



ALLEGHENY COUNTY
EMPLOYEES' RETIREMENT SYSTEM

Financial and Actuarial Report

for the Fiscal Years Ended
December 31, 2016 & 2017

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Letter from the Board President

To the Members, Survivors and Beneficiaries of the Plan:

I would like to recognize the hard work and dedication of the men and women that serve on the RBAC. Working with our investment advisor/consultant Wilshire Associates, the fund surpassed 900 million dollars at the end of 2017. While the current year showed positive returns, markets can be volatile. Due to these fluctuating market conditions, the RBAC works diligently with the Contribution Rate Working Group to ensure that the plan is consistently funded. Our goal is to always strengthen the growth and long-term stability of the plan.

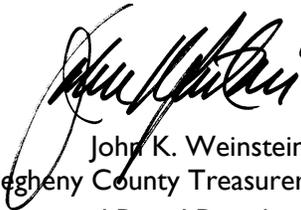
Based on the report and recommendation of the Contribution Rate Working Group, The RBAC acted to raise the contribution rate in 2018. Today, the Allegheny County and Airport Authority employees contribute 9.5% of pensionable wages to the retirement fund and their employers provide the remaining 9.5% contribution. The RBAC Actuary (Cowden Associates, Inc.), the County's Department of Budget and Finance, the County Controller's Office, the County Treasurer's Office, County Council and investment advisor/consultant Wilshire Associates will always work together to ensure the plan be around into perpetuity.

Member education remains a primary focus of the RBAC. Our staff have been visiting various County facilities to educate County and Airport Authority Employee's on their retirement benefits. Seminars are held on financial wellness to assist with retirement preparation, as well as completing your retirement paperwork.

I would also like to express appreciation to the staff of the County Executive, Treasurer and Controller's Office. Their continued support and the relationships that have been forged are crucial to the Plan and its fiscal soundness.



It is my honor to serve you as President/Treasurer and on behalf of the trustees of the Retirement Board.


John K. Weinstein
Allegheny County Treasurer
and Board President

Report of Independent Auditors

We have audited the accompanying financial statements of the Allegheny County Employees' Retirement System (Retirement System) as of December 31, 2017 and 2016, and for the years then ended, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Allegheny County Employees' Retirement System's 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 of these financial statements based on our audit. We conducted our audit 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 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 principles 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 fiduciary net position of the Allegheny County Employees' Retirement System as of December 31, 2017 and 2016, and the changes in its fiduciary net position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed more fully in the disclosure about the discount rate in Note 6 to the financial statements, the Allegheny County Employees' Retirement System is projected to reach a depletion date of 2044. Our opinion is not modified with respect to this matter.

Other Matters

Accounting principles generally accepted in the United States of America require that the schedule of changes in net pension liability, the schedule of employer contributions, and the schedule of annual money-weighted rate of return on pages 18 through 21 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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.

Audited Financial Results

STATEMENTS OF FIDUCIARY NET POSITION DECEMBER 31,

ASSETS

	<u>2017</u>	<u>2016</u>
Cash and Cash Equivalents	\$ 15,395,727	\$ 13,761,337
Investments (at fair value):		
Equity:		
U.S. Common and Preferred Stock	124,424,207	96,260,497
American Depositary Receipts	2,061,761	1,680,703
S&P 500 Index Fund	89,140,130	74,569,550
Non-U.S. Stocks and Equity Mutual Funds	149,232,859	135,501,881
Bonds and Notes:		
Corporate Certificates of Deposit	2,728,503	1,650,446
U.S. Government and Related Agency Debt	21,624,759	20,163,391
Fannie Mae and Freddie Mac Debt	7,143,227	8,573,919
Fixed Income Mutual Funds	145,338,006	142,682,678
U.S. Corporate Debt Instruments	66,272,117	61,731,245
Non-U.S. Government and Corporate Debt	17,531,906	17,449,596
Other Investments:		
Hedge Funds	1,697,855	-
Real Estate Investment Trusts	97,462,544	93,744,640
Commodities Funds	16,579,156	15,852,623
Venture Capital / Private Equity	183,560,628	174,693,094
Receivables:		
Amounts Due from Brokers for Sold Investments	992,067	383,935
Accrued Interest and Dividends	1,439,384	1,539,674
Accrued Employer Contributions	857,302	709,395
Accrued Employee Contributions	857,302	709,308
Other Assets	<u>10,057</u>	<u>478</u>
Total Assets	<u>\$ 944,349,497</u>	<u>\$ 861,658,390</u>

LIABILITIES

Liabilities:		
Vouchers Payable	\$ 21,401	\$ 397,444
Accrued Payroll	3,292	1,513
Payroll Withholdings	942	911
Accrued Liabilities	2,690,992	2,772,128
Amounts Due to Brokers for Purchased Investments	953,771	712,109
Other Liabilities	<u>24,258</u>	<u>4,269</u>
Total Liabilities	<u>\$ 3,694,656</u>	<u>\$ 3,888,374</u>

FIDUCIARY NET POSITION

Net Position Restricted for Pensions:	\$ <u>940,654,841</u>	\$ <u>857,770,016</u>
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Audited Financial Results

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION DECEMBER 31,

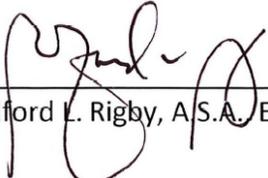
	<u>2017</u>	<u>2016</u>
Additions:		
Contributions:		
Employee	\$ 35,184,080	\$ 34,102,601
Employer	<u>35,123,482</u>	<u>33,975,748</u>
Total Contributions	<u>70,307,562</u>	<u>68,078,349</u>
Investment Income:		
Net Appreciation in Fair Value of Investments	107,999,823	51,018,397
Interest	4,715,004	4,499,890
Dividends	6,119,044	6,756,439
Partnership Income	7,452,936	7,931,578
Stock Loan Income	<u>89,956</u>	<u>114,385</u>
	126,376,763	70,320,689
Less: Investment Management Fees	<u>10,972,813</u>	<u>4,213,570</u>
Total Investment Income - net	115,403,950	66,107,119
Miscellaneous Income	<u>206,171</u>	<u>55,139</u>
Total Additions - Net	<u>185,917,683</u>	<u>134,240,607</u>
Deductions:		
Benefit Payments	96,244,878	91,072,767
Refunds of Employee Contributions	5,333,853	5,464,912
Salaries, Wages and Related Expenses	179,947	252,836
Administrative & Miscellaneous Expenses	<u>1,274,180</u>	<u>1,128,731</u>
Total Deductions	<u>103,032,858</u>	<u>97,919,246</u>
Net Increase in Net Position	82,884,825	36,321,361
Net Position Restricted for Pensions at Beginning of Year	<u>857,770,016</u>	<u>821,448,655</u>
Net Position Restricted for Pensions at End of Year	<u>\$ 940,654,841</u>	<u>\$ 857,770,016</u>

Source: Allegheny County Employees' Retirement System December 31, 2017 Audit performed by Case Sabatini. Full Audit can be viewed at www.alleghenycounty.us/retirement/reports/reports.aspx or pdf by request

Actuarial Certification

I certify that I have performed an actuarial valuation of the above plan as of January 1, 2017 in accordance with generally accepted actuarial principle applied consistently with the preceding valuation. I meet the Qualification Standards of the American Academy of Actuaries to render this actuarial opinion.

I certify that the information in this Executive summary is consistent with the formal report of the valuation.



Bradford L. Rigby, A.S.A., E.A., M.A.A.A.

11/09/2017
Date: _____



Frank Canonico, E.A., M.A.A.A.

11/9/2017
Date: _____



Paul D. Halliwell, Project Coordinator

11/9/2017
Date: _____

Summary of Principal Actuarial Results

	January 1, 2017	January 1, 2016
Demographics		
Active Participants		
Number	7,246	7,168
Average Age	47.2	47.5
Average Age at Hire	34.6	34.6
Average Past Service	12.7	12.9
Total Payroll (prior year)	\$365,353	\$349,522
Covered Payroll*	378,412	361,964
Average Pay	50,421	48,761
Median Pay	45,842	44,439
Inactive Participants		
Number in Pay Status	4,790	4,654
Average Age in Pay Status	73.8	74.0
Average Monthly Benefit	\$1,626	\$1,561
Median Monthly Benefit	1,339	1,282
Police/Fire	2,799	2,581
Sheriffs/Guards/POs	2,548	2,305
Non-uniformed	1,121	1,091
Number of Terminated Vested	232	255
Average Age of Terminated Vested	49.7	51.4
Average Monthly Benefit	\$1,013	\$1,344
Median Monthly Benefit	798	1,068
Police/Fire	1,982	2,579
Sheriffs/Guards/POs	955	2,112
Non-uniformed	750	1,030
Total Participants	12,268	12,077
Total Active Member and Employer Contributions		
Dollars (actual)		\$68,078
Dollars (expected)	\$68,114	
Percentage of Payroll	18%	18%

*Projected to next year using salary increase assumption.

Summary of Principal Actuarial Results

	January 1, 2017	January 1, 2016
	(\$ Amounts in 000s)	(\$ Amounts in 000s)
Interest Rate	<u>7.75%</u>	<u>7.75%</u>
Accrued Benefit Funded Status		
Accrued Benefit Liability	<u>\$1,353,760</u>	<u>\$1,281,734</u>
Market Value of Assets	<u>857,770</u>	<u>821,449</u>
Accrued Benefit Funded Ratio	<u>63.4%</u>	<u>64.1%</u>
Accrued Liability Funded Status		
Actuarial Liability	<u>\$1,555,335</u>	<u>\$1,483,630</u>
Actuarial Value of Assets	<u>857,770</u>	<u>821,449</u>
Funded Ratio	<u>55.2%</u>	<u>55.4%</u>
Total Funded Status		
Value of Total Liabilities	<u>\$1,794,577</u>	<u>\$1,713,600</u>
Value of Total Assets		
(Market Value of Existing Assets and Present		
Value of Future Contributions)	<u>1,317,420</u>	<u>1,259,531</u>
Total Ratio	<u>73.4%</u>	<u>73.5%</u>
Total Normal Cost		
Dollar	<u>\$33,040</u>	<u>\$32,032</u>
% of Payroll	<u>8.73%</u>	<u>8.85%</u>

Source: Allegheny County Employees' Retirement System Actuarial Report January 1, 2017 performed by Cowden. Full Report can be viewed at <http://www.alleghenycounty.us/retirement/reports/reports.aspx> or pdf by request.

Consultant Reports

Wilshire Associates Incorporated

Economy & Markets:

The U.S. economy continued to grow in 2017, with Real GDP growth of 2.3%. GDP growth accelerated from the 1.6% rate of 2016, which was the lowest rate since a similar figure in 2013. Consumer spending was the largest contributor to growth, while an increase in the trade deficit was the most significant detractor, despite a weakening U.S. Dollar. Job growth continued to slow in 2017, but still managed to add 2.1 million jobs.

Represented by the Wilshire 5000 Total Market Index, 2017 marked the U.S. stock market's ninth consecutive annual gain since a -37.2% decline in 2008, returning 21.0% in 2017. With only four trading days resulting in losses of 1% or more, and the largest U.S. equity market sell-off of the year being only 2.75%, 2017 was one of the least volatile years in nearly four decades. In a reversal from 2016, large cap stocks outperformed small cap stocks, while growth stocks outpaced value stocks during the calendar year.

The global developed stock markets produced strong returns in 2017, with the MSCI EAFE Index posting a return of 25.0%. Emerging markets had their best year since the financial crisis, returning 37.3% for the year after also being up double digits in 2016. A weakening U.S. Dollar was a tailwind for U.S. investors in overseas equities, as currency boosted the return on the MSCI EAFE Index by nearly 10.0%.

After drifting lower for most of 2017, 10-year U.S. Treasury yields reversed course in the fourth quarter and returned to roughly where they began, reaching 2.40% by year-end. The Federal Open Market Committee decided to increase their overnight rate by 0.25% three times in 2017, ending with a target range of 1.25-1.50%. Credit spreads continued to tighten during the year in both investment grade and high yield bonds.

RBAC Total Fund:

The Retirement Board of Allegheny County (RBAC) Pension Fund ended 2017 with a total asset value of \$940.6 million, up \$82.9 million for the year. Additionally, RBAC paid out over \$96 million in benefit payments during 2017.

The RBAC Total Fund outperformed its benchmark in 2017, returning 14.1% vs. the benchmark which returned 12.2%. Relative to an institutional fund peer universe, however, RBAC lagged the median plan in the TUCS Total Return of Master Trusts – Public Universe due in large part to dedicated allocations to inflation-oriented assets. While more equity-oriented funds outperformed in 2017, Wilshire believes RBAC's more balanced approach is better positioned to succeed over the long run. The largest contributors to absolute and relative performance included allocations to public equities, all posting double-digit returns and many managers outperforming their respective benchmarks.

The U.S. Equity Composite outperformed the Wilshire 5000 Index during 2017, returning 22.1% while the index returned 21.0%. Active management in the U.S. Equity composite added value in 2017, and ranked in the 16th percentile of a peer group universe of other U.S. equity portfolios. Earnest Small-Cap Value was the best relative performer in the composite, outperforming the benchmark Russell 2000 Value Index by 13.9% (21.8% vs. 7.8%).

The Non-U.S. Equity Composite continued to outperform its benchmark in 2017, returning 31.0% while the index returned 27.8%. Baillie Gifford was the largest contributor to relative performance, outperforming by 7.6% compared to the benchmark MSCI All Country World ex U.S. (Net) Index (34.8% vs. 27.2%).

Within Core Fixed Income, the Composite was in line with the benchmark in 2017, as each returned 3.5%. Federated Investors was the best performing manager again in 2017, outperforming the Bloomberg Barclays U.S. Aggregate by 0.8% and outperforming over 75% of its peers.

Consultant Reports (Cont.)

Wilshire Associates Incorporated (Cont.)

RBAC's dedicated allocation to High Yield proved to be additive to the RBAC Total Fund again in 2017, returning 6.3%. The RBAC High Yield Composite, however, lagged the benchmark and its peer group through a challenging environment, where higher quality active managers struggled to keep pace with the index.

Asset Strategy Consultants

The Retirement Board of Allegheny County (RBAC) portfolio continues to expand the amount invested in Alternative Investment partnerships. We are generally pleased with the reports and updates we receive from the General Partners for these investments.

These Investments are having a positive impact on the total portfolio performance. The Partnerships own a small interest in many companies and economic sectors.

The RBAC has approved several new allocations to General Partners. Now that distributions are picking up, we will continue to add new funds opportunistically to get to our target allocation. We expect to make allocations to new partnerships as we move into 2018.

The existing investments are continually monitored for liquidity, potential risks, and the stability of the investment team. The roster of Alternative Investments creates a well-diversified pool for the Pension Plan. We hope 2018 will build on the success of 2017.

PFM Asset Management

EMERGING PROGRAM

As of December 31, 2017, local, emerging and minority manager assets totaled \$48.6 million, or 5.2% of total plan assets. The County has approximately \$22 million of capital left to allocate to local/emerging/minority managers in order to reach the program's goal of representing 7.5% of total plan assets. During this year, we added two fixed income managers to the program. Altair Management Partners (funded in January 2017) and FNB Investment Advisors (funded in June 2017).

BROKERAGE PROGRAM

The Retirement Board of Allegheny County requires that investment managers direct 25% of their trades to Local, Minority, and Women-owned brokerage firms. For the calendar year 2017, 19.96% of the total commission dollars were directed to approved brokers, representing \$21,405 paid to local or minority-owned firms.

For more information and reports, please see the Retirement Office website.

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WALTER SZYMANSKI**

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pension@alleghenycounty.us**

**Website:
alleghenycounty.us/retirement**

**Solicitor:
CAMPBELL DURRANT BEATTY
PALOMBO & MILLER, P.C.**

**Actuary:
COWDEN**

**Financial Consultants:
WILSHIRE ASSOCIATES INC
ASSET STRATEGY CONSULTANTS
PFM ASSET MANAGEMENT**

**Auditor:
CASE SABATINI**

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Retirement Board of Allegheny County



County Treasurer **JOHN WEINSTEIN**.....*President, Treasurer*
TED PUZAK.....*Vice President, Elected Member*
County Controller **CHELSA WAGNER**.....*Secretary*
County Executive **RICH FITZGERALD**.....*Member*
FRANK DICRISTOFARO..... *Elected Member*
County Chief of Staff **JENNIFER LIPTAK**.....*Executive Appointee*
Council Budget Manager **SARAH ROKA**.....*Council Appointee*