESTMENT  
SECTION**





October 31, 2019

Board of Trustees  
City of Danville, Virginia Employees' Retirement System  
418 Patton Street, 3<sup>rd</sup> floor  
Danville, Virginia 24543

Ladies and Gentlemen:

The City of Danville Virginia Employees' Retirement System was created to provide retirement benefits for those employees who have earned a pension from the City. The Trustees, to set up the plan in a prudent manner, have issued policy and guidelines for their advisors. Under these guidelines the System can invest in common and preferred stocks traded on any major exchanges, U.S. Government or agency issued bonds, corporate bonds rated A or better at the time of purchase, commercial paper rated A1-P1, mortgage and asset backed securities including collateralized mortgage obligations limited to unleveraged priority or sequential pay tranches and subject to the quality rating limitations for all debt securities, Rule 144-A corporate bonds rated A or better at the time of purchase with the rights of registration attached. International investment managers may purchase international equity securities in ADR form or in direct form. Additionally, private equity investments in domestic companies, direct real estate and timber are permitted.

To maintain a diversified plan, the Trustees have set forth certain limitations in the policy and guidelines document. The maximum of total bond holdings in any one corporation should not exceed 10% of the long-term indebtedness of that corporation. Managers should advise the Trustees if an equity holding exceeds 15% of the advisor's portfolio. International managers may invest no more than 25% of total assets in any one developed country. A maximum of 15% of the portfolio can be in emerging market countries. No more than 5% of the assets should be in any one company without prior written approval. Investment advisors should not hold for their accounts in aggregate more than 5% of the outstanding shares of a company.

The System is well diversified by security, by asset class, by investment manager and investment manager style. Current policy allows for a target investment in domestic equities of 30%, international equities of 10%, emerging markets of 10%, real estate 10%, timber 5%, private equity 5%, and bonds of 30%.

The Trustees have engaged Dahab Associates, Inc. to calculate and monitor the returns on a regular basis. We have calculated the rates of return from monthly statements provided by the custodian bank. The returns are reported gross of management and custodian fees, but net of transaction costs. All return calculations are monthly and time weighted, and meet or exceed industry-standard methodology put forth by the Bank Administration Institute.

In the fiscal year ending June 30, 2019, the fund earned 7.4% gross of fees. For the three and five year annualized periods, the System has earned 8.9% and 6.0% gross of fees respectively. For the longer ten-year and twenty-year period, per annum, the System earned a return of 9.4% and 5.9% gross of fees respectively. This return does not include some investments in private equity which report on a lagged basis. Risk characteristics for the portfolio and its components are calculated quarterly using appropriate statistical methodologies.

Respectfully,

A handwritten signature in black ink, appearing to read 'Richard E. Dahab', written in a cursive style.

Richard E. Dahab, CFA  
Chairman

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**OUTLINE OF INVESTMENT POLICIES**  
**June 30, 2019**

---

General

The purpose of the fund is to provide for the accumulation of money in an actuarially sound fashion so that burden on the taxpayers will be spread over the employees' service. The investment policies are designed to set forth the policies and guidelines for those who administer and invest the funds in the portfolio.

Overall Goal

The compound rate of return (net of fees) over a long period of 7.0%.

A real rate of return of at least 2% above the average rate of inflation as measured by the Consumer Price Index over a four-year period.

Asset Allocation

Based upon market value	<u>Actual</u>	<u>Target</u>
Domestic Equities	33 %	30 %
International Equities	10 %	10 %
Emerging Markets	12 %	10 %
Bonds	26 %	30 %
Real Estate	14 %	10 %
Real Estate – Timber	1 %	5 %
Private Equity	3 %	5 %
Cash	1 %	- %

Each advisor is apportioned funds in his assigned sector and may have no more than 10% in cash equivalents. If an advisor feels there are insufficient investment opportunities within his style of investing because of current market conditions and these conditions will exist for more than a calendar quarter, he should notify the Trustees. At their discretion, the manager may be granted the option of holding a significant percentage of assets in cash equivalents or they may choose to redeploy the un-invested funds temporarily until the advisor wishes to invest them.

Investment Program

Each advisor has been hired to invest according to a philosophy and/or investment program he has proposed. Unless otherwise limited by statute or by the requirements set forth herein, the manager has full discretion to execute his stated philosophy. The advisor is not expected to deviate from that philosophy without the express consent of the Trustees.

Specific parameters are established, for the quality and type of investments, which may be purchased within each sector of investments. To service diversification, other guidelines are established so the investment of the system will not represent a significant position in any company's outstanding stock or bonds. No diversification is needed for U.S. government or agency funds.

Each advisor is authorized to vote proxies in a manner deemed to be in the best interest of participants in the System unless specific direction is provided by the Trustees.

Monitoring Performance

The Board of Trustees, with the assistance of an investment consultant, reviews the performance of the investment advisors and systematically meets on a quarterly basis to review and evaluate performance.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**INVESTMENT RESULTS**  
**June 30, 2019**

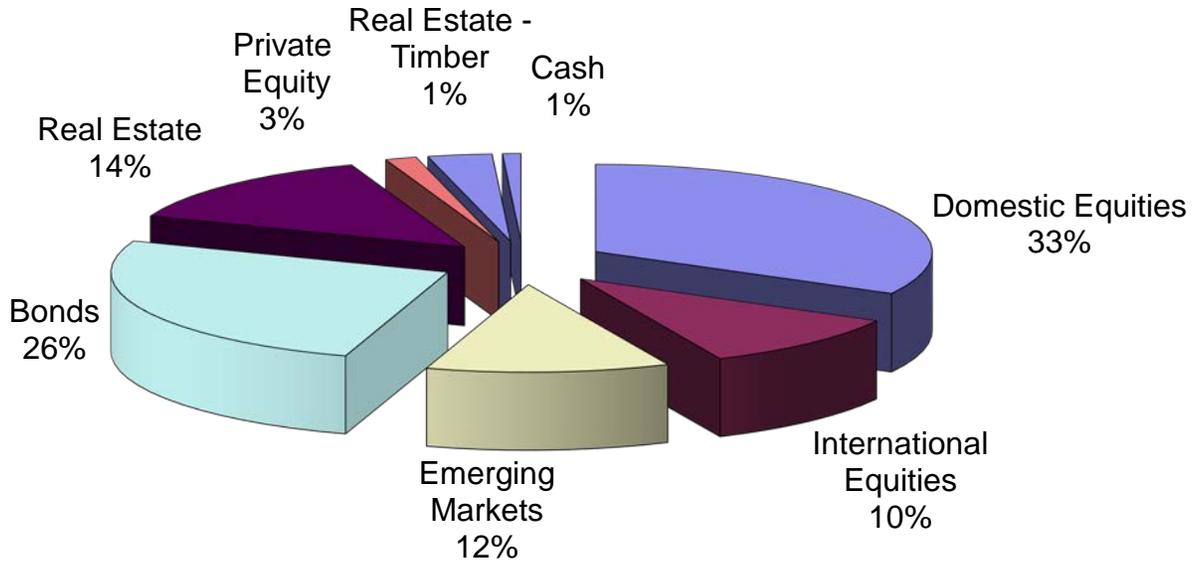
The following schedule compares rates of return for the ERS portfolio with appropriate benchmark indices. The ERS rate of return is gross of fees and is time-weighted to eliminate the influence of contributions and withdrawals which are not controlled by investment managers. It is generally accepted as a useful method of comparing the performance of various fund managers since it measures factors within their control.

	<b>Current Year 6/30/2019</b>	<b>Annualized 3 - Year</b>	<b>Annualized 5 - Year</b>
<b>ERS Total Portfolio - Gross</b>	<b>7.40 %</b>	<b>8.90 %</b>	<b>6.00 %</b>
<b>ERS Domestic Equity Segment</b>	<b>12.20 %</b>	<b>14.40 %</b>	<b>10.60 %</b>
S & P 500 Index	10.40 %	14.20 %	10.70 %
Russell 3000 Index	9.00 %	14.00 %	10.20 %
Russell 1000 Growth Index	11.60 %	18.10 %	13.40 %
Russell 1000 Value Index	8.40 %	10.20 %	7.50 %
<b>ERS International Equity Segment</b>	<b>-0.20 %</b>	<b>9.80 %</b>	<b>3.30 %</b>
MSCI EAFE Index	1.60 %	9.60 %	2.70 %
<b>ERS Emerging Markets Equity Segment</b>	<b>3.80 %</b>	<b>8.50 %</b>	<b>1.00 %</b>
MSCI Emerging Markets Index	1.60 %	11.10 %	2.90 %
<b>ERS Fixed Income Segment*</b>	<b>6.30 %</b>	<b>1.70 %</b>	<b>2.30 %</b>
Barclays Aggregate Bond Index	7.90 %	2.30 %	3.00 %
1 - 3 Year Treasury	8.50 %	2.40 %	3.10 %
<b>ERS Real Estate - Timber Segment</b>	<b>1.70 %</b>	<b>-2.20 %</b>	<b>0.00 %</b>
NCREIF Timber Index	2.90 %	3.30 %	4.60 %
<b>ERS Real Estate Segment</b>	<b>7.90 %</b>	<b>8.90 %</b>	<b>0.00 %</b>
NCREIF ODCE Index	6.40 %	7.60 %	9.80 %
<b>ERS Private Equity Segment</b>	<b>11.40 %</b>	<b>17.90 %</b>	<b>10.40 %</b>
Cambridge Private Equity Index	8.70 %	14.90 %	11.30 %

\* Includes Government and Agency Issues

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**ASSET ALLOCATION**  
 June 30, 2019

**Asset Allocation**



■ Domestic Equities	■ International Equities	□ Emerging Markets	□ Bonds
■ Real Estate	■ Real Estate - Timber	■ Private Equity	■ Cash

	<u>Value</u>	<u>Percent</u>
Domestic Equities	\$ 86,442,938	33%
International Equities	26,958,637	10%
Emerging Markets	30,618,252	12%
Bonds	68,037,350	26%
Real Estate	36,012,184	14%
Real Estate - Timber	3,948,916	1%
Private Equity	8,081,186	3%
Cash	2,309,951	1%
Totals	<u>\$ 262,409,414</u>	<u>100%</u>

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**LIST OF LARGEST ASSETS HELD**  
**Year Ended June 30, 2019**

**Largest Stock Holdings (By Fair Value)**

	<b>Shares</b>	<b>Stock</b>		<b>Fair Value</b>
1)	11,436	JP Morgan Chase & Company	\$	1,278,545
2)	35,704	Bank of America		1,035,416
3)	22,508	Pfizer Inc		975,047
4)	17,040	Verizon Communications		973,495
5)	8,586	Procter & Gamble Company		941,455
6)	6,925	Chevron Corporation		861,747
7)	24,683	AT&T Incorporated		827,127
8)	7,786	Medtronic PLC		758,279
9)	17,087	Comcast Corporation		722,438
10)	11,665	Xcel Energy Incorporated		693,951

**Largest Bond Holdings (By Fair Value)**

	<b>Par</b>	<b>Bonds</b>		<b>Fair Value</b>
1)	\$ 14,314,895	CF Panagora BD Index Fund GT	\$	51,275,952
2)	152,846	Northern Trust Collective Short Term Government Bond Index Fund		16,441,599
3)	52,283	Commercial Mortgage-Backed WAMU Mtg Pass-thru CTFS Ser 2007		48,517
4)	44,350	Commercial Mortgage-Backed Master Adj Rate Mtgs Tr 2007		48,359
5)	77,206	Commercial Mortgage-Backed Alternative Ln Tr 2006		39,702
6)	40,078	Commercial Mortgage-Backed WAMU Mtg Pass-thru CTFS Ser 2007 CI 2		37,468
7)	31,743	Commercial Mortgage-Backed CHL Mtg Pass-thru Tr 2007		31,006
8)	40,032	Commercial Mortgage-Backed Citigroup Mtg Ln Tr Ser 2005		30,757
9)	28,966	Commercial Mortgage-Backed WAMU Mtg Pass-thru CTFS Ser 2006		26,898
10)	59,710	Commercial Mortgage-Backed Alternative Resecuritization 2007		26,536

A complete list of portfolio holdings is available upon request.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF FEES AND COMMISSIONS**  
**Year Ended June 30, 2019**

	<u>Assets Under Management at 6/30/19 (at Fair Value)</u>	<u>Fees And Commissions Paid</u>
<b>INVESTMENT MANAGERS' FEES</b>		
<u>Equity Managers</u>		
Rothschild Asset Management, Inc.	\$ 33,451,440	\$ 163,831
Loomis, Sayles and Company, L.P.	32,912,131	139,388
Northern Trust Asset Management	16,441,599	14,259
Lazard Asset Management	40,474,050	292,863
HGK Asset Management	17,102,839	
Hamilton Lane	8,081,186	
 <u>Mutual Fund Manager</u>		
PanAgora Asset Management, Inc.	71,675,118	52,145
 <u>Real Estate Managers</u>		
BTG Pactual Timberland Investment Group, LLC	3,948,916	1,539
American Realty Advisors	20,774,971	
Intercontinental Real Estate Corporation	15,237,213	
		664,025
Total investment managers' fees		\$ 664,025
 <b>OTHER INVESTMENT SERVICE FEES</b>		
<u>Investment Custodian</u>		
The Northern Trust Company		\$ 27,705
 <u>Investment Consultant</u>		
Dahab Associates, Inc.		62,500
		90,205
Total other investment service fees		\$ 90,205
<b>Total investment expense</b>		<b>\$ 754,230</b>

**BOARD OF TRUSTEES**

The members of the Board of Trustees serve without compensation.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF COMMISSIONS**  
**Year Ended June 30, 2019**

---

<b>Brokerage Firm</b>	<b>Number of Shares Traded</b>	<b>Total Commissions</b>	<b>Commissions per Share</b>
Cowen and Company, LLC	89,653	\$ 3,426	\$ 0.038
* Other Commissions	2,631,527	6,666	0.003
Total Commissions	2,721,180	\$ 10,092	

\* Other commissions includes all brokers with total commissions less than \$2,000 for the fiscal year end.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**INVESTMENT SUMMARY**  
**Year Ended June 30, 2019**

<u>Type of Investment</u>	<u>Fair Value</u>	<u>Percent of total Fair Value</u>
Fixed Income:		
Corporate Bonds	\$ 51,595,751	19.66%
U.S. Government Bonds	<u>16,441,599</u>	<u>6.27%</u>
Total Fixed Income	<u>68,037,350</u>	<u>25.93%</u>
Common Stock:		
Equity Index Fund	83,609,750	31.86%
Foreign	26,958,637	10.28%
Financials	7,041,628	2.68%
Health Care	5,040,301	1.92%
Industrials	3,845,786	1.47%
Communication Services	3,786,473	1.44%
Energy	3,079,881	1.17%
Information Technology	2,370,132	0.90%
Consumer Staples	2,113,738	0.81%
Utilities	1,749,831	0.67%
Real Estate	1,690,215	0.64%
Consumer Discretionary	993,100	0.38%
Miscellaneous	920,372	0.35%
Materials	<u>819,983</u>	<u>0.31%</u>
Total Common Stock	<u>144,019,827</u>	<u>54.88%</u>
Alternative Investments:		
Real Estate	36,012,184	13.73%
Timberland	3,948,916	1.50%
Private Equity	<u>8,081,186</u>	<u>3.08%</u>
Total Alternative Investments	<u>48,042,286</u>	<u>18.31%</u>
Short-term Investments:		
Cash and Cash Equivalents	<u>2,309,951</u>	<u>0.88%</u>
Total investments	<u>\$ 262,409,414</u>	<u>100.00%</u>



**ACTUARIAL  
SECTION**

October 24, 2019

Board of Trustees  
Employees' Retirement System of the City of Danville  
Danville, Virginia

Dear Board Members:

We respectfully present in this report the results of our actuarial valuation. Actuarial valuations of the Employees' Retirement System of the City of Danville are performed annually. The results of the latest actuarial valuation of the Retirement System, prepared as of July 1, 2019, are presented in this report.

The purpose of this report is to provide the information needed for the funding and contributions for the Employees' Retirement System of the City of Danville (the City), in accordance with actuarial principles and best practices. The accounting report under GASB 67/68 for this plan is sent under separate cover, and serves a different purpose. All the figures presented in this report are to be used for funding purposes.

The valuation reflects the benefits in effect on the valuation date and has been prepared on the basis of the data submitted by the City.

#### **Financing Objective and City's Contribution Rate**

The financing objectives of the Retirement System are:

- (a) to fully fund all current costs based on the normal contribution rate payable by the City determined under the funding method; and
- (b) to amortize the unfunded accrued liability, or surplus, based on accrued liability contributions payable by the City.

Effective September 1, 2019, mandatory employee contributions are required for new hires and rehires, hired after September 1, 2019. This change did not have any impact on this valuation.

The total actuarial contribution rate from this valuation is 9.0% of pay (with a 15 years amortization of benefit changes for the Police and Firemen which were effective September 1, 2018), which represents the normal cost of 9.6% of pay reduced by an amortization of the surplus of 0.6% of pay. This is a net decrease of 0.5% of pay versus the prior valuation. The total rates are 6.846% for General employees, and 14.644% for Police and Firemen (with a 15-year amortization of benefit changes for the Police and Firemen which were effective September 1, 2018).

The results of the valuation indicate that the actuarial contributions payable by the City, when taken together with the current assets of the Retirement System, are adequate to fund the actuarial liabilities on account of all benefits payable under the Retirement System. If the actual rate contributed to the Fund by the City is lower than the actuarial rate, this could lead to deterioration of funding over time.

### **Unfunded Accrued Liability and Funding Progress**

The unfunded accrued liability represents the present value of the portion of benefits accrued to the valuation date - with respect to active members, retired members, contingent annuitants in receipt of annual retirement allowances, and terminated members entitled to annual deferred vested allowances, - in excess of the current assets of the Retirement System.

The unfunded accrued liability (surplus) as of July 1, 2019 is (\$5,874,279). The ratio of valuation assets to the System's actuarial accrued liability is 102.5%, an increase of 0.6% versus the prior valuation.

### **Actuarial Assumptions and Methods**

The Entry Age Normal method is the actuarial cost method used to determine the System's liability and cost. The assets used for determining actuarial contributions are valued using a five-year smoothing of investment gains and losses with a gradual recognition of 20% of the outstanding unrecognized gain as of July 1, 2018 over the following 5 years, plus 20% of the gain/loss for each subsequent year.

### **Financial Results and Membership Data**

Detailed summaries of the financial results of the valuation and membership data used in preparing the valuation are shown in the exhibits which are presented in Sections 3 and 5 of the report.

### **Actuarial Certification**

Boomershine Consulting Group has conducted an actuarial valuation of this Plan as of July 1, 2019. The employee data and financial information used in this valuation were reviewed, but not audited by us. On the basis of our review, we believe the information to be sufficiently complete and reliable.

The assumptions and methods used for this valuation satisfy the parameters outlined by the Actuarial Standards Board in relevant Actuarial Standards of Practice. In our opinion, each assumption used in this valuation is reasonable taking into account the experience of the Plan and reasonable expectations. The methods employed in this valuation are consistent with generally accepted actuarial principles and practices.

The information as presented in this Actuarial Report for funding purposes fully and fairly discloses the actuarial position of the Plan. All of the schedules presented within this report were prepared by Boomershine Consulting Group, including the following:

- Summary of Principal Plan Provisions
- Valuation Methods and Assumptions
- Schedule of Active Member Valuation Data
- Solvency Test
- Development of Unfunded Actuarial Accrued Liability
- Actuarial Cost and Liability Summary

- Analysis of Financial Experience
- History of Funding Progress

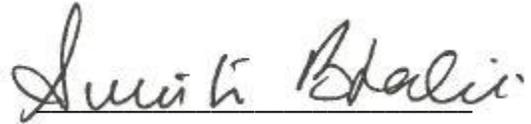
The undersigned are members of the American Academy of Actuaries, and are qualified to render the actuarial opinions presented in this report.

Respectfully Submitted,

BOOMERSHINE CONSULTING GROUP, L.L.C.

Handwritten signature of Gregory M. Stump in cursive script, positioned above a horizontal line.

Gregory M. Stump, FSA, EA, MAAA, FCA  
Chief Actuary

Handwritten signature of Sunita K. Bhatia in cursive script, positioned above a horizontal line.

Sunita K. Bhatia, ASA, EA, MAAA, FCA  
Senior Actuary

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**June 30, 2019**

---

The following summary describes plan provisions assumed in calculating the cost of your pension plan.

**General Information**

Original Effective Date: January 1, 1946 as amended through July 1, 2019.

**Eligibility**

Prior to October 1, 1991, all regular, full-time employees of the City (as defined in the Ordinance) become members of the Retirement System as a condition of continuing employment as of the first day of the calendar month coincident with or next following the completion of one year of continuous service. Any employee on October 1, 1991, who is not a member on October 1, 1991, became a member as of that date; however, an Annuity Savings Account B shall not be established for such an employee until the first day of the calendar month following completion of one year of continuous service. New employees hired after October 1, 1991 shall become members upon the first day of the calendar month coincident with or next following date of employment. No Annuity Savings Account B will be established for new or rehired employees hired after October 1, 1991.

Upon becoming a member, each employee shall be classified as a "General Employee" or as a "Policeman or Fireman" by the Board of Trustees.

**Creditable Service**

Creditable service shall equal total years of service with the City, including certified service prior to 1946 (known as "prior service"), the one year of service prior to becoming a member of the System, and up to a maximum of one year for accumulated sick leave. However, service will not be credited for service prior to a break in membership.

An employee has a break in his membership if one of the following events occurs:

1. Death
2. Absence from service for any five years out of a six consecutive year period.
3. Retirement
4. Withdrawal of member contributions.

Service will not be interrupted by a period of service in the Armed Forces of the United States under which employment rights are granted.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**June 30, 2019**

---

**Normal Service Retirement Age**

For members hired after December 7, 1999, the normal service retirement age is the later of the age at which the member has five or more years of creditable service or age sixty-five for General Employees and age sixty for Policemen and Firemen. For members hired on December 7, 1999 or earlier, the normal service retirement age is age sixty-five for General Employees and age sixty for Policemen and Firemen.

Any member who has attained his normal service retirement age is retired on a service retirement allowance on the first day of the calendar month following the attainment of such age. Extensions of service beyond normal service retirement age may be granted at the request of the employee's department head, if approved by the City Council.

**Service Retirement Allowance**

The retirement allowance consists of:

An annuity equal to the amount provided by the contributions of the member at the time he retires, plus

In the case of a General Employee, a pension which, together with his annuity, will provide a total amount equal to  $1/55$  of the average final compensation of the member, multiplied by the number of years of his creditable service prior to January 1, 1956 (not counting "prior service"), and 1.42% of the part of such compensation not in excess of \$9,500, plus 1.82% of the part of such compensation in excess of \$9,500 multiplied by the number of years of his creditable service after December 31, 1955. In the case of a Policeman or Fireman, a pension which, together with his annuity, will provide a total amount equal to  $1/50$  or 2% of the average final compensation of the member multiplied by the number of years of his creditable service excluding "prior service" (see below). Effective September 1, 2018, Policeman and Fireman, a pension which, together with his annuity, will provide a total amount equal to 2.2% of the average final compensation of the member multiplied by the number of years of his creditable service excluding "prior service".

The allowance of any General Employee who did not elect to reduce his contributions with respect to the first \$4,200 of each year's salary when first eligible to do so is to be increased by the actuarially equivalent value of additional accumulated contributions resulting from not having made such election; the pension of any Policeman or Fireman in service on January 1, 1957, who did not elect to increase his contributions is to be reduced by the actuarial equivalent of the amount by which his accumulated contributions would have been increased had he elected to pay such increased contributions.

If the member has credit for prior service, an additional pension is payable which in the case of a General Employee is to be equal to 1.42% of the part of his average final compensation not in excess of \$9,500, plus 1.82% of the part of such compensation in excess of \$9,500, multiplied by the number of years of such prior service credit. In the case of a Policeman or Fireman, an additional pension is payable equal to  $1/50$  of the average final compensation of the member multiplied by the number of years of such prior service credit. Effective September 1, 2018, an additional pension is payable equal to 2.2% of the average final compensation of a Policeman or Fireman multiplied by the number of years of such prior service credit.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**June 30, 2019**

---

The minimum pension for any member shall be a pension which, together with his annuity, will provide an amount equal to 1.35% of the average final three-year compensation multiplied by his years of creditable service.

**Delayed Retirement**

A member may continue in the employment of the City until he files notice of his intention to retire. In such event, he will receive at actual retirement or death a retirement benefit based on compensation and service to his actual retirement date.

**Average Final Compensation**

“Average Final Compensation” means the member’s average earnable compensation during the three consecutive years of creditable service which will produce the highest average, or during all his creditable service if the member has less than three years (five-year average for members retiring or terminating prior to December 7, 1999).

**Accrued Benefit**

A member’s accrued benefit at any time prior to the normal service retirement age is a benefit computed as described in Service Retirement Allowance above based on average compensation and creditable service as of the accrual date. The annuity portion of this benefit is the actuarial equivalent of the member’s accumulated contributions, and the pension portion is the difference between the accrued benefit and the annuity.

**Early Service Retirement Allowance**

After the attainment of age fifty-five and five years of creditable service, a Policeman, Fireman or General Employee may retire early. For a Policeman, Fireman, or General Employee hired on or before December 7, 1999, the member may retire early after attainment of age fifty-five.

The member may receive a monthly benefit for life beginning at his normal service retirement age equal to the accrued benefit at early retirement date. Payments may begin immediately with the benefits reduced for early payment. For a General Employee with less than thirty years of creditable service, the accrued benefit will be reduced by 4.8% times the lesser of the number of years the retirement occurs prior to age sixty-five or thirty minus his years of creditable service. For a Policeman or Fireman, the accrued benefit will be reduced by 2 1/6% times the lesser of the number of years the retirement occurs prior to age sixty or thirty minus years of creditable service. Effective September 1, 2018, the accrued benefit will be reduced by 2 1/6% times the lesser of the number of years the retirement occurs prior to age sixty or twenty five minus years of creditable service for a Policeman or Fireman.

No reduction is applied in the case of any employee with at least thirty years of creditable service. Effective September 1, 2018, no reduction is applied in the case of a General Employee with at least thirty years of creditable service or Policeman or Fireman with at least twenty five years of creditable service.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**June 30, 2019**

---

**Disability Retirement Benefits**

A member who is totally and permanently incapacitated, either mentally or physically, for the further performance of duty and who has completed five years of creditable service may be granted a disability retirement allowance. The allowance begins immediately, and it is equal to the member's accrued benefit computed using modified creditable service and offset by any worker's compensation benefits for which he is eligible. The modified creditable service is equal to the smaller of (1) twice the creditable service to the accrual date (for this purpose, credited service granted based on accumulated sick leave shall not be doubled), or (2) the projected creditable service to age sixty (but in no event less than the creditable service to date). The minimum allowance payable is to be 25% of the member's average final three-year compensation. No such minimum allowance is to exceed 100% of the allowance that would be payable to a General Employee if he continued in service until age sixty-five, earning his final three-year average compensation in all future years. This minimum shall cease to apply to a General Employee when he becomes eligible for unreduced Social Security benefits.

**Death Benefit**

If an active member who was hired after December 7, 1999 and has five or more years of creditable service should die at any time prior to retirement, a retirement allowance shall be payable to either the spouse, minor child, or parent of the member. If an active member (hired on or before December 7, 1999) should die at any time prior to retirement, a retirement allowance shall be payable to the spouse, minor child or parent of the member. Such retirement allowance shall be continued during the lifetime of such person or in the case of a minor child, until such time as the child dies or attains age of majority.

For an active member who dies prior to attaining age fifty-five, the allowance shall equal one-half of the retirement allowance that would have been payable to the member had the member retired on the day prior to death and had elected to receive a joint and one-half survivor benefit. If the active member dies after attaining age fifty-five, the allowance shall equal the retirement allowance that would have been payable to the member had the member retired on the day prior to death and had elected to receive a joint 100% survivor benefit.

In the case of a member who had not attained age fifty-five at the time of his death, it shall be assumed the member's age at his date of death was fifty-five for the purpose of reducing the benefit on an actuarial equivalent basis.

In the case of a member who dies after attaining age sixty-five, the amount shall equal the deceased retirement allowance that would have been payable to the member had the member retired on the day prior to death and elected to receive a joint and 100% survivor annuity.

The beneficiary may elect to receive the member's accumulated contributions with interest in lieu of any other benefits under the Retirement System.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**June 30, 2019**

---

**Vested Retirement Allowance**

Any member whose service is terminated other than by death or retirement after he has completed five or more years of creditable service may elect to receive a vested retirement allowance in lieu of the return of his contributions. Such deferred vested retirement allowance shall equal his accrued benefit and shall be payable beginning at his normal service retirement age.

**Optional Methods of Settlement**

A member, upon retirement, may elect to convert the retirement allowance otherwise payable to him into a modified retirement allowance in any one of the following forms. However, if no option is elected, the member will be assumed to have automatically retired under Option 1.

Option 1

An unreduced retirement allowance payable during his life, with the provision that if he dies before he has received in monthly payments of his annuity the amount of his accumulated contributions at the time of his retirement, the balance will be paid to his designated beneficiary or estate.

Option 2

A reduced retirement allowance of equivalent actuarial value to Option 1 payable during his life, with the provision that at his death his allowance will be continued throughout the life of such person as he shall have designated.

Option 3

A reduced retirement allowance of equivalent actuarial value to Option 1 payable during his life, with the provision that at his death one-half of such allowance will be continued throughout the life of such person as he shall have designated.

Option 4

A reduced retirement allowance of equivalent actuarial value to Option 1 payable during his life, with the provision that at his death some other benefit, approved by the Board, will be payable provided that the total of such reduced retirement allowance during his life and the succeeding benefit shall be computed to be of equivalent actuarial value to the retirement allowance that he would have received without optional modification.

Option 5

A retirement allowance of equivalent actuarial value to Option 1 that is greater from retirement age (if less than sixty-five) to age sixty-five, and less following age sixty-five, so that the combined benefits from the Retirement System and Social Security are as level as possible.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF PRINCIPAL PLAN PROVISIONS**  
**June 30, 2019**

---

**Optional Methods of Settlement - continued**

Lump Sum

If the actuarial equivalent of a benefit due to normal retirement, early retirement, disability, or death is \$10,000 or less at the time the benefit is to commence, a lump sum payment of the actuarial equivalent shall be paid to the member or member's beneficiary in full settlement of benefits from the Plan.

All optional methods of settlement are actuarially equivalent to the normal form of annuity on a unisex basis based on the UP-1984 Mortality Table adjusted for a 20% female content in the participant group and an 80% female content in beneficiaries group and 6% interest.

**Contributions**

Contributions by City Made on Behalf of Members (Annuity Savings Account B): The Board of Trustees shall determine the portion of earnable compensation to be contributed by the City on behalf of each member hired prior to October 1, 1991 such that each class of employee shall bear a reasonable portion of and have an interest in the total cost of the Retirement System. The Board has set the contribution rate at 5% of earnable compensation for General Employees and 6.5% of earnable compensation for Policemen and Firemen.

Any employee who is first employed (or rehired) by the City after October 1, 1991 shall not be eligible to receive any contributions to an Annuity Savings Account B.

Upon the withdrawal by a member, except by death or retirement, he is paid on demand the sum of the City contributions made on his behalf together with no less than one-half of the interest credited thereon.

Contributions by City: The Danville City Code requires the ERS Board of Trustees to file with the City Manager its certification of the amount of the appropriation necessary to pay the normal and accrued liability for the ensuing fiscal year, as determined in conjunction with the actuary utilized by the ERS. This may be presented to the City Manager as a percentage rate of the City payroll. The City Manager shall report to City Council at the time the budget is presented the amount to be included therein for retirement purposes compared to the ERS Board of Trustees' recommendation. The City makes annual contributions, based on members' earnable compensation, to provide for the pensions and other benefits payable from the contributions of the City. The actuarial cost method used for funding purposes is the same as the method used for financial reporting purposes. See the "Schedule of City Contributions" on page 34 in the Required Supplementary Information section for a schedule of the actuarially determined contributions and the actual City contributions.

Effective September 1, 2019, new hires and rehires have mandatory employee contributions, which total the lesser of 50% of the City's adopted annual contribution rate or the Virginia Retirement System's (VRS) hybrid plan's current contribution rate. These contributions shall be pre-tax contributions and will continue until the employee ceases to be a full-time employee of the City of Danville. These contributions are called Employee Contributions and are not subject to the same rules and guidelines as the Annuity Savings Account A or B set up previously in the System. Interest is not earned on employee contributions. Upon retirement, these Employee Contributions shall be distributed based upon the option selected.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS**  
**June 30, 2019**

---

**Valuation Method**

The method of valuation used for pension benefits is called the Entry Age Normal Method. Under this method, actuarial gains and losses are reflected immediately through a change in the Unfunded Accrued Liability. However, the impact is amortized over time as part of the actuarially determined contribution.

**Valuation of Assets**

For the purpose of evaluating the plan, assets are valued by the Five-Year Moving Average method. All assets are placed in a trust fund with the Board of Trustees of the Employees' Retirement System of the City of Danville, Virginia, as trustee. The financial information used in this valuation was not audited by Boomershine Consulting Group.

**Employees Included in the Calculations**

All regular, full-time employees on the valuation date are included in the calculations. Former employees or their survivors who are entitled to an immediate or deferred benefit under the provisions of the plan as indicated by the employee data are also included.

**Actuarial Assumptions**

1. Mortality:

Healthy and Disabled Lives	RP-2000 Mortality Tables, with one year set back for males and one year set forward for females, projected to 2025 using Scale BB – The probabilities are illustrated in the tables below. For disabled members, the RP 2000 Disabled tables are used.
----------------------------	--
  
2. Disability:

a. General Employees	300% of United Auto Workers Disability rates. The probabilities are illustrated in the tables below.
b. Police and Firemen	400% of United Auto Workers Disability rates. The probabilities are illustrated in the tables below.
  
3. Termination: The probabilities are illustrated in the tables below.
  
4. Salary progression: Salaries are assumed to increase at a rate of 5.75% per year for general employees for the first 15 years of service, then 3.75% and 5.25% for public safety employees for all years, of which 2.75% is attributable to expected inflation. No portion of membership payroll is expected to increase due to growth in the active group size.
  
5. Investment return: 7.0% compounded annually.
  
6. Plan expenses: Certain administrative expenses are now being paid from the trust fund. The investment return is assumed to be net of these as well as investment expenses.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS**  
**June 30, 2019**

---

7. Retirement age:

<u>Age</u>	<u>Probability of Retirement</u>	
	<u>General Employees</u>	<u>Police and Fire</u>
50-54	.000	.100
55	.030	.050
56	.036	.063
57	.043	.078
58	.052	.098
59	.062	.122
60	.075	.153
61	.090	.191
62	.107	.238
63	.129	.298
64	.155	.373
65	.250	1.00
66	.250	1.00
66	.250	1.00
67	.250	1.00
68	.250	1.00
69	.250	1.00
70+	1.00	1.00

8. Future post-retirement cost-of-living increases 0%, effective July 1, 2013

9. The following are examples of the probability that a participant will die, become disabled.

<u>Age</u>	<u>General</u>		<u>Police and Fire</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
25	.00090	.00150	.00120	.00200
30	.00120	.00018	.00160	.00240
35	.00150	.00240	.00200	.00320
40	.00210	.00300	.00280	.00400
45	.00300	.00450	.00400	.00600
50	.00540	.00780	.00720	.01040
55	.01080	.00147	.01440	.01960
60	.02700	.03630	.03600	.04840
65	.00000	.00000	.00000	.00000

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
June 30, 2019**

10. The following are examples of the probability that a participant will terminate employment.

<u>Years of Service</u>	<u>General</u>		<u>Police and Fire</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
0	24.0 %	16.8 %	12.0 %	12.0 %
1	20.4 %	14.3 %	11.0 %	11.0 %
2	17.3 %	12.1 %	10.0 %	10.0 %
3	14.7 %	10.3 %	9.0 %	9.0 %
4	12.5 %	8.8 %	8.0 %	8.0 %
5	10.6 %	7.5 %	7.0 %	7.0 %
6	9.1 %	6.3 %	6.0 %	6.0 %
7	7.7 %	5.4 %	5.0 %	5.0 %
8	6.5 %	4.6 %	4.0 %	4.0 %
9	5.6 %	3.9 %	3.0 %	3.0 %
10	4.7 %	3.3 %	2.0 %	2.0 %
11	4.0 %	2.8 %	1.0 %	1.0 %
12	3.4 %	2.4 %	0.0 %	0.0 %
13	2.9 %	2.0 %	0.0 %	0.0 %
14	2.5 %	1.7 %	0.0 %	0.0 %
15	2.1 %	1.5 %	0.0 %	0.0 %
16	1.8 %	1.2 %	0.0 %	0.0 %
17	1.5 %	1.1 %	0.0 %	0.0 %
18	1.3 %	0.9 %	0.0 %	0.0 %
19	1.1 %	0.8 %	0.0 %	0.0 %
20+	0.0 %	0.0 %	0.0 %	0.0 %

**Other Considerations**

1. For the purpose of valuing death benefits, all male employees are assumed to be married to a spouse three years younger and all females are assumed to be married to a spouse three years older.
2. Employee data supplied to the Actuary by the Employer and financial information supplied to the Actuary by the Plan have not been audited by the Actuary, although the Actuary believes these to be accurate and complete.
3. For purposes of determining projected benefits payable from member contributions, those contributions are assumed to earn 5% interest compounded annually.
4. Actuaries rely on the Employer to inform them of any former participants who have been rehired and lost prior service because of the length of their break in service. These employees may have participation requirements different from other new employees.
5. Projected benefits are limited to the federal (415) limitation for defined benefit plans.
6. Total contributions made by the City have been included in the calculations as of July 1, 2019.
7. The Entry Age Normal method used in this report was adopted effective July 1, 1994. The rates assumed for salary progression, investment return, and future post-retirement cost-of-living increases have been adopted effective July 1, 2010 and revised on July 1, 2013. All other actuarial assumptions used for the July 1, 2013 valuation were adopted effective July 1, 2002.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF ACTIVE MEMBER VALUATION DATA**  
**Last Ten Fiscal Years**

GENERAL ACTIVE MEMBERS

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Average Salary</u>	<u>Percent Increase (Decrease)</u>
6/30/2010	744	28,034,775	37,681	(0.3)
6/30/2011	711	26,590,761	37,399	(0.7)
6/30/2012	700	26,907,626	38,439	2.8
6/30/2013	688	27,078,698	39,359	2.4
6/30/2014	688	28,418,464	41,306	4.9
6/30/2015	691	30,232,352	43,752	5.9
6/30/2016	706	31,029,264	43,951	0.5
6/30/2017	710	31,408,693	44,238	0.6
6/30/2018	686	31,102,746	45,339	2.5
6/30/2019	702	32,124,526	45,761	0.9

POLICEMEN AND FIREMEN ACTIVE MEMBERS

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Average Salary</u>	<u>Percent Increase (Decrease)</u>
6/30/2010	249	11,056,814	44,405	(1.4)
6/30/2011	246	10,895,336	44,290	(0.3)
6/30/2012	248	11,298,543	45,559	2.9
6/30/2013	245	11,351,316	46,332	1.7
6/30/2014	246	12,031,352	48,908	5.6
6/30/2015	242	12,833,418	53,031	8.4
6/30/2016	246	13,162,746	53,507	0.9
6/30/2017	234	12,737,798	54,435	1.7
6/30/2018	239	13,088,496	54,764	0.6
6/30/2019	227	12,109,520	53,346	(2.6)

ALL ACTIVE MEMBERS

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Average Salary</u>	<u>Percent Increase (Decrease)</u>
6/30/2010	993	39,091,589	39,367	(0.6)
6/30/2011	957	37,486,097	39,170	(0.5)
6/30/2012	948	38,206,169	40,302	2.9
6/30/2013	933	38,430,014	41,190	2.2
6/30/2014	934	40,449,816	43,308	5.1
6/30/2015	933	43,065,770	46,158	6.6
6/30/2016	952	44,192,010	46,420	0.6
6/30/2017	944	44,146,491	46,765	0.7
6/30/2018	925	44,191,242	47,774	2.2
6/30/2019	929	44,234,047	47,615	(0.3)

Note: The valuation data above is presented for active members at the stated valuation date. The covered payroll amounts for the fiscal year disclosed on page 34 include payroll activity throughout the entire fiscal year instead of at a certain point in time. Therefore, the annual payroll on this page will not agree to the covered payroll amounts for the fiscal year disclosed on page 34.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF RETIREE AND BENEFICIARY DATA**  
**Last Ten Fiscal Years**

<u>Year Ended</u>	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>On Rolls at Year End</u>		<u>Percent Increase in Annual Allowances</u>	<u>Retirees as a Percentage of Active Members</u>	
	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>	<u>No.</u>	<u>Annual Allowances</u>		<u>Number</u>	<u>Pay</u>
6/30/2010	34	701,160	20	337,476	487	8,976,431	2.8	49.0	22.9
6/30/2011	31	644,028	17	233,340	501	9,273,682	3.3	52.4	24.7
6/30/2012	33	481,126	19	248,306	515	9,798,011	5.7	54.3	25.6
6/30/2013	43	762,467	11	244,789	547	10,032,957	2.4	58.6	26.1
6/30/2014	42	734,996	24	298,091	565	10,345,166*	3.1	60.5	25.6
6/30/2015	54	983,389	20	281,571	599	11,022,071	6.5	64.2	25.6
6/30/2016	40	472,695	19	96,058	615	11,601,476	5.3	64.6	26.3
6/30/2017	55	601,291	16	206,649	652	12,174,988	4.9	69.1	27.6
6/30/2018	34	524,485	22	308,232	665	12,716,164	4.4	71.9	28.8
6/30/2019	58	1,962,758	19	259,152	705	14,061,024	10.6	76.2	31.8

Other adjustments not included in the above charges are cost-of-living adjustments, offsets for workers' compensation and beneficiary option changes.

\*The annual allowances will not agree to the amount reported on page 21 as benefits paid to participants due to one-time retiree bonuses paid during the fiscal year.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF FUNDING PROGRESS**  
**Last Ten Fiscal Years**

Valuation Date	Actuarial Accrued Liability (AAAL)	Actuarial Value of Assets	Assets as a Percentage of AAAL	Unfunded Actuarial Accrued (Asset) Liability (UAAL)	Covered Employee Payroll	UAAL as a Percentage of Covered Employee Payroll
6/30/2010	199,018,107	178,430,719	89.65%	20,587,388	39,091,589	52.66%
6/30/2011	200,232,740	179,553,821	89.67%	20,678,919	37,486,097	55.16%
6/30/2012	206,452,918	174,103,211	84.33%	32,349,707	38,206,170	84.67%
6/30/2013	180,257,415	176,071,124	97.68%	4,186,291	38,430,014	10.89%
6/30/2014	187,932,189	194,075,656	103.3%	(6,143,467)	40,449,816	(15.19)%
6/30/2015	198,700,213	206,132,066	103.7%	(7,431,853)	43,065,770	(17.26)%
6/30/2016	211,011,377	209,854,554	99.5%	1,156,823	44,192,010	2.62%
6/30/2017	217,794,253	218,689,286	100.4%	(895,033)	44,146,491	(2.02)%
6/30/2018	228,026,950	232,284,874	101.9%	(4,257,924)	44,191,242	(9.64)%
6/30/2019	239,875,524	245,749,803	102.4%	(5,874,279)	44,234,047	(13.28)%

The presentation of assets accumulated by a retirement system for the funding of benefit liabilities as a percentage of the aggregate accrued benefit liabilities provides an indication of the extent to which a system is funded. Analysis of this percentage over a period of time indicates whether the system is becoming financially stronger or weaker. The greater this percentage, the stronger the system. The presentation of unfunded accrued benefit liabilities as a percentage of the annual covered active member payroll removes the effects of inflation from reported changes in funding status. The smaller this percentage, the stronger the system.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
SOLVENCY TEST  
Last Ten Fiscal Years**

Valuation Date	Aggregate Actuarial Accrued Liabilities for				Actuarial Value of Assets	Percentages of Accrued Liabilities Covered by Actuarial Value of Assets	
	Retirees and Beneficiaries	Annuity Savings Accounts (a)	Employer Liability (b)	Total Non-Retired Accrued Liability (a + b)		Retirees and Beneficiaries	Non-Retired Accrued Liability
6/30/2010	95,330,009	19,877,031	83,811,067	103,688,098	178,430,719	100.0	80.0
6/30/2011	98,720,447	19,556,035	81,956,258	101,512,293	179,553,821	100.0	80.0
6/30/2012	100,883,683	19,560,815	86,008,420	105,569,235	174,103,211	100.0	69.0
6/30/2013	90,921,087	18,931,082	70,405,246	89,336,328	176,071,124	100.0	95.0
6/30/2014	94,165,329	17,998,767	75,768,093	93,766,860	194,075,656	100.0	107.0
6/30/2015	100,193,761	16,601,222	81,905,230	98,506,452	206,132,066	100.0	100.0
6/30/2016	107,370,355	16,385,717	87,255,305	103,641,022	209,854,554	100.0	99.0
6/30/2017	114,428,585	15,164,613	88,201,055	103,365,668	218,689,286	100.0	100.0
6/30/2018	115,795,570	15,254,383	96,976,997	112,231,380	232,284,874	100.0	100.0
6/30/2019	133,409,707	11,856,141	94,609,676	106,465,817	245,749,803	100.0	100.0

The progress of a retirement system in accumulating assets to pay benefits when due can be measured by examining the extent to which assets accumulated for benefits cover liabilities for future benefits to retirees and beneficiaries and liabilities for service already rendered by active members. In a system receiving actuarially determined employer contributions, the liabilities for future benefits to retirees and beneficiaries will generally be fully covered by accumulated assets. In addition, the liabilities for service already rendered by active members will be partially covered by the remainder of accumulated assets, and will increase over time.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
ANALYSIS OF FINANCIAL EXPERIENCE**

**Approximate Reconciliation of the Increase (Decrease) in the Unfunded Accrued (Asset) Liability (UAL)**

	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>June 30, 2015</u>	<u>June 30, 2014</u>	<u>June 30, 2013</u>	<u>June 30, 2012</u>
UAL as of July 1	\$ (4,257,924)	\$ (895,033)	\$ 1,156,823	\$ (7,431,853)	\$ (6,143,467)	\$ 4,186,291	\$ 32,349,707	\$ 20,678,919
Normal cost (NC) as of July 1	4,358,787	4,043,431	4,089,278	3,400,557	3,674,296	3,141,494	3,829,022	3,835,893
Interest for one year on UAL and NC	7,061	220,388	367,227	(282,191)	(201,865)	512,945	2,532,511	1,716,037
Contribution with interest	<u>(4,947,571)</u>	<u>(3,389,346)</u>	<u>(2,956,184)</u>	<u>(3,038,928)</u>	<u>(4,135,969)</u>	<u>(6,050,540)</u>	<u>(5,462,385)</u>	<u>(5,098,812)</u>
Expected UAL as of July 1	<u>(4,839,647)</u>	<u>(20,560)</u>	<u>2,657,144</u>	<u>(7,352,415)</u>	<u>(6,807,005)</u>	<u>1,790,190</u>	<u>33,248,855</u>	<u>21,132,037</u>
Adjustment due to change in actuarial assumptions	-	260,194	-	5,105,391	-	-	(30,716,477)	-
Actual UAL as of July 1	<u>(5,874,279)</u>	<u>(4,257,924)</u>	<u>(895,033)</u>	<u>1,156,823</u>	<u>(7,431,853)</u>	<u>(6,143,467)</u>	<u>4,186,291</u>	<u>32,349,707</u>
Net increase (decrease) in UAL	<u>\$ (1,034,632)</u>	<u>\$ (4,497,558)</u>	<u>\$ (3,552,177)</u>	<u>\$ 3,403,847</u>	<u>\$ (624,848)</u>	<u>\$ (7,933,657)</u>	<u>\$ 1,653,913</u>	<u>\$ 11,217,670</u>

**An Explanation of the Increase (Decrease) in UAL is as follows:**

	<u>June 30, 2018</u>	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>June 30, 2015</u>	<u>June 30, 2014</u>	<u>June 30, 2013</u>	<u>June 30, 2012</u>
A. Plan Experience							
1. Investment return on actuarial value of assets	\$ (6,802,253)	\$ (2,357,192)	\$ (3,808,582)	\$ 1,722,581	\$ (6,742,968)	\$ (10,366,297)	\$ 15,681,697
2. New entrants	-	-	-	-	-	-	-
3. Liability Gain/(Loss)	<u>5,767,621</u>	<u>(2,140,366)</u>	<u>256,405</u>	<u>1,681,266</u>	<u>6,118,120</u>	<u>2,432,640</u>	<u>16,688,693</u>
4. Net plan experience [gain/(loss)]	<u>(1,034,632)</u>	<u>(4,497,558)</u>	<u>(3,552,177)</u>	<u>3,403,847</u>	<u>(624,848)</u>	<u>(7,933,657)</u>	<u>32,370,390</u>
B. Plan Changes	-	-	-	-	-	-	-
C. Assumption Changes	-	-	-	-	-	<u>(30,716,477)</u>	-
D. Net (increase) decrease in UAL	<u>\$ (1,034,632)</u>	<u>\$ (4,497,558)</u>	<u>\$ (3,552,177)</u>	<u>\$ 3,403,847</u>	<u>\$ (624,848)</u>	<u>\$ (7,933,657)</u>	<u>\$ 1,653,913</u>

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION**  
**Last Ten Fiscal Years**

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
<b>Additions</b>										
Employer contributions	\$ 4,611,297	\$ 4,950,582	\$ 4,929,208	\$ 5,280,687	\$ 5,849,278	\$ 3,998,392	\$ 2,937,842	\$ 2,857,851	\$ 3,276,604	\$ 4,782,997
Investment income (loss) - (net of expenses)	<u>17,263,703</u>	<u>36,597,190</u>	<u>(1,137,468)</u>	<u>22,861,602</u>	<u>38,756,248</u>	<u>5,204,202</u>	<u>645,252</u>	<u>25,415,340</u>	<u>16,591,447</u>	<u>16,641,621</u>
Total additions	<u>21,875,000</u>	<u>41,547,772</u>	<u>3,791,740</u>	<u>28,142,289</u>	<u>44,605,526</u>	<u>9,202,594</u>	<u>3,583,094</u>	<u>28,273,191</u>	<u>19,868,051</u>	<u>21,424,618</u>
<b>Deductions</b>										
Benefit payments	8,976,431	9,273,682	9,798,011	10,032,957	10,345,166	11,436,684	11,601,476	12,174,988	12,716,164	14,013,888
Administrative expenses	118,562	131,158	109,792	107,025	109,411	143,714	125,428	111,095	86,905	121,916
Refunds	<u>3,660</u>	<u>190,414</u>	<u>15,871</u>	<u>74,438</u>	<u>34,958</u>	<u>157,590</u>	<u>21,697</u>	<u>25,085</u>	<u>-</u>	<u>47,136</u>
Total deductions	<u>9,098,653</u>	<u>9,595,254</u>	<u>9,923,674</u>	<u>10,214,420</u>	<u>10,489,535</u>	<u>11,737,988</u>	<u>11,748,601</u>	<u>12,311,168</u>	<u>12,803,069</u>	<u>14,182,940</u>
<b>Change in net position</b>	<u>\$ 12,776,347</u>	<u>\$ 31,952,518</u>	<u>\$ (6,131,934)</u>	<u>\$ 17,927,869</u>	<u>\$ 34,115,991</u>	<u>\$ (2,535,394)</u>	<u>\$ (8,165,507)</u>	<u>\$ 15,962,023</u>	<u>\$ 7,064,982</u>	<u>\$ 7,241,678</u>

Source: Internal reports generated by the financial system of the City of Danville, Virginia and the Employees' Retirement System of the City of Danville, Virginia.

# **STATISTICAL SECTION**

The Statistical Section provides additional historical perspective, context, and detail in order to provide a more comprehensive understanding of this fiscal year's financial statements, note disclosures, and supplementary information. This section provides multi-year trend of financial information to facilitate a more comprehensive understanding of how the organization's financial position and performance has changed over time. Additionally, detailed, multi-year analysis of benefits paid and current fiscal year-end retired members by type of benefits received are presented.



**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
SCHEDULE OF BENEFIT PAYMENTS BY TYPE  
Last Ten Fiscal Years**

Fiscal Year Ended	Retirees			Beneficiaries	Total Benefits
	Age and Service Benefits	Disabilities	Vested		
6/30/2010	6,401,580	1,790,900	153,708	630,243	8,976,431
6/30/2011	6,486,680	1,891,453	161,789	733,760	9,273,682
6/30/2012	6,953,544	1,911,096	198,713	734,658	9,798,011
6/30/2013	7,083,494	1,910,334	251,585	787,544	10,032,957
6/30/2014	7,275,508	1,937,340	293,004	839,314	10,345,166
6/30/2015	8,162,974	2,030,589	354,181	888,940	11,436,684
6/30/2016	8,188,654	2,101,636	398,273	912,913	11,601,476
6/30/2017	8,580,837	2,211,781	440,741	941,629	12,174,988
6/30/2018	8,956,461	2,337,307	460,040	962,356	12,716,164
6/30/2019	10,033,629	2,279,202	526,882	965,599	13,805,312

Source: Internal reports generated by the financial system of the City of Danville, Virginia and the Employees' Retirement System of the City of Danville, Virginia.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA**  
**SCHEDULE OF AVERAGE BENEFIT PAYMENTS**  
**Last Ten Fiscal Years**

Retirement Effective Date	Years Credited Service					
	5-10	10-15	15-20	20-25	25-30	30+
July 1, 2009 to June 30, 2010						
Average monthly benefit	\$ 294.64	352.75	718.85	1,107.64	3,727.75	3,202.27
Average final monthly salaries	\$ 2,481.39	2,794.69	2,661.33	2,789.25	6,059.79	4,742.10
Number of active retirees	4	2	4	4	2	10
July 1, 2010 to June 30, 2011						
Average monthly benefit	\$ 248.46	847.88	587.72	1,399.35	2,103.58	3,059.32
Average final monthly salaries	\$ 3,213.93	2,946.24	2,478.10	3,923.74	4,298.08	5,145.98
Number of active retirees	1	3	2	9	6	7
July 1, 2011 to June 30, 2012						
Average monthly benefit	\$ 140.91	574.01	886.43	1,065.42	1,953.62	2,557.06
Average final monthly salaries	\$ 2,016.76	2,541.63	3,112.84	3,082.88	4,596.08	4,238.05
Number of active retirees	3	8	2	3	3	9
July 1, 2012 to June 30, 2013						
Average monthly benefit	\$ 440.95	265.56	692.86	1,091.22	1,557.93	2,808.63
Average final monthly salaries	\$ 2,264.14	2,572.92	3,037.06	3,243.52	3,287.55	4,518.29
Number of active retirees	8	2	5	7	3	11
July 1, 2013 to June 30, 2014						
Average monthly benefit	\$ 358.92	470.70	1,097.05	592.91	2,558.19	3,139.21
Average final monthly salaries	\$ 2,646.31	2,596.98	3,101.17	2,246.74	5,254.13	4,583.82
Number of active retirees	8	6	3	1	7	10
July 1, 2014 to June 30, 2015						
Average monthly benefit	\$ 340.07	916.25	550.44	1,152.97	2,295.94	3,471.74
Average final monthly salaries	\$ 2,501.82	4,346.44	2,251.16	3,300.95	4,428.54	5,070.09
Number of active retirees	11	2	4	5	4	15
July 1, 2015 to June 30, 2016						
Average monthly benefit	\$ 417.26	817.01	773.04	1,866.97	2,095.57	2,817.80
Average final monthly salaries	\$ 3,441.52	4,197.03	2,814.56	3,706.05	4,106.14	5,188.37
Number of active retirees	6	7	7	4	6	7
July 1, 2016 to June 30, 2017						
Average monthly benefit	\$ 459.87	542.14	1,581.67	1,882.85	2,117.08	2,871.30
Average final monthly salaries	\$ 3,810.82	2,521.70	4,336.76	3,899.73	4,274.93	4,333.47
Number of active retirees	5	8	7	4	12	14
July 1, 2017 to June 30, 2018						
Average monthly benefit	\$ 497.59	855.47	839.59	1,377.68	1,769.51	3,234.64
Average final monthly salaries	\$ 4,049.96	3,841.52	2,896.17	3,300.29	3,674.92	4,607.74
Number of active retirees	6	9	4	4	4	5
July 1, 2018 to June 30, 2019						
Average monthly benefit	\$ 522.00	608.88	972.43	2,385.26	2,846.44	4,684.81
Average final monthly salaries	\$ 4,002.68	2,841.15	4,057.82	4,736.49	5,075.60	6,315.05
Number of active retirees	4	12	1	3	10	24

Source: Internal report generated by the financial system of the City of Danville, Virginia and the Employees' Retirement System of the City of Danville, Virginia.

**EMPLOYEES' RETIREMENT SYSTEM OF THE CITY OF DANVILLE, VIRGINIA  
SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFITS  
June 30, 2019**

Amount of Monthly Benefit	Number of Retirees	Type of Retirement*						Options Selected**			
		1	2	3	4	5	6	1	2	3	5
Deferred	318	-	-	-	-	-	318	-	-	-	-
\$0-100	13	-	2	-	4	2	5	4	-	4	-
101-200	30	4	7	-	1	18	-	26	3	1	-
201-300	31	4	9	1	7	10	-	19	5	7	-
301-400	38	8	15	7	5	3	-	26	8	4	-
401-500	41	7	9	10	6	9	-	27	8	6	-
501-600	24	7	7	2	5	3	-	16	5	3	-
601-700	30	4	10	5	3	8	-	18	8	3	1
701-800	22	4	6	4	4	4	-	15	5	2	-
801-900	31	6	8	5	8	4	-	17	4	10	-
901-1000	27	4	11	5	5	2	-	16	5	5	1
1001-1100	16	5	3	2	5	1	-	4	6	6	-
1101-1200	23	5	11	5	1	1	-	14	2	6	1
1201-1300	21	4	4	3	10	-	-	8	5	7	1
1301-1400	18	3	5	5	2	3	-	12	2	2	2
1401-1500	19	4	7	2	6	-	-	9	3	5	2
1501-1600	22	9	3	5	3	2	-	13	6	3	-
1601-1700	11	4	1	5	1	-	-	9	-	2	-
1701-1800	17	7	5	3	-	2	-	9	5	2	1
1801-1900	10	4	2	3	-	1	-	6	3	1	-
1901-2000	20	9	4	5	1	1	-	13	4	3	-
2001-2100	9	2	6	1	-	-	-	4	2	2	1
2101-2200	9	2	6	1	-	-	-	5	-	4	-
2201-2300	11	5	3	-	3	-	-	3	6	1	1
2301-2400	10	4	1	5	-	-	-	8	1	1	-
2401-2500	17	8	5	3	1	-	-	10	5	2	-
Over 2500	185	95	61	26	2	1	-	112	35	38	5
<b>Totals</b>	<b>1,023</b>	<b>218</b>	<b>211</b>	<b>113</b>	<b>83</b>	<b>75</b>	<b>323</b>	<b>423</b>	<b>136</b>	<b>130</b>	<b>16</b>

* <u>Type of Retirement</u>	** <u>Options Selected (See Page 10)</u>
1 Service retirement for age and/or service	1 Life
2 Early retirement	2 100% spousal
3 Non-occupational/occupational disability	3 50% spousal
4 Joint survivorship - benefit paid to beneficiary	5 Social Security Option
5 Vested retirement	
6 Deferred future benefits (includes occupational disability)	

Source: Internal reports generated by the financial system of the City of Danville, Virginia and the Employees' Retirement System of the City of Danville, Virginia.

**COMPLIANCE**  
**SECTION**



**INDEPENDENT AUDITOR’S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Trustees  
Employees’ Retirement System of the  
City of Danville, Virginia  
Danville, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Employees’ Retirement System of the City of Danville, Virginia, (the “System”), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the System’s basic financial statements, and have issued our report thereon dated November 25, 2019.

**Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the System’s internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System’s internal control. Accordingly, we do not express an opinion on the effectiveness of the System’s internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity’s financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. **Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.**

## Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. **The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.**

## Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*Brown, Edwards & Company, L.L.P.*  
CERTIFIED PUBLIC ACCOUNTANTS

Lynchburg, Virginia  
November 25, 2019

**EMPLOYEES' RETIREMENT SYSTEM OF  
THE CITY OF DANVILLE, VIRGINIA**

**SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS  
June 30, 2019**

**A. FINDING – FINANCIAL STATEMENT AUDIT**

**2018-001: Segregation of Duties (Significant Deficiency)**

*Condition:*

An important aspect of any internal control system is the segregation of duties. Not all duties at the System have been adequately segregated. In an ideal system, no individual would perform more than one duty in connection with any transaction or series of transactions. With limited staff, sufficiently separating duties can be difficult or even impossible. As with all areas of internal control, management and those charged with governance should make careful decisions about the cost versus benefit of any internal control.

*Recommendation:*

We recommend that management take steps to eliminate performance of conflicting duties where possible or to implement effective compensating controls. Such duties are: the Retirement Accountant should not have access to create new retirees in the system; this function should be performed by Human Resources only.

*Current Status:*

The System has compensating controls in place that would detect unauthorized retirees entered into the accounting system. Such controls include reviews by the System's Executive Secretary (who also serves as the City's Finance Director) of new retiree paperwork and payment registers.