

Isiah Leggett County Executive Timothy L. Firestine Chief Administrative Officer

March 23, 2018

Members of the Montgomery County Council

I am pleased to present to you the Quarterly Report of the Montgomery County Employees' Retirement System ("ERS") for the quarter ended December 31, 2017. This quarterly report is designed to assist you in understanding the current status of the ERS. This report was prepared pursuant to the provisions of the Montgomery County Code.

History

The Employees' Retirement System was established in 1965 as a cost-sharing multiple-employer defined benefit pension plan providing benefits to the employees of Montgomery County and other agencies or political subdivisions who elect to participate. The System is closed to employees hired on or after October 1, 1994, except public safety bargaining unit employees and employees who elect to participate in the Guaranteed Retirement Income Plan ("GRIP"). There were approximately 5,750 ERS and GRIP active members and 6,530 retirees participating in the ERS as of December 31, 2017.

Performance Results

The total return achieved by the ERS' assets for the quarter was a gain of 4.19%, 47 basis points ahead of the 3.72% gain recorded by the policy benchmark. For the one-year period ending December 31, 2017 the ERS' gross return (before fees) was a gain of 14.90%, 204 basis points ahead of the 12.86% gain recorded by the policy benchmark. The one-year gross return places the ERS' performance slightly below median of the universe of comparable pension funds constructed by the Board's consultant, Wilshire Associates. Our annualized performance of 7.93% for the three-year period and 8.82% for the five-year period ranked slightly above and slightly below the median, respectively, of the universe. The annualized return for the ten-year period was 6.91%, and ranks in the top decile of Wilshire's Large Public Funds Universe. The asset allocation on December 31, 2017 was: Domestic Equities 19.1%, International Equities 15.5%, Global Equities 3.2%, Fixed Income 22.4%, Inflation Linked Bonds 11.8%, Public Real Assets 10.3%, Private Equity 7.3%, Private Real Assets 4.8%, Private Debt 1.1%, Opportunistic 2.9%, and Cash 1.6%. We estimate that the funded status of the ERS was 96.0% as of December 31, 2017. The actual funded status will be affected by the ERS' membership experience, as well as demographic and economic changes and may be higher or lower when calculated by the actuary during the next valuation.

Major Initiatives

During the quarter, the following commitments were made: \$19 million to Clearlake Capital Partners V, LP, a distressed restructuring private equity fund, \$13 million to Thoma Bravo Discover II, LP, a lower-mid market buyout private equity fund, and \$11 million to Magna Hotel Fund VI, LP, a hospitality-focused private real asset fund. In addition, Morgan Stanley Investment Management Inc. was hired to manage a global listed infrastructure mandate.

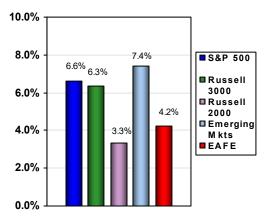
Capital Markets and Economic Conditions

Economic data reflected that GDP increased at an annualized rate of 2.6% rate in the fourth quarter of 2017, falling short of market expectations of 3.0%. The biggest driver of the disappointing GDP report was a surge in imports, which is subtracted from the GDP figure. Imports grew at a 13.9% pace, which

represents the fastest rate since 2010. Consumer spending, which accounts for more than two-thirds of the U.S. economy, grew at a 3.8% rate, which points to a growing and strong economy. The economy added 647,000 jobs during the quarter, an increase from Q3's 425,000 gain. The U.S. unemployment rate held steady at 4.1%, which is a 17-year low. Inflation came in below expectations as CPI decreased from 2.2% to 2.1% during the quarter amid a slowdown in gasoline and fuel prices. Core CPI, which excludes the costs of food and energy, slightly increased from 1.7% to 1.8% during the quarter due to rising medical care costs. The housing market continues to recover as new housing starts averaged 1.25M in Q4 relative to 1.17M in Q3. However, housing starts are still 50% below their levels seen before the bursting of the housing bubble in 2007.

Public Equity Markets: U.S. equities continued their strong performance in Q4, advancing to all-time highs following robust corporate earnings as well as hopes for tax reform. The low volatility environment that had been present in the first three quarters persisted into the end of the year, with the VIX, a measure of equity market volatility, reaching all-time lows during Q4. Equities were supported by positive macroeconomic data, included a strong Q3 GDP report as well as strength in the employment data. The

Index Return Qtr - 12/31/17



top performing sectors for the quarter were the more cyclical sectors of Consumer Discretionary, Technology, and Financials while the defensive sectors of Utilities, Telecom, and Health Care lagged. During the quarter large cap outperformed small cap and value outperformed growth. Our combined domestic equity performance was a gain of 5.49%, underperforming the 6.34% gain of the Russell 3000 Index. The underperformance was driven by active management underperformance in the large cap space.

Developed international and emerging equity markets took divergent paths in Q4 as emerging market equities outperformed developed international markets. Within developed markets, Asia was a standout performer driven by Japan and Australia while Europe underperformed due to weakness in France, Switzerland, and Germany. European weakness was attributed to strength in the currency impacting exporters as well as disappointing corporate

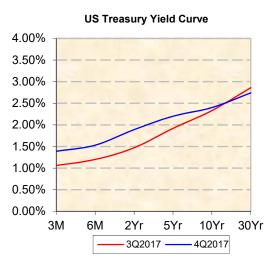
earnings within Health Care, Telecom, and Financials. Japan rallied sharply as it became clear that Shinzo Abe's Liberal Democratic Party would regain their electoral majority, indicating continued monetary and fiscal stimulus. Much like the U.S., the top performing sectors in Q4 were cyclicals, particularly Energy, Materials, and Consumer Discretionary. The more defensive Utilities, Health Care, and Telecom sectors failed to participate in the rally. Emerging markets continued to rally in the quarter led by India and China. India performed well as the government announced plans to inject capital into the struggling state-owned banks. China performed well due to a favorable Q3 GDP report. Latin America underperformed for the quarter, primarily due to currency weakness in Mexico and Brazil. Our combined international equity performance was a gain of 5.73%, outperforming the 5.17% gain recorded by the benchmark index. Our global equity allocation returned 5.08%, underperforming the 5.73% gain of the MSCI ACWI benchmark.

Private Equity: Private equity funds raised \$453 billion globally in 2017, the largest amount of capital raised in any year. 2017 also marks as the second consecutive year in which annual fundraising has surpassed \$400 billion, a landmark that had only been achieved in 2007-2008. Even though fewer funds closed in 2017 than in 2016, 50% of the funds exceeded their target and 21% achieved 125% or more of their fundraising goal. Fundraising in North America reached a new high in 2017 with the \$272 billion aggregate capital raised representing a 23% increase versus 2016, and 60% share of all capital raised during the year. Buyout funds in North America raised \$176 billion, a 12% increase from 2016. With \$24.7 billion, Apollo IX was the largest private equity fund ever raised. Venture capital deals completed globally reached \$182 billion, which was 28% higher than 2016 and the highest level in record – the rise in value was driven by over \$1 billion transactions. Meanwhile, the number of deals completed represented a four-year low. VC deal flow continued to shift from the North American markets towards European and emerging markets such as China and India, with these two emerging regions raising 75% more capital in 2017 than in 2016, securing \$28 billion through 56 funds.

During the quarter, our private equity managers called a combined \$20.4 million and paid distributions of \$25.4 million. Our current allocation to private equity is 7.30%, with a market value of \$300.2 million. From its 2003 inception through September 30, 2017, the total private equity program (including fund-of-funds) has generated a net internal rate of return of 9.8% versus a 12.3% return for the dollar-weighted public market equivalent (the Russell 3000 Index plus 300 bps). The direct private equity program generated a 18.1% return versus 17.1% for the benchmark since inception (2009).

Opportunistic: Hedge funds, as measured by the HFRI Fund of Funds Composite Index, gained 1.56% in the fourth quarter. On a sub-strategy basis, the HFRI Event-Driven Index rose 1.68%, the HFRI Relative Value Index gained 0.82%, the HFRI Equity Hedge Index advanced 3.66%, and the HFRI Macro Index was up 0.89%. The opportunistic portfolio returned 1.76% in the fourth quarter, beating the HFRI Fund of Funds Index by 20 bps primarily due to outperformance from the portfolio's Relative Value and Fund of Funds managers.

Fixed Income: The yield curve flattened during the fourth quarter driven primary by a rise in short and intermediate bond yields. The increase in shorter-term yields is attributed to the transition away from years of accomodative monetary policy by the Fed. While Treasury yields have moved up, credit spreads remained suppressed, leading to the outperformance of corporate bonds relative to Treasuries. The yield on the 30year bond decreased by 12 bps during the quarter, and ended the period at 2.74%. The spread between 2-year and 10-year Treasuries, the main gauge of the yield curve, narrowed by 35 bps to 51 bps. For the guarter, the 2-year Treasury yield ended at 1.89%, up by 42 bps from the prior period, while the 10-year Treasury yield rose by 28 bps to 2.40%. For the guarter, the Merrill Lynch High Yield II Constrained Index rose by 0.41%, the Barclays Aggregate was up 0.39%, and the Barclays Long Govt/Credit Index recorded a gain of 2.84%. The fixed income portfolio's performance for the quarter was a gain of 1.81%,



outperforming the custom benchmark by 32 bps. Our global inflation-linked bond portfolio, combined with a portable alpha overlay, recorded a gain of 5.61% for the quarter, outperforming the custom benchmark's gain of 4.26%.

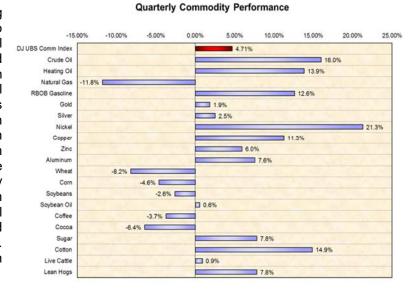
Private Debt: Private debt fundraising in the fourth quarter saw 36 funds reach a final close, securing a total of \$35 billion in capital commitments from investors. The majority of the funds that closed (57%) were direct lending, with mezzanine, distressed/special situations, and venture debt funds rounding out the remainder of the fundraising. The largest close was a €4.2 billion direct lending fund focused on providing senior secured loans to European corporate borrowers. Geographically, of the 36 funds that closed, 26 were North American focused. During the quarter, our private debt managers called a combined \$5.5 million and paid distributions of \$4.0 million. Our current allocation to private debt is 1.10%, with a market value of \$45.1 million. From inception through September 30, 2017, the private debt program generated a net internal rate of return of 10.5% versus a 9.9% return for the dollar-weighted public market equivalent benchmark (BofA Merrill Lynch High Yield Master II Constrained + 300 bps).

Private Real Assets: The NCREIF Property Index (NPI), a measure of private commercial real estate properties in the U.S., gained 1.8% in the fourth quarter 2017, slightly up from 1.7% from the previous quarter. For the calendar year 2017, the NPI returned 7.0%. The Industrial sector continued to lead performance by property type with total returns of 3.3% in the fourth quarter. Office experienced the second strongest quarterly return by property sector at 1.7%. Apartments, Retail and Hotel returned 1.6%, 1.3% and 1.0%, respectively. Hotels were also the lowest performing property type during 2017, as increasing supply weighed on the industry's ability to push higher average daily rates. Within the U.S. upstream oil and gas sector, there was an uptick in the number of deals announced in the fourth quarter 2017 versus the same period one-year ago; however, total deal value declined by 47%. As oil prices have moved up and stabilized, upstream operators are taking the opportunity to re-invest in core assets and strengthen balance sheets rather than focus on deal making. During the quarter, our private real assets managers called a combined \$22.8 million and paid distributions of \$17.2 million. Our current allocation to private real

QUARTERLY REPORT

assets is 4.8%, with a market value of \$197.9 million. From its 2006 inception through September 30, 2017, the private real assets program (including fund-of-funds) has generated a net internal rate of return of 5.6% versus a 6.6% gain for the long-term benchmark CPI plus 500 bps. Underperformance is primarily due to real estate commitments prior to the financial crisis of 2008 and a private oil and gas fund in 2010.

Public Real Assets: The Bloomberg Commodity Index gained 4.7% due to strength in the energy and industrial metal sectors. Energy prices rallied on voluntary OPEC and Russian production cuts and U.S. crude oil supply declines. Industrial metals appreciated on global growth in manufacturing and greater than expected economic expansion in China. Nickel led the sector advance on expectations for increased battery demand for electric vehicles. Grain prices fell on abundant global supplies. Precious metals advanced due to U.S. dollar weakness. Livestock prices appreciated on strong demand for U.S. meat.



Global listed real estate securities as measured by the FTSE EPRA/NAREIT Developed Index advanced 3.6%, led by strong performance in the German listed residential sector, the French and London office sectors and Hong Kong developers. The German listed residential sector benefited from strong underlying residential market fundamentals and low German Bund rates. The French office sector profited from recovering business sentiment and improving rental growth. In comparison the London office sector rebounded after weak third quarter performance and low valuations. Hong Kong real estate continues to do well as developers are benefitting from farmland conversions and receiving strong demand for their condo projects. Japanese real estate was mixed with Japanese developers outperforming JREITs. U.S. REITs were positive but underperformed the index due to the rising interest rate environment and decelerating growth in the core real estate sectors. The U.S. regional mall sector outperformed due to robust M&A activity.

Master Limited Partners (MLPs), as measured by the Alerian MLP Total Return Index, declined 1.0% due to weak investor sentiment.

For the quarter, the public real asset portfolio advanced 4.60%, outperforming the custom benchmark by 106 bps due to outperformance by our active commodity, REIT, and MLP managers.

Additions

The primary sources of additions for the ERS include contributions from members and employers and investment income. The following table displays the source and amount of additions for the quarter ending December 31, 2017 and fiscal year-to-date.

Employees' Retirement System		
Contributions and Investment Income	(millions)	

	Qtr 12/31/2017		Fiscal YTD	
Employer Contributions	\$	23.0	\$	47.1
Member Contributions		7.3		14.6
Net Investment Gain		161.7		253.9
	\$	192.0	\$	315.6

QUARTERLY REPORT

Deductions

The deductions from the Employees' Retirement System include the payment of retiree and survivor benefits, participant refunds, and administrative expenses.

Employees'	Retiren	nent System
Deductions	by Type	(millions)

	Qtr 12/31/2017		Fiscal YTD	
Benefits	\$	59.8	\$	118.6
Refunds		1.3		1.9
Administrative Expenses		0.9		1.6
	\$	62.0	\$	122.1

Outlook

In a widely anticipated move, the U.S. Federal Reserve ("Fed") voted to raise short-term interest rates by a quarter point at their most recent December policy meeting. The Fed's benchmark interest rate is now targeted between a range of 1.25% - 1.50%. Additionally, the Fed also increased their GDP growth expectations for 2018 – raising the estimate from 2.1% to 2.4%, as new accommodative fiscal policies were passed through Congress. Presently, the U.S. economy has been growing at a slightly higher rate than the revised estimates, turning in two consecutive quarters of growth in excess of 3%. The Fed also boosted their 2018 inflation forecast by 0.1% to 1.7% - still below their long-term target rate of 2%. The expected unemployment rate was further cut to 3.9% for 2018 and 2019, reflecting the positive outlook for overall growth.

The European Central Bank ("ECB") continued to leave its benchmark interest rate unchanged at 0%. The ECB's monetary policy path is slightly behind that of the U.S. Fed, as the ECB is expected to continue purchasing €30 billion of assets each month through their quantitative easing program until at least September 2018. Even with much uncertainty remaining related to Brexit, the Bank of England's ("BoE") policy committee raised interest rates by a quarter point to 0.50%. This represents the first increase since 2007, and was largely in response to inflation breaching the upper band of the BoE's target range. The outlook for the Japanese economy remains strong after current PM Abe's snap general election victory in October. Major economic metrics such as the unemployment rate, declined to a cyclical low of 2.7%. Inflation, retail sales, and industrial production data were also all reported ahead of expectations. A survey record by the Bank of Japan indicated the strongest sentiment by large manufacturing companies in more than 11 years which could provide a future boost for corporate expenditures and business investment.

Sources: BlackRock, Bloomberg, Bridgewater, Eagle, FRM, Gryphon, JP Morgan MSCI, NCREIF, Northern Trust, Oil & Gas Investor, PE Hub, Private Equity Analyst, Pitchbook, Preqin, PwC Deals, Real Capital Analytics, RE Alert, S&P Schroders, T. Rowe Price, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, Wilshire Associates.

EMPLOYEES' RETIREMENT SYSTEM STATEMENTS OF FIDUCIARY NET POSITION

December 31, 2017

Assets

Equity in pooled cash and investments	\$ 2,347,964
Investments: Northern Trust Aetna Fidelity - Elected Officials Plan Fidelity - DRSP/DROP	 4,111,843,358 868,290 662,273 9,485,419
Total investments	4,122,859,340
Contributions receivable	7,156,403
Total assets	4,132,363,707
Liabilities	
Benefits payable and other liabilities	 5,403,325
Net position restricted for pensions	\$ 4,126,960,382

EMPLOYEES' RETIREMENT SYSTEM STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

December 31, 2017

	Quarter	Fiscal YTD
Additions		
Contributions:		
Employer	\$ 22,951,369	\$ 47,107,220
Member	7,324,767	14,592,213
Total contributions	30,276,136	61,699,433
Investment income	166,122,730	263,316,911
Less investment expenses	4,417,940	9,435,070
Net investment income	161,704,790	253,881,841
Total additions	191,980,926	315,581,274
Deductions		
Retiree benefits	44,738,985	88,408,072
Disability benefits	12,628,063	25,380,314
Survivor benefits	2,446,539	4,858,781
Refunds	1,280,462	1,877,178
Administrative expenses	881,328	1,601,958
Total deductions	61,975,377	122,126,303
Net increase	130,005,549	193,454,971
Net position restricted for pensions		
Beginning of period	3,996,954,833	3,933,505,411
End of period	\$ 4,126,960,382	\$ 4,126,960,382