FINANCIAL STATEMENTS September 30, 2018 and 2017

DAVIDSON, JAMIESON & CRISTINI, P.L. Certified Public Accountants



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2018

Presented to

Town of Davie Police Pension Plan

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

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Alan H. Winkle Program Administrator

September 30, 2018 and 2017

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The Board of Trustees Town of Davie Police Pension Plan Davie, Florida

INDEPENDENT AUDITOR'S REPORT

Report on Financial Statements

We have audited the accompanying financial statements of Town of Davie Police Pension Plan (Plan), which comprise the statements of fiduciary net position as of September 30, 2018 and 2017, and the related statement of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

The Plan's Board of Trustees 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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain 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 Plan'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 Plan'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.

The Board of Trustees Town of Davie Police Pension Plan Davie, Florida

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 fiduciary net position of the Town of Davie Police Pension Plan as of September 30, 2018 and 2017, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Our audit was made for the purpose of forming an opinion on the basic financial statements as a whole. The accompanying required supplementary information on pages 34 through 41 of the Town of Davie Police Pension Plan is required by Governmental Accounting Standards Board Statement No. 67 and is not a required part of the basic financial statements. The additional information on page 42 is presented for purposes of additional analysis and is also not a required part of 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 above information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management has omitted the Management's Discussion and Analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing 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. Our opinion on the basic financial statements is not affected by this missing information.

Davidson, Jamieson & Cristine, G.L.

January 14, 2019

STATEMENTS OF FIDUCIARY NET POSITION

September 30, 2018 and 2017

<u>Assets</u>

	-	2018	2017
Cash	\$	865,794 \$	13,626
Receivables:			
Participants		52,958	79,199
Interest and dividends		222,466	122,486
Broker-dealers	-	54,590	68,135
Total receivables		330,014	269,820
Investments at fair value:			
U.S. Government obligations		14,383,457	8,289,513
U.S. Government agency obligations		3,191,399	10,962,111
Mortgages		3,139,767	7,308,167
Corporate bonds		13,711,570	11,391,287
Domestic stocks		60,752,478	42,455,242
Domestic equity investment funds		32,382,265	37,379,308
International equity investment fund		18,637,303	14,404,626
Real estate investment funds		19,448,396	17,925,770
Temporary investments	-	2,690,000	2,478,053
Total investments		168,336,635	152,594,077
Prepaid expenses	-	529,465	492,061
Total assets		170,061,908	153,369,584
Liabilities			
Accounts payable		174,568	180,242
Accounts payable, broker-dealers	-	88,020	128,475
Total liabilities		262,588	308,717
Net position restricted for pensions	\$	169,799,320 \$	153,060,867

See Notes to Financial Statements.

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years ended September 30, 2018 and 2017

Additions:	-	2018	2017
Contributions:			
Employer	\$	6,223,000	\$ 6,472,000
Participants		1,382,963	1,417,689
Buy back		643,473	686,748
DROP contributions	-	431,816	129,155
Total contributions		8,681,252	8,705,592
Intergovernmental revenue:			
Chapter 185 state excise tax rebate		938,653	905,664
Investment income:			
Net appreciation (depreciation)			
in fair value of investments		11,752,340	14,225,333
Interest		1,040,851	1,077,186
Dividends		1,676,182	1,508,886
Commission rebate		73	1,327
Class action settlements		2,695	2,151
Other		1,000	900
Investment income		14,473,141	16,815,783
Less investment expenses		716,010	668,544
Net investment income	-	13,757,131	16,147,239
Total additions		23,377,036	25,758,495
Deductions:			
Benefits:			
Age and service		5,560,832	5,341,326
Disability		212,618	207,107
Drop payments Refunds of contributions		558,250	451,264
Administrative expenses		106,404 200,479	36,851 197,732
Administrative expenses	-	200,477	177,752
Total deductions		6,638,583	6,234,280
Net increase in net position		16,738,453	19,524,215
Net position restricted for pensions:			
Beginning of year	•	153,060,867	133,536,652
End of year	\$	169,799,320	\$ 153,060,867

See Notes to Financial Statements.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

1. <u>Description of Plan</u>

The following brief description of the Town of Davie Police Pension Plan (Plan) is provided for general information purposes only. Participants should refer to the Plan Ordinance for more complete information.

<u>General</u> - The Plan is a single employer defined benefit pension plan covering all full-time sworn police officers of the Town of Davie, Florida (Town). Participation in the Plan is required as a condition of employment. Originally established in 1976 and substantially amended in 2001, 2005, 2006, 2007 and 2011, the Plan provides for pension, death and disability benefits. The Plan is subject to provisions of Chapter 185 of the State of Florida Statutes.

The Plan, in accordance with the above statute, is governed by a five member pension board. Two police officers who are elected by a majority of the members of the Plan, two are appointed by the Town Council and must be legal residents of the Town and a fifth member who is appointed by the other four members constitute the pension board. The Town and the Plan participants are obligated to fund all Plan costs based upon actuarial valuations. The Town is authorized to establish benefit levels and the Board of Trustees approves the actuarial assumptions used in the determination of contribution levels.

At September 30, 2018, the Plan's membership consisted of:

Retirees and beneficiaries:	
Currently receiving benefits	107
DROP retirees	46
Terminated employees entitled to benefits	
but not yet receiving them	1
Total	154
Current employees:	
Vested	93
Nonvested	80
Total	<u>173</u>

At September 30, 2017, the date of the most recent actuarial valuation, there were 106 retirees and beneficiaries receiving benefits.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

1. <u>Description of the Plan (Continued)</u>

Normal Retirement

<u>Tier One Participants - Officers Hired Prior to October 1, 2010</u> - Those officers may retire on the earlier of the date on which they attain 20 years of benefit service or the date on which they attain age 55. For officers terminating service with more than 15 years but less than 20 years of benefit service, the normal retirement benefit will commence on the first day of the month coincident with or next following the date the officer would have completed 20 years of benefit service. An officer has vested benefits after 10 years of continuous service.

Upon retirement, an officer will receive a monthly benefit amount equal to the number of years of benefit service multiplied by 3% of final average earnings for the first 10 years of service plus 4% for the next 5 years of benefit service, plus 5% for the next 5 years of benefit service, plus 2% for the next 10 years of benefit service, with a 95% maximum. However, after 47½ years of benefit service, benefits shall recommence at a rate of 2% of final average earnings per year.

<u>Tier Two Participants - Officers Hired After October 1, 2010</u> - Tier Two benefits shall be administered in the same manner as Tier One benefits, except as follows: the normal retirement benefit for Tier Two officers shall be calculated using a 3% multiplier for the first 20 years of service, and 2% for each additional year, up to a maximum benefit of 80%. Notwithstanding the 80% cap, benefits shall accrue at a rate of 2% per year for any active Tier Two member after 40 years of service.

The officers' benefits commence on the first day of the month following their retirement date and are continued until death; however, benefits may be payable to the officers' beneficiaries, depending on the optional form of payment elected. An officer with the consent of the Town of Davie may continue to work beyond their normal retirement date and retire on any subsequent first day of the month.

<u>Early Retirement</u> - Any officer who has completed 10 years of benefit service and attained the age of 50 may retire early, with the consent of the Town of Davie.

Upon retirement, an officer will receive a monthly benefit amount equal to the number of years of benefit service multiplied by 3% of final average earnings for the first 10 years of service plus 4% for the next 5 years of service, plus 5% for the next 5 years of benefit service, plus 2% for the next 10 years of benefit service. The benefit will be reduced for early payment so that it is actuarially equivalent to the normal retirement benefit. Effective May 1, 2011, the early retirement reduction shall be no more than 3% per year.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

1. <u>Description of the Plan (Continued)</u>

Early Retirement (Continued)

The officer also has the option of deferring the commencement of his monthly benefit to his normal retirement date, the earlier of the date he would have attained 20 years of benefit service (provided he has completed 15 years of actual Benefit Service) or age 55. In such case, there would be no actuarial reduction to his monthly benefit.

<u>Disability</u> - Any officer who receives a medically substantiated service connected disability as determined by the pension board will receive a monthly benefit equal to the greater of 66-2/3% of such officer's base pay at time of disability, less any applicable benefits payable by Federal Old Age, Survivors and Disability Insurance, Worker's Compensation benefits or other disability benefits payable from Broward County or the Town of Davie, or 42% of final average earnings payable as a ten year certain and life annuity. If the disability is non-service connected, an officer will receive a monthly benefit of the greater of \$100 or 1.50% of final average earnings multiplied by the number of years of benefit service at their date of disability offset by the amounts described above. Benefits are payable beginning six months after termination of service for disability. Effective May 1, 2011 the minimum non-service connected disability benefit shall be the greater of the accrued benefit or 25% of final pay payable as 10 years certain and life annuity.

<u>Death Benefits</u> - Prior to retirement, if death is non-service connected or officer had no spouse to whom he had been married for at least one (1) year prior to death, the death benefit shall be the return of accumulated employee contributions plus prior plan benefits, if any. However, if a member had at least 10 years of benefit service at the time of death, then his or her beneficiary will be entitled to the benefits otherwise payable to the officer at early or normal retirement date.

If death is service-connected and officer has an eligible spouse to whom he had been married to for at least one (1) year prior to death, such spouse shall be entitled to a monthly annuity equal to the greater of 50% of base pay at this date of death, or accrued benefit payable to the eligible spouse on the date of what would have been the officers' normal retirement date. Such pension shall continue to the spouse until the earlier of the spouse's death or remarriage, with a guarantee that such benefits will at least equal the accumulated contributions at his date of death. If an officer had no eligible spouse but had at least 10 years of benefit service at the time of death, then his or her beneficiary will be entitled to the benefits otherwise payable to the member at early or normal retirement date.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

1. <u>Description of the Plan (Continued)</u>

Disability Benefits (Continued)

After retirement, if a member had elected a joint and survivor or a 10 year certain and life optional form of payment, the adjusted monthly benefit will be continued to the beneficiary until the appropriate annuity ending date. Total benefits payable to the officer and his beneficiary will not be less than the amount of accumulated contributions at date of retirement.

<u>Cost-of-Living Adjustment (COLA)</u> - An annual COLA will be granted to retirees and beneficiaries. Disability retirees are not eligible for a COLA. The amount of the COLA will be 2% per year. For officers who retired prior to October 1, 1997, the monthly benefit after the yearly COLA will not exceed 115% of the original monthly benefit prior to any COLA. For post October 1, 1997 retirees, the limit for future monthly benefits after COLA will be 130% of the original benefit amounts prior to any COLA. The first annual COLA will commence on the fifth anniversary of retirement, but no earlier than November 1, 2004.

<u>Normal Forms of Retirement Income</u> - For a married participant, the normal form of retirement income will be monthly payments for the life of the officer with benefit continuing to the spouse after the officer's death for one year and 60% of the benefit to the spouse thereafter. The benefit amount is not reduced due to this form of payment,. The participant may also elect to receive the benefit as an unreduced ten year certain life annuity. For an unmarried participant, the normal form of payment will be an unreduced ten year certain and life annuity.

<u>Optional Forms of Retirement Income</u> - The following optional forms of retirement income may be elected by an officer.

<u>Option 1</u> - A single life annuity payable during the lifetime of the participant only.

<u>Option 2</u> - A retirement annuity of smaller monthly amount, payable to the officer during the joint lifetime of the officer and a joint pensioner designated by the officer, and following the death of either of them, 50%, 66 2/3%, 75% of 100% depending on the retiree's election, of such small monthly amount payable to the survivor for the lifetime of the survivor.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

1. <u>Description of the Plan (Continued)</u>

Option Forms of Retirement Income (Continued)

Option 3 - A monthly annuity payable to the officer for ten years certain and life thereafter.

A "pop-up" feature can also be elected by the officer together with the 662/3%, 75% or 100% joint and contingent annuity described in Option 2 above. For those officers who elect this feature, the benefit amount will increase to the original normal form of payment amount if the beneficiary predeceases the member.

Deferred Retirement Option Plan (DROP Plan) - A Deferred Retirement Option Plan was implemented for the year ended September 30, 1998. The DROP is administered by the Police Pension Board of Trustees. The rate of return earned by the DROP is the same as that earned by the Plan less a \$10 per month adjustment for expenses. Once an officer enters the DROP, his monthly retirement benefit is frozen, and his monthly benefit is paid into his DROP account. Upon termination of employment, the balance of the officer's DROP account is payable to him and he also begins to receive his (frozen) monthly retirement benefit. The DROP has a five (5) year maximum participation period. Effective October 1, 2010, DROP participants may remain in he DROP for up to 5 years. In no event can the total of the sum of years of creditable service and year of DROP participant exceed 30 years for a member who enters the DROP.

All officers electing to participate in the DROP are required upon entering the DROP to transfer any accumulated leave balances above four hundred and eighty (480) hours into the officer's DROP account, subject to the annual limit set forth in the Internal Revenue Code.

<u>Member Contributions</u> - Each police officer will contribute 9.0% of their basic compensation to the Plan, starting on their eligibility dates and continuing to their date of retirement, disability, termination or death, whichever comes first. These contributions are designated as employee contributions under Section 414(h)(2) of the Internal Revenue Code. Effective January 1, 2013, the limit of the amount of overtime that is included in pensionable compensation was lowered from 400 hours to 300 hours.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

1. <u>Description of the Plan (Continued)</u>

<u>Town and State Contributions</u> - Pursuant to Florida Statutes, Chapter 185, contributions from the State of Florida Department of Insurance consists of an excise tax imposed by the Town upon certain casualty insurance companies on the gross amount of receipts of premiums from policy holders on all premiums collected on casualty insurance policies covering property within the Town. The Town pays into the Plan such amount as is determined actuarially to provide for benefits under the Plan not met by member contributions. This amount is reduced by any allowable Chapter 185 State contributions.

<u>Permissive Service Credit Purchasing</u> - A vested active participant shall be permitted to purchase permissive service credit in the form of an increased benefit accrual factor, which may be purchased in one percent (1.0%) increments above the participant's accrued benefit percentage, in an amount not to exceed twenty percent (20%) of final average earnings (FAE). The maximum of benefit accrual will remain at ninety-five percent (95%) of FAE for Tier One participants and eighty per cent (80%) for Tier Two participants. The purchase cost would be the <u>full</u> actuarial cost of the increased benefit accrual multiplier and must be paid in full prior to the grating of the increased benefits.

A vested active participant shall be permitted to purchase permissive service credit expressed as an earlier normal retirement date. Under such proposal, a participant would be able to receive an unreduced normal retirement benefit as early as upon the completion of 15 years of Benefit Service (instead of 20), if a purchase of the maximum of five (5) years of permissive service credit were made. However, the participant would not accrue a higher multiplier, but would be permitted to begin receiving an unreduced retirement benefit with fewer years of actual service. The purchase cost would be the full actuarial cost of the earlier commencement of retirement benefits and must be paid in full prior to the grating of the increased benefits.

The cost of either purchase may be made either in one lump sum or made in payroll deduction installments for a period not to exceed five (5) years, with 7.0% per annum interest added, and must be completed prior to commencement of any enhanced benefits.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

2. <u>Summary of Significant Accounting Policies</u>

<u>Basis of Accounting</u> - Basis of accounting is the method by which revenues and expenses are recognized in the accounts and are reported in the financial statements. The accrual basis of accounting is used for the Plan. Under the accrual basis of accounting, revenues are recognized when they are earned and collection is reasonably assured, and expenses are recognized when the liability is incurred. Plan participant contributions are recognized in the period in which the contributions are due. Town contributions to the plan as calculated by the Plan's actuary, are recognized as revenue when due and the Town has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

<u>Basis of Presentation</u> - The accompanying financial statements are presented in accordance with Governmental Accounting Standards Board (GASB) Statement 67, Financial Reporting for Defined Benefit Pension Plans and the Codification of Governmental Accounting and Financial Reporting Standards which covers the reporting requirements for defined benefit pensions established by a governmental employer. The accompanying financial statements include solely the accounts of the Plan which include all programs, activities and functions relating to the accumulation and investment of the assets and related income necessary to provide the service, disability and death benefits required under the terms of the Plan Ordinance and the amendments thereto.

<u>Valuation of Investments</u> - Investments in common stock and bonds traded on a national securities exchange are valued at the last reported sales price on the last business day of the year; securities traded in the over-the-counter market and listed securities for which no sale was reported on that date are valued at the mean between the past reported bid and asked prices; investments in securities not having an established market value are valued at fair value as determined by the Board of Trustees. The fair value of an investment is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Investment income is recognized on the accrual basis as earned. Unrealized appreciation in fair value of investments includes the difference between cost and fair value of investments held. The net realized and unrealized investment appreciation or depreciation for the year is reflected in the Statements of Changes in Fiduciary Net Position.

• Debt securities: Debt securities consist primarily of negotiable obligations of the U.S. government and U.S. government-sponsored agencies, corporations and foreign debt securities. These securities can typically be valued using the close or last traded price on a specific date (quoted prices in active markets). When quoted prices are not available, fair value is determined based on valuation models that use inputs that include market observable inputs. These inputs include recent trades, yields, price quotes, cash flows, maturity, credit ratings, and other assumptions based upon the specifics of the investment's type.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

2. <u>Summary of Significant Accounting Policies (Continued)</u>

Valuation of Investments (Continued)

- Equity securities: Equity securities consist of domestic equity securities, domestic equity funds, and international equity funds. Domestic securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the fiscal year. Securities traded in the over-the counter market and listed securities for which no sale was reported on that date are valued at the last reported bid price. International equities are valued base upon quoted foreign market prices and translated into U.S. dollars at the exchange rate in effect at September 30. Securities which are not traded on a national security exchange are valued by the respective Plan manager or other third parties based on yields currently available on comparable securities of issuers with similar credit ratings.
- Alternative investments: These investments include equity real estate investments where
 no readily ascertainable market value exists. To value these investments, management, in
 consultation with the general partner and investment advisors, determines the fair values
 for the individual investments based upon the partnership's or limited liability company's
 most recent available financial information adjusted for cash flow activities through
 September 30. The estimated fair value of these investments may differ from values that
 would have been used had a ready market existed.

Unrealized gains and losses are presented as net appreciation in fair value of investments on the Statement of Changes in Fiduciary Net Position along with gains realized on sale of investments. Purchases and sale of securities are reflected on a trade-date basis. Interest income is recognized as earned and dividend income is recorded as of the ex-dividend date. Realized gains and losses on the sale of investments are based on average cost identification method.

Given the inherent nature of investments, it is reasonably possible that changes in the value of those investments will occur in the near term and that such changes could materially affect the amounts reported in the statements of fiduciary net position.

<u>Custody of Assets</u> - Custodial and investment services are provided to the Plan under contracts with national trust companies having trust powers. The Plan's investment policies are governed by Florida State Statutes and ordinances of the Town of Davie, Florida.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

2. <u>Summary of Significant Accounting Policies (Continued)</u>

<u>Authorized Plan Investments</u> - The Board recognizes that the obligations of the Plan are longterm and that its investment policy should be made with a view toward performance and return over a number of years. The general investment objective is to obtain a reasonable total rate of return defined as interest and dividend income plus realized and unrealized capital gains or losses commensurate with the prudent investor rule and Chapter 185 of the Florida Statutes.

Permissible investments include obligations of the U.S. Treasury and U.S. agencies, high capitalization common or preferred stocks, pooled equity funds, high quality bonds or notes and fixed income funds, real estate and derivative investments. In addition, the Board requires that Plan assets be invested with no more than 62.5 in stocks and convertible securities measured at market value at the end of each reporting period. Further information regarding the permissible investments from the Plan can be found in the Plan's Investment Guidelines.

<u>Actuarial Cost Method</u> - The Plan has elected the Entry Age Normal for funding purposes. This method allocates the actuarial present value of each participant's projected benefit on a level basis over the participant's earnings from the date of entry into the Plan through the date of retirement.

<u>Reporting Entity</u> - The financial statements presented are only for the Plan and are not intended to present the basic financial statements of the Town of Davie, Florida.

The Plan is included in the Town's Comprehensive Annual Financial Report (CAFR) for the year ended September 30, 2018, which is a separately issued document. Anyone wishing further information about the Town is referred to the Town's CAFR.

The Plan is a pension trust fund (fiduciary fund type) of the Town which accounts for the single employer defined benefit pension plan for all Town Police Officers. The provisions of the Plan provide for retirement, disability, and survivor benefits

The Town's actuarially determined contribution rate for the years ended September 30, 2018 and 2017 was 42% and 43%, respectively. This rate consists of 22% and 23% of member salaries to pay normal costs plus 20% and 20%, respectively, to amortize the unfunded actuarially accrued liability pursuant to the September 30, 2017 and 2016 actuarial valuation.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

2. <u>Summary of Significant Accounting Policies (Continued)</u>

<u>Administrative Costs</u> - All administrative costs of the Plan are financed through charges allocated against the DROP accounts. The Town contributes the remainder of the cost of administration of the Plan.

<u>Cash</u> - The Plan considers money market and demand account bank and broker-dealer deposits as cash. Temporary investments, shown on the balance sheet are composed of investments in short-term custodial proprietary money market funds.

<u>Federal Income Taxes</u> - A favorable determination letter dated October 20, 1994 indicating that the Plan is qualified and exempt from Federal income taxes was issued by the Internal Revenue Service. Although the Plan has been amended since receiving this determination, the Board believes that the Plan is designed and continues to operate in compliance with the applicable requirements of the Internal Revenue Code.

<u>Use of Estimates</u> - The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

<u>Subsequent Events</u> - Management has adopted the provisions set forth in GASB Statement No. 56, *Subsequent Events*, and considered subsequent events through the date of the audit report which is the date that the financial statements were available to be issued.

New Accounting Pronouncements -

<u>Fair Value Measurement and Application</u> - GASB statement No. 72 addresses accounting and financial reporting issues related to fair value measurements. The definition of fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This statement provides guidance for determining a fair value measurement for financial reporting purposes. This statement also provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements.

Fair value is described as an exit price. Fair value measurements assume a transaction takes place in a government's principal market, or a government's most advantageous market in the absence of a principal market. The fair value also should be measured assuming that general market participants would act in their economic best interest. Fair value should not be adjusted for transaction costs.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

3. <u>Deposits and Investments</u>

Deposits

Fiduciary International of the South (FTIOS) periodically holds uninvested cash in its respective capacity as custodian for the Plan. These funds exist temporarily as cash in the process of collection from the sale of securities.

Investments

Investments that are not evidenced by securities that exist in physical or book-entry form include investments in open-ended international and domestic investment funds and a commingled pooled trust fund.

The Plan's independently managed investments are segregated into five separate accounts and managed under separate investment agreements with Garcia, Hamilton & Associates, L.P., Clearbridge Investments, LLC, LMCG Investments, LLC, PNC Capital Advisors, LLC, and Lyrical Asset Management, L.P. These five accounts give FTIOS the custodianship, but give these listed money managers the authority to manage the investments.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

3 Deposits and Investments (Continued)

The Vanguard Index Investment Fund is a domestic equity investment fund which is also held by FTIOS. Wedge Mid Cap Fund is an alternative investment fund. held by Comerica Trust Company. International equity funds includes the Johnstone I.E. Group Trust which is an alternative investment fund held by Melon Bank. The real estate investment funds include the U.S. Real Estate Investment Fund, LLC, UBS Trumbell Property Fund, and the American Core Realty Fund., LLC.

These assets are invested in accordance with the Plan's specific investment guidelines. Investment management fees are calculated quarterly as a percentage of the fair market value of the Fund's assets managed.

The investment managers listed above are monitored by the Board of Trustees and an investment performance monitor. Except for the alternative investments, the Plan's investments are uninsured and unregistered and are held in the custodians' or the Bank's accounts in the Plan's name as described above.

The alternative investment real estate funds shown above use the net asset value (NAV) provided by the investment managers of these funds. The NAV is based on the value of the underlying assets owned by these funds minus their liabilities and then divided by the number of shares or percentage of ownership outstanding. The NAV's unit price is quoted on a private market that is not active; however, the unit price is based on underlying investments which are traded on an active market.

The values of these alternative investments are not necessarily indicative of the amount that could be realized in a current transaction. The fair value may differ significantly from the value that would have been used had a ready market for the underlying funds existed, and the differences could be material. Future confirming events will also affect the estimates of fair value and the effect of such events on the estimates of fair value could be material.

The Plan held no investment securities that individually represent 5% or more of the Plan's net assets available for benefits during the year ended September 30, 2018 and 2017.

The Plan has no instrument that, in whole or in part, is accounted for as a derivative instrument under GASB 53, *Accounting and Financial Reporting for Derivative Instruments* during the current Plan year.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

3. <u>Deposits and Investments (Continued)</u>

The Plan held the following fixed investments as of September 30, 2018:

				Average
	%		Overall	Effective
	of	Fair Value	Credit	Duration
Investment Type	Fund	9/30/18	Rating	(Years)
U.S. Government obligations	8.4 % \$	14,383,457	AA	5.2
U.S. Government agency obligations	1.8	3,191,399	AA	6.9
Mortgages	1.8	3,139,767	A-AA	3.3
Corporate bonds	8.0	13,711,570	A-AAA	7.3
Temporary investments	1.5	2,690,000	N/A	N/A
Total	21.5% \$	37,116,193		

The Plan held the following fixed investments as of September 30, 2017:

				Average
	%		Overall	Effective
	of	Fair Value	Credit	Duration
Investment Type	Fund	9/30/17	Rating	(Years)
U.S. Government obligations	5.41 % \$	8,289,513	AA	5.2
U.S. Government agency obligations	7.16	10,962,111	AA	6.9
Mortgages	4.77	7,308,167	A-AA	3.3
Corporate bonds	7.44	11,391,287	A-AAA	7.3
Temporary investments		2,478,053	N/A	N/A
Total	24.78% \$	40,429,131		

<u>Interest Rate Risk</u> - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment in debt securities. Generally, the longer the time to maturity, the greater the exposure to interest rate risks. Through its investment policies the Plan manages its exposure to fair value losses rising from increasing interest rates. The Plan limits the effective duration of its investment portfolio through the adoption of the Barclay Intermediate Aggregate Bond Index benchmark.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

3. <u>Deposits and Investments (Continued)</u>

<u>Credit Risk</u> - Credit risk is the risk that a debt issuer will not fulfill its obligations. Consistent with state law, the Plan's investment guidelines limit its fixed income investments to a quality rating of "A" or equivalent as rated by Moody's or by Standard & Poor's bond rating services at the time of purchase. Fixed income investments which are downgraded below the minimum rating must be liquidated at the earliest beneficial opportunity.

<u>Custodial Credit Risk</u> - Custodial credit risk is defined as the risk that the Plan may not recover cash and investments held by another party in the event of a financial failure. The Plan requires all securities to be held by a third party custodian in the name of the Plan. Securities transactions between a broker-dealer and the custodian involving the purchase or sale of securities must be made on a "delivery vs. payment" basis to ensure that the custodian will have the security or money, as appropriate, in hand at the conclusion of the transaction. The investments in mutual funds and investment fund are considered *unclassified* pursuant to the custodial risk categories of GASB Statement No. 3, because they are not evidenced by securities that exist in physical or book-entry form.

<u>Investing in Foreign Markets</u> - Investing in foreign markets may involve special risks and considerations not typically associated with investing in companies in the United States of America. These risks include revaluation of currencies, high rates of inflation, repatriation restrictions on income and capital, and future adverse political, social, and economic developments. Moreover, securities of foreign governments may be less liquid, subject to delayed settlements, taxation on realized or unrealized gains, and their prices are more volatile than those of comparable securities in U.S. companies.

<u>Foreign Tax Withholdings and Reclaims</u> - Withholding taxes on dividends from foreign securities are provided for based on rates established via treaty between the United States of America and the applicable foreign jurisdiction, or where no treaty exists at the prevailing rate established by the foreign country. Foreign tax withholdings are reflected as a reduction of dividend income in the statement of operations. Where treaties allow for a reclaim of taxes, the Fund will make a formal application for refund. Such reclaims are included as an addition to dividend income.

<u>Investing in Real Estate</u> - The Plan is subject to the risks inherent in the ownership and operation of real estate. These risks include, among others, those normally associated with changes in the general economic climate, trends in the industry including creditworthiness of tenants, competition for tenants, changes in tax laws, interest rate levels, the availability of financing and potential liability under environmental and other laws.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

3. <u>Deposits and Investments (Continued)</u>

<u>Investment Asset Allocation</u> - The Plan's adopted asset allocation policy as of September 30, 2018 is as follows:

Asset Class	Target Allocation
Domestic stocks	50.00%
International stocks	12.50
Real estate	10.00
Domestic bonds	27.50
Total	<u>100.00%</u>

<u>Rate of Return</u> - For the year ended September 30, 2018 the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.90 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

4. Net Increase (Decrease) in Realized and <u>Unrealized Appreciation (Depreciation) of Investments</u>

The Plan's investments appreciated (depreciated) in value during the years ended September 30, 2018 and 2017 as follows:

	2018					
	Realized Appreciation (Depreciation)		Unrealized Appreciation (Depreciation)			Total
Investments at fair value as determined by quoted market price:						
U.S. Government obligations	\$	(133,282)	\$	(323,486)	\$	(456,768)
U.S. Government agency obligations		(98,239)		(1,203)		(99,442)
Mortgages		(150,930)		10,023		(140,907)
Corporate bonds		39,272		15,371		54,643
Domestic stocks		3,032,770		3,561,236		6,594,006
Domestic equity investment funds		3,402,758		1,099,092		4,501,850
International equity						
investment fund		35,032		326,434		361,466
Real estate investment funds		-		937,492		937,492
Net increase in realized and						
unrealized appreciation						
(depreciation) of investments	\$	6,127,381	\$	5,624,959	\$	11,752,340

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

4. Net Increase (Decrease) in Realized and <u>Unrealized Appreciation (Depreciation) of Investments (Continued)</u>

	Realized Appreciation (Depreciation)		Unrealized Appreciation (Depreciation)			Total
Investments at fair value as determined by quoted market price:						
U.S. Government obligations	\$	(122,290)	\$	(399,656)	\$	(521,946)
U.S. Government agency obligations		4,845		(12,456)		(7,611)
Mortgages		(289,033)		(108,812)		(397,845)
Corporate bonds		332,183		13,478		345,661
Domestic stocks		1,989,431		4,373,083		6,362,514
Domestic equity investment funds		-		5,079,479		5,079,479
International equity						
investment funds		(381,467)		3,112,693		2,731,226
Real estate investment funds		-		633,855		633,855
Net increase in realized and unrealized appreciation						
(depreciation) of investments	<u>\$</u>	1,533,669	\$	12,691,664	\$	14,225,333

The calculation of realized gains and losses is independent of the calculation of net appreciation (depreciation) in the fair value of plan investments.

Unrealized gains and losses on investments sold in 2018 that had been held for more than one year were included in net appreciation (depreciation) reported in the prior year.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

5. <u>Investments</u>

The Plan's investments at both carrying value and cost or adjusted cost as of September 30, 2018 and 2017 are summarized as follows:

	2018			2017				
Investment	Cost		Fair Value		Cost			Fair Value
U.S. Government obligations	\$	14,452,255	\$	14,383,457	\$	8,034,825	\$	8,289,513
U.S. Government agency obligations		3,190,738		3,191,399		10,960,247		10,962,111
Mortgages		3,286,218		3,139,767		7,464,641		7,308,167
Corporate bonds		13,603,238		13,711,570		11,298,326		11,391,287
Domestic stocks		51,293,459		60,752,478		36,557,459		42,455,242
Domestic equity investment funds		22,660,050		32,382,265		28,756,185		37,379,308
International equity investment fund		13,088,121		18,637,303		9,181,878		14,404,626
Real estate investment funds		15,038,495		19,448,396		14,453,363		17,925,770
Temporary Investments		2,690,000		2,690,000		2,478,053		2,478,053
Total	\$	139,302,574	\$	168,336,635	\$	129,184,977	\$	152,594,077

6. Mortgage-Backed Securities

The Plan invests in mortgage-backed securities representing interests in pools of mortgage loans as part of its interest rate risk management strategy. The mortgage-backed securities are not used to leverage investments in fixed income portfolios. The mortgage-backed securities held by the Plan were guaranteed by federally sponsored agencies such as: Government National Mortgage Association, Federal National Mortgage Association and Federal Home Loan Mortgage Corporation.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

7. <u>Designations</u>

A portion of the fiduciary net position is designated for benefits that accrue in relation to the DROP accounts as further described in Note 1. Allocations to the DROP plan accounts for the fiscal year ended September 30, 2018 are presented below as determined in the most recent annual valuation available for the fiscal year then ended:

	 2018
Designated for DROP accounts (fully funded)	\$ 9,873,114
Total designated fiduciary net position	9,873,114
Undesignated fiduciary net position	 159,926,206
Total fiduciary net position	\$ 169,799,320

8. Investment Measurement at Fair Value

Fair Value Hierarchy

The accounting standards break down the fair value hierarchy into three levels based on how observable the inputs are that make up the valuation. The most observable inputs are classified as Level 1 where the unobservable inputs are classified as Level 3.

Level 1 inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

As a general rule, any asset that has a daily closing price and is actively traded will be classified as a Level 1 input.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

8. Investment Measurement at Fair Value (Continued)

Fair Value Hierarchy (Continued)

Level 2 inputs are inputs (other than quoted prices included within Level 1) that are observable for the asset or liability, either directly or indirectly. Inputs to the valuation methodology include: (1) quoted market prices for similar assets or liabilities in active markets, (2) quoted prices for identical or similar assets or liabilities in active markets, (3) inputs other than quoted prices that are observable for the asset or liability, and (4) inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

As a general rule, if an asset or liability does not fall into the requirements of a Level 1 or Level 3 input, it would default to Level 2. With Level 2 inputs, there is usually data that can be easily obtained to support the valuation, even though it is not as easily obtained as a Level 1 input would be.

Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

As a general rule, Level 3 inputs are those that are difficult to obtain on a regular basis and require verification from an outside party, such as an auditor or an appraisal, to validate the valuation.

Net asset value (NAV) is a common measurement of fair value for Level 1, Level 2, and Level 3 investments. A fund's NAV is simply its assets less its liabilities, and is often reported as a per share amount for fair value measurement purposes. The Plan would multiply the NAV per share owned to arrive at fair value. Level 1 investment in funds such as mutual funds report at a daily NAV per share and are actively traded. NAV also comes in to play for Level 2 and 3 investments. As a matter of convenience (or referred to in accounting literature as a "practical expedient"), a Plan can use the NAV per share for investments in a nongovernmental entity that does not have a readily determined fair value, such as an alternative investment. Investments measured at NAV as a practical expedient would be excluded from the fair value hierarchy because the valuation is not based on actual market inputs but rather is quantified using the fund's reported NAV as a matter of convenience.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

8. Investment Measurement at Fair Value (Continued)

Fair Value Hierarchy (Continued)

The Plan categorizes its fair value measurement within the fair value hierarchy established by generally accepted accounting principles. The Plan has the following total recurring fair value measurements as of September 30, 2018 and 2017:

- *Debt securities* Debt securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used by International Data Pricing and Reference Data, LLC. (Interactive Data) to value securities based on the securities' relationship to benchmark quoted prices.
- *Mutual funds* The rationale for inclusion in Level 1 or Level 2 points to the unobservable inputs involved in mutual fund pricing. Mutual funds do not trade using bid and ask, as with ETF's or common stock. Instead, the prices are determined by the net asset value of the underlying investments at the close of business for the next day's open. The underlying assets themselves may include a variety of Level 1 and Level 2 securities and some may be valued using matrix pricing which interpolates the price of a security based on the price of similar securities.
- *Fixed income funds* Valued using pricing models maximizing the use of observable input for similar securities. This includes basing value on yield currently available on comparable securities of issues with similar credit ratings.
- *Equity funds* Valued at market prices for similar assets in active markets.
- *Common stock* Valued at quoted market prices for identical assets in active markets.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

8. Investment Measurement at Fair Value (Continued)

Fair Value Hierarchy (Continued)

		Fair Value Measurements Using						
Investments by fair value level	September 30, 2018	Quoted Prices in Active Markets Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)				
U.S. Government obligations	\$ 14,383,457 \$	5 14,383,457 \$	- \$	-				
U.S. Government agency obligations	3,191,399	-	3,191,399	-				
Mortgages	3,139,767	-	3,139,767	-				
Corporate bonds	13,711,570	-	13,711,570	-				
Domestic stock	60,752,478	60,752,478	-	-				
Domestic equity investment funds	32,382,265	-	32,382,265	-				
International equity investment fund	18,637,303	-	18,637,303	-				
Temporary investment funds	 2,690,000		2,690,000	-				
Total investments measured at fair value level	148,888,239 \$	5 75,135,935 \$	73,752,304 \$					
Investment measured at the net asset value (NAV):								
Real estate investment funds ^(A)	 19,448,396							
Total investments measured at NAV	 19,448,396							
Total investments measured at fair value	\$ 168,336,635							

^(A)Liquidity and Notice is quarterly.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

8. Investment Measurement at Fair Value (Continued)

Fair Value Hierarchy (Continued)

	2018		Redemption	Redemption
	Fair	Unfunded	Frequency (if	Notice
Investments measured at NAV	 Value	Commitments	currently eligible)	Period
Real estate investment funds:				
U.S. Real Estate Investment Fund, LLC	\$ 9,312,540 \$	-	Quarterly	60 days
American Realty Fund	5,766,006			
UBS Property Fund	 4,369,850	-	Quarterly	60 days
Total investments measured at NAV	\$ 19,448,396 \$	-		

The real estate investment funds are open end, commingled private equity real estate portfolios. These REIT-based funds are structured as limited partnerships. Their primary focus is to invest in well-based income producing properties within major U.S. markets. The fair values of the investments in these funds have been determined using the NAV per unit of the trusts ownership interest in partners' capital. The investments of the fund are valued quarterly. Withdrawal requests must be made 60 days in advance and may be paid in one or more installments.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

8. Investment Measurement at Fair Value (Continued)

Fair Value Hierarchy (Continued)

	_	Fair Value Measurements Using					
Investments by fair value level	 September 30, 2017	Quoted Prices in Active Markets Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)			
U.S. Government obligations	\$ 8,289,513	\$ 8,289,513 \$	- \$	-			
U.S. Government agency obligations	10,962,111	-	10,962,111	-			
Mortgages	7,308,167	-	7,308,167	-			
Corporate bonds	11,391,287	-	11,391,287	-			
Domestic stock	42,455,242	42,455,242	-	-			
Domestic equity investment funds	37,379,308	-	37,379,308	-			
International equity investment fund	14,404,626	-	14,404,626	-			
Temporary investment funds	2,478,053	-	2,478,053	-			
Total investments measured at fair value level	 134,668,307	\$ 50,744,755 \$	83,923,552 \$	-			
Investment measured at the net asset value (NAV):							
Real estate investment funds ^(A)	 17,925,770						
Total investments measured at NAV	 17,925,770						
Total investments measured at fair value	\$ 152,594,077						
^(A) Liquidity and Notice is quarterly.							

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

9. Plan Amendments

The Plan was amended during the fiscal year ended September 30, 2018 as follows:

- A. Creation of a share plan.
- B. Address the effects of benefit limits under Section 415 of the Internal Revenue Code.
- C. Creation of terminal leave amounts for the receipt of accumulated leave.
- D. Creation of a self directed drop option.
- E. Mutually agree on the use of the excise tax rebate.

These changes did not result in an actuarial cost to the Town.

The Plan was not amended during the fiscal year ended September 30, 2017.

10. <u>Plan Termination</u>

Although it has not expressed an intention to do so, the Town may terminate the Plan in accordance with the provisions of the Plan and the provisions of Florida Statutes §185.37. In the event that the Plan is terminated or contributions to the Plan are permanently discontinued, the benefits of each police officer in the Plan at such termination date would be non-forfeitable.

11. Commitments and Contingencies

As described in Note 1, certain members of the Plan are entitled to refunds of their accumulated contributions, without interest, upon termination of employment with the Town prior to being eligible for pension benefits. At September 30, 2018 aggregate contributions from active members of the Plan were approximately \$12,473,000. The portion of these contributions which are refundable to participants who may terminate with less than ten years of service has not been determined.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

12. <u>Risk and Uncertainties</u>

The Plan invests in a variety of investment funds. Investments in general are exposed to various risks, such as interest rate, credit, and overall volatility risk. Due to the level of risk associated with certain investments, it is reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect the amounts reported in the statements of fiduciary net position.

13. Net Pension Liability of the Town

The components of net position liability of the Town of Davie (Town) as of September 30, 2018 were as follows:

86.47%

Total Pension Liability Plan Fiduciary Net Position	\$ 196,372,184 169,799,320
Town's Net Pension Liability	\$ 26,572,864
Plan Fiduciary Net Position as a percentage of	

total pension liability

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

13. <u>Net Pension Liability of the Town (Continued)</u>

<u>Actuarial Assumptions</u> - The total pension liability at September 30, 2018 was determined by an actuarial valuation as of October 1, 2017 with update procedures used to roll forward the total pension liability to September 30, 2018. The actuarial valuation used the following actuarial assumptions:

• •	
Inflation	3.00%
Salary increases	5.50%, including inflation
Projected COLAs	2.0%, with a limit of 130% of the original pension benefit, the first annual COLA will commence on the fifth anniversary of retirement.
Investment rate of return	7.50%, compounded annually, net of pension plan
	investment expense, including inflation.
Mortality	Pre-Retirement:
	Female Non-Disabled: RP2000 Generational, 100%
	Combined Health with White Collar Adjustment,
	Scale BB
	Male Non-Disabled: RP2000 Generational, 10% Combined Healthy with White Collar Adjustment/ 90% Combined Healthy with Blue Collar Adjustment, Scale BB.
	Post-Retirement:
	Female Non-Disabled: RP2000 Generational, 100% Annuitant White Collar, Scale BB
	Male Non-Disabled: RP2000 Generational, 50% Annuitant White Collar/ 50% Annuitant Blue Collar, Scale BB
	Pre-Retirement & Post-Retirement:
	Female Disabled: 60% RP2000 Disabled Female set forward two years/ 40% Annuitant White Collar with no setback, no projection scale.
	Male Disabled: 60% RP2000 Disabled Male setback four years/ 40% Annuitant White Collar with no setback, no projection scale

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

13. <u>Net Pension Liability of the Town (Continued)</u>

The long-term expected rate of return on pension plan investments was determined using a buildingblock method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major 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. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2018 are summarized in the following table:

Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
50.00%	Domestic stocks	4.58%
12.50	International stocks	7.90
10.00	Real estate	7.80
27.50	Domestic bonds	2.00

<u>Discount Rate</u> - The discount rate used to measure the total pension liability was 7.50 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. 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.

NOTES TO FINANCIAL STATEMENTS September 30, 2018 and 2017

13. <u>Net Pension Liability of the Town (Continued)</u>

<u>Sensitivity of the Net Pension Liability to Changes in the Discount Rate</u> - The following presents the net pension liability of the Town, calculated using the discount rate of 7.50%, as well as what the Town's net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower (6.50 percent) or 1-percentage point higher (8.50%) than the current rate.

	Current Single Discount					
	 1% Decrease 6.50%	_	Rate Assumption 7.50%		1% Increase 8.50%	
Town's Net Pension Liability	\$ 50,662,473	\$	26,572,864	\$	6,288,932	

REQUIRED SUPPLEMENTARY INFORMATION

September 30, 2018

SCHEDULE OF CHANGES IN THE CITY'S NET PENSION LIABILITY

Last Four Fiscal Years

	-	September 30, 2018	September 30, 2017	September 30, 2016	September 30, 2015
Total pension liability:					
Service cost	\$	4,574,502 \$	4,567,940 \$	4,172,243 \$	4,080,569
Interest		13,924,970	12,970,707	11,090,225	10,820,739
Changes of benefit terms		-	-	-	-
Difference between expected and actual experience		497,848	5,256,258	229,588	(698,115)
Changes of assumptions		3,193,344	5,409,186	-	21,912,756
Benefit payments, including refunds of employee contributions	-	(6,438,104)	(6,036,548)	(6,691,573)	(7,246,724)
Net change in total pension liability		15,752,560	22,167,543	8,800,483	28,869,225
Total pension liability - beginning	-	180,619,624	158,452,081	149,651,598	120,782,373
Total pension liability ending (a)	\$	196,372,184 \$	180,619,624 \$	158,452,081 \$	149,651,598
Plan fiduciary net position:					
Contributions - employer	\$	6,223,000 \$	6,472,000 \$	5,672,500 \$	5,797,600
Contributions - state		938,653	905,664	858,749	784,261
Contributions - participants		1,382,963	1,417,689	1,359,147	1,128,753
Contributions - buy-back		643,473	686,748	365,598	256,789
DROP account		431,816	129,155	221,440	106,274
Net investment income		13,757,131	16,147,239	10,696,539	844,685
Benefit payments, including refunds of employee contributions		(6,438,104)	(6,036,548)	(6,691,573)	(7,246,724)
Administrative expense		(200,479)	(197,732)	(192,512)	(152,164)
Other	-	-		-	-
Net change in plan fiduciary net position		16,738,453	19,524,215	12,289,888	1,519,474
Plan fiduciary net position - beginning	-	153,060,867	133,536,652	121,246,764	119,727,290
Plan fiduciary net posiiton - ending (b)	\$	169,799,320 \$	153,060,867 \$	133,536,652 \$	121,246,764
Net pension liability (asset) (a) - (b)	\$	26,572,864 \$	27,558,757 \$	24,915,429 \$	28,404,834

September 30, 2018

SCHEDULE OF RATIOS Last Four Fiscal Years

	September 30, 2018	September 30, 2017	September 30, 2016	September 30, 2015
Plan fiduciary net position as a percentage of the total pension liability	86.47%	84.74%	84.28%	81.02%
Covered employee payroll	\$ 15,388,083 \$	15,278,632 \$	14,068,195 \$	13,411,960
Net pension liability as a percentage of covered payroll	172.68%	180.37%	177.10%	211.79%

September 30, 2018

SCHEDULE OF CONTRIBUTIONS Last Four Fiscal Years

	September 30, 2018		September 30, 2017	September 30, 2016	September 30, 2015
Actuarially determined contributions	\$	7,170,624 \$	7,272,120 \$	6,418,604 \$	6,361,217
Contributions in relation to the actuarially determined contributions		7,170,624	7,272,120	6,418,604	6,361,217
Contribution deficiency (excess)	\$	\$	\$	\$	
Covered employee payroll	\$	15,388,083 \$	15,278,632 \$	14,068,195 \$	13,411,960
Contributions as a percentage of covered employee payroll	_	46.60%	47.59%	45.62%	47.40%

NOTES TO SCHEDULE OF CONTRIBUTIONS

The actuarially determined contribution rates in the schedule of the Town's contributions are calculated as of October 1, 2015. Unless otherwise noted above, the following actuarial methods and assumptions were used to determine the contribution rates reported in the Schedule of the Town's contributions.

1. Mortality:

<u>Pre-Retirement:</u>
Female Non-Disabled: RP2000 Generational, 100% Combined Health with White Collar Adjustment, Scale BB
Male Non-Disabled: RP2000 Generational, 10% Combined Healthy with White Collar Adjustment/ 90% Combined Healthy with Blue Collar Adjustment, Scale BB.
<u>Post-Retirement:</u>
Female Non-Disabled: RP2000 Generational, 100% Annuitant White Collar, Scale BB
Male Non-Disabled: RP2000 Generational, 50% Annuitant White Collar/ 50% Annuitant Blue Collar, Scale BB
<u>Pre-Retirement & Post-Retirement:</u>
Female Disabled: 60% RP2000 Disabled Female set forward two years/ 40% Annuitant White Collar with no setback, no projection scale.
Male Disabled: 60% RP2000 Disabled Male setback four years/ 40% Annuitant White Collar with no setback, no projection scale

2. Interest to be Earned by the Fund:

7.50%, compounded annually, net of investment expenses.

3. Allowances for Expenses or Contingencies:

Estimated by net of investment fees paid during the previous year.

NOTES TO SCHEDULE OF CONTRIBUTIONS (CONTINUED)

4. Employee Withdrawal Rates:

Withdrawal rates were used in accordance with tables per the following illustrative example:

	Withdrawal Rates		
	Per 100 Employees		
Age	Male	Female	
20	8.4	14.0	
25	5.6	8.4	
30	3.9	5.6	
35	2.8	3.9	
40	1.7	2.8	
45	1.1	1.7	
50	0.2	1.1	
55 &	0.0	0.0	

5. Assumption on Pensionable Overtime Hours

Each member is assumed to continue to work the same number of overtime hours as in the most recent plan year, subject to the 300 hours maximum, for each future year.

6. Disability Rates:

The 1985 Disability Study - Class 1 with separate male and female rates were used. 75% of disabilities assumed to be service incurred, 25% assumed to be non-service incurred.

NOTES TO SCHEDULE OF CONTRIBUTIONS (CONTINUED)

7. Salary Increase Factors:

Current salaries were assumed to increase at a rate of 5.5% per year until retirement.

8. Rates of Retirement:

The following are the retirement rates assumed for the participants eligible for retirement:

Participants with 20 or more		Participants with less than			
years of Benefit Service		20 years of Benefit Service			
Years of Service	Percentage Retiring	Age	Percentage Retiring		
Service	Keuring	Age	Kettring		
20	65%	50-54	25%		
21-24	50%	55-59	50%		
25 and	100%	60 and	100%		
over		over			

However, active participants eligible for retirement that have less than 20 years of Benefit Service as of the valuation date are assumed to have a minimum of one year future service.

9. Asset Valuation Method:

The actuarial value of assets is determined by smoothing the difference between actual investment earnings and assumed investment return over three (3) years. This method was adopted effective October 1, 2007 with no phase-in. The resulting value would then be limited to between 80% and 120% of market value.

NOTES TO SCHEDULE OF CONTRIBUTIONS (CONTINUED)

10. <u>Actuarial Cost Method</u>:

Normal Retirement, Termination, Disability and Pre-Retirement Death Benefits: Entry-Age-Actuarial Cost Method.

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his date of hire to his retirement age to fund his estimated benefits, assuming the plan ad always been in effect. The normal cost of the plan is the sum of the individual normal costs for all active participants. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the actuarial value of assets of the plan.

11. Marriage Assumptions:

100% of active participants were assumed married, with husbands three (3) years older than wives.

12. <u>Valuation of Normal Form of Payment:</u>

The normal form of payment is valued as an unreduced joint and 60% survivor annuity benefit for married members. For unmarried members, the normal form of payment is valued as ten years certain and life annuity.

- 13. Changes from October 1, 2016 Actuarial Valuation:
 - A. Mortality table changed.
 - B. The assumed fund investment return was changed from 7.60% to 7.50%.

SCHEDULE OF INVESTMENT RETURNS

Last Four Fiscal Years

	September 30, 2018	September 30, 2017	September 30, 2016	September 30, 2015
Annual money-weighted rate of return				
net of investment expenses	8.90%	11.80%	8.40%	0.50%

ADDITIONAL INFORMATION

SCHEDULE OF INVESTMENT AND ADMINISTRATIVE EXPENSES Years ended September 30, 2018 and 2017

	2018		2017	
	Investment Expenses	Administrative Expenses	Investment Expenses	Administrative Expenses
Actuary fees	\$ -	\$ 49,352	\$	\$ 53,840 -
Administrator's fees	-	48,000	-	48,000
Audit fees	-	26,500	-	27,500
Custodial fees	53,559	-	64,459	-
Dues and subscriptions	-	1,875	-	1,845
Directors' insurance	-	9,149	-	9,585
Investment managers' fees:				
TAMRO Capital Partners	-	-	-	-
Lyrical Asset Management, L.P.	91,117	-	67,868	-
Garcia Hamilton & Associates, L.P. (FX)	95,915	-	123,020	-
Garcia Hamilton & Associates, L.P. (EQ)	-	-	32,984	-
Johnstone Asset Management Corporation	124,699	-	106,165	-
State Street Global Advisors	-	-	1,523	-
PNC Capital Advisors, LLC	81,550	-	74,539	-
LMCG Investments, LLC	68,332	-	56,019	-
Clearbridge Investments, LLC	124,975	-	72,882	-
Legal fees	-	31,139	-	30,297
Office expenses	-	660	-	260
Performance monitor	75,863	-	69,085	-
Seminar and travel expense		33,804		26,405
	<u>\$ 716,010</u>	<u>\$ 200,479</u>	<u>\$ 668,544</u>	<u>\$ 197,732</u>
Percentage of				
plan net position	0.42%	0.12%	0.44%	0.13%