OFFICES OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

Richard Madaleno
Chief Administrative Officer

April 28, 2023

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, 2022. 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 6,367 ERS and GRIP active members and 6,804 retirees participating in the ERS as of December 31, 2022.

Performance Results

The total return achieved by the ERS' assets for the quarter was a gain of 3.11%, 59 basis points behind the 3.70% gain recorded by the policy benchmark. For the one-year period ending December 31, 2022 the ERS' gross return (before fees) was a loss of 11.95%, 115 basis points ahead of the 11.39% loss recorded by the policy benchmark. The one-year gross return places the ERS' performance in the third quartile of the universe of comparable pension funds constructed by the Board's consultant, NEPC. Our annualized performance of 5.99% for the three-year period and 6.82% for the five-year period, ranked in the second and first quartile, respectively, of the universe. The annualized return for the ten-year period was 7.82%, ranking in the second quartile of the universe. The asset allocation on December 31, 2022, was: Domestic Equities 10.5%, International Equities 11.2%, Global Equities 3.4%, Fixed Income 12.7%, Emerging Market Debt 1.2%, Inflation Linked Bonds/Gold 14.9%, Public Real Assets 8.0%, Private Equity 17.8%, Private Real Assets 9.6%, Private Debt 3.4%, Opportunistic 5.1%, and Cash 2.2%. We estimate that the funded status of the ERS was 94.3% based on a market value of assets and 101.3% on an actuarial (smoothed) value of assets as of December 31, 2022. 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

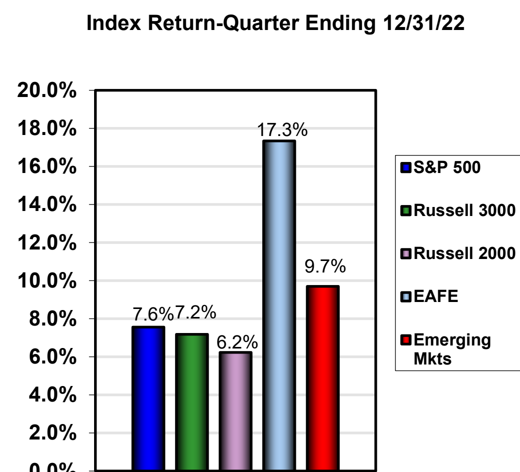
During the quarter, the ERS committed $30 million to Longpoint Realty Fund III, a private real asset fund, $29 million to Astara Capital I, a private equity fund, and $16 million to Banner Ridge Secondary Fund V, a private debt fund.

Capital Markets and Economic Conditions

Fourth quarter GDP for 2022 increased at an annual rate of 2.7% according to the second estimate released by the Bureau of Economic Analysis, this is slightly lower than the original advance estimate of 2.9% but is only slightly behind economist predictions of 2.8%. The updated estimate reflects a downward revision to consumer spending that was partly offset by an upward revision to nonresidential fixed investment, imports (which are a subtraction to GDP) were also revised up. The growth in real GDP in the fourth quarter reflects increases in private inventory investment, consumer spending, nonresidential fixed investment, federal government spending and state and local government spending. These gains were partly offset by decreases in residential fixed investment and exports. The increase in private inventory investment was led by manufacturing (mainly petroleum and coal products) as well as mining, utilities, and construction industries (led by utilities). The increase in consumer spending reflected an increase in services that was partly offset by a decrease in goods. Within services, the increase was led by health care as well as housing and utilities. Within goods, the leading contributor to the decrease was "other" durable goods (mainly jewelry). By the end of Q4 2022, the unemployment rate has remained steady, ending at 3.5%, the same level seen at the end of Q3. In December, seven states had over-the-month unemployment rate increases, the largest of which was in Nevada (+0.3 percentage point). Five states had over-the-month decreases, the largest of which was in Maryland (-0.3 percentage point). The U.S. labor market added 223,000 jobs in December on a seasonally adjusted basis according to the Labor Department. This amount is in line with economists' expectations but is the smallest gain since President Biden took office.

The consumer price index (CPI) rose 6.5% from a year ago, in line with the 6.5% Dow Jones estimate and down 0.1% from the previous month. The annual change was lower than the peak of 9.1% seen in June but still hovering near the highest levels since the early 1980s. A steep drop in gasoline was responsible for most of the monthly decline. Prices at the pump tumbled 9.4% for the month and are now down 1.5% from a year ago. Closely watched shelter costs, which make up about one-third of CPI, rose 0.8% in December and are up 7.5% from a year ago. Used vehicle prices, one of the initial drivers of inflation, were down 2.5% for the month and are now down 8.8% year over year. Medical care services increased 0.1% after dropping in the previous two months. Apparel and transportation services rose by 0.5% and 0.2%, respectively, and are still up 14.6% from a year ago. However, airline fares fell 3.1% for the month, but are still up 28.5% from a year ago. Core CPI, which excludes volatile food and energy costs, rose 5.7% from a year ago but was also in line with estimates. The housing picture has continued its trend down with sales of previously owned homes falling 1.5% in December from November, to a seasonally adjusted annual rate of 4.02 million units. That decline marks a record 11th straight month of sales declines. Sales were lower by 34% year-over-year. Despite the slowdown in sales, inventory continues to stay low. There were 970,000 homes for sales at the end of December, down 13.4% from November and up 10.2% from December 2021. Home prices in December were up 2.3% from a year ago, while still up, the year-over-year increase is much lower than it was in Q2 or Q3, which saw prices up 14.2% and 8.4%, respectively. The median single-family existing home price in the fourth quarter was $366,900, down from the peak seen in June of $413,800.

Public Equity Markets: U.S. equities advanced with the S&P 500 Index posting a 7.6% gain for the quarter. Besides strong corporate earnings, indications that the pace of policy tightening would slow and signs that elevated inflation could be cooling positively impacted investor confidence. Energy stocks rallied with Exxon and Chevron posting record profits in the quarter. Energy, industrial, and materials were among the strongly performing sectors of the S&P Index while the consumer discretionary and communication sectors posted negative returns. Both large and small cap value stocks outperformed their growth counterparts. Our combined domestic equity performance was a gain of 7.2%, in line with the 7.2% performance of the Russell 3000 Index.



International developed markets strongly outperformed their U.S. counterparts, rallying 17.3% for the quarter. Denmark and Austria were among the best performing markets generating above 30% returns in USD terms. In Europe,

equity gains were supported by hopes that inflation may be peaking in Europe as well as in the U.S. Japanese stocks advanced with most companies reporting strong earnings, especially the larger ones, which benefited from yen's weakness. Almost all Asia ex Japan markets ended the quarter in positive territory. Hong Kong markets advanced after the U.S. and Chinese leaders signaled a desire to improve U.S.-China relations at a meeting ahead of the G20.

Emerging markets underperformed international developed markets, but outperformed U.S. markets. Most of the returns were generated in November, as investor sentiment improved on hopes that the Fed would slow its policy tightening, any recession would be shallow, and markets would begin to discount the recovery. Optimism faded somewhat in December, however, when the Fed reiterated its commitment to fighting inflation. Up close to 63% during the quarter, Turkiye was the best performing emerging market as its central bank continued to loosen monetary policy. Poland and Hungary rebounded following months of underperformance because of the war in Ukraine. China also outperformed thanks to reversal of its zero-COVID policy as well as new measures to support the property sector. Indian shares slipped on negative investor sentiment due to macro uncertainty, elevated valuations, and downside risk to earnings. Brazil lagged because of policy uncertainty around the election of President Lula. Our combined international equity performance was a gain of 13.5%, underperforming the 14.6% gain recorded by the benchmark. Our global equity allocation recorded a gain of 8.9%, underperforming the 9.8% gain of the MSCI ACWI Index.

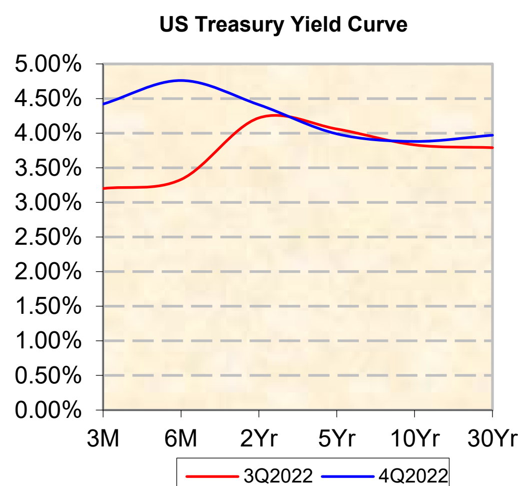
Private Equity: During the fourth quarter, a total of 461 funds reached their final close, securing $183 billion in commitments. Relative to Q3, the number of funds raised decreased 4%, however, there was a significant slowdown relative to the same quarter a year prior, with the number of funds raised decreasing 57%. The aggregate capital raised in Q4 increased 3% relative to the prior quarter but decreased 9% compared to the same period last year. North America continued to dominate the fundraising landscape, representing 76% of the aggregate capital raised and 60% of the total number of funds raised. U.S. buyout deal activity rebounded during the quarter as the aggregate deal volume increased 32% to $84 billion and the average deal size increased 50% to $1,152 million. However, deal volume was still 31% lower than Q4 2021. The number of buyout deals in Q4 decreased 5% to 992 relative to the prior quarter. Buyout multiples in the U.S. remained relatively stable from the prior quarter, coming in at 11.5x Enterprise Value-to-EBITDA. The technology sector continues to be the most robust representing 29% of aggregate U.S. buyout deal value. Buyout exit activity in the fourth quarter included 79 exits, a 50% drop from the prior quarter, however, aggregate exit values jumped 50% to $56 billion, and the average exit size increased 118% to $2,955 million. The global private equity sector has $2.5 trillion in dry powder and continues to hover around record highs.

U.S. venture fundraising activity slowed down more than traditional private equity in Q4 as the number of funds raised decreased 16% to 158, aggregate capital raised decreased 68% to $10.9 billion, and the average fund size shrank 60% to $83 million. U.S. venture deal making also decreased for the quarter with the number of consummated deals down 13% to 1,447, aggregate deal value down 16% to $33 billion, although average deal size increased 3% to $28 million.

During the quarter, our private equity managers called a combined $27.3 million and paid distributions of $23.6 million. Our current allocation to private equity is 17.8%, with a market value of $818 million. From its 2003 inception through September 30, 2022, the total private equity program (including fund-of-funds) has generated a net internal rate of return of 14.0% versus a 12.6% return for the dollar-weighted public market equivalent (the Russell 3000 Index plus 300 bps). The direct private equity program, which began in 2009, has generated a 24.4% return versus 14.8% for the benchmark.

Hedge Funds: For the quarter, industry-wide hedge funds rose by 2.3% based on the HFRI Composite Index. On a sub-strategy basis, the Event-Driven Index gained 3.1%, the Relative Value Index advanced 1.5%, the Macro Index declined 1.3%, and the Equity Hedge Index returned 4.3%. The System's diversifying hedge funds recorded a gain of 2.4% versus a gain of 1.5% for the Conservative Index. The diversifying portfolio outperformance is primarily attributable to strong fund selection within the global macro and quantitative sectors. The System's directional hedge funds recorded a loss of 1.3% compared to the positive 2.7% return for the Strategic Index. The directional underperformance is primarily attributable to negative fund selection within the equities sector.

Fixed Income: The yield curve shifted upwards noticeably for the quarter across shorter maturities as the Fed hiked rates while the economy and employment remained strong. For example, the yield on the 3-month bill maturities moved up 122 bps, while the 10- and 30-year bond maturities only advanced 5 and 18 bps respectively. Given the steeper rise in short-term yields, the spread between 2-year and 10-year Treasuries, the main gauge of the yield curve, further inverted and ended the quarter at -53 bps, 14 bps tighter than the previous quarter levels. By the end of the quarter, the 10-year Treasury yield was 3.88% whereas the 30-year Treasury yield was 3.97%. The high yield portfolio's performance for the quarter was a gain of 4.5%, outperforming the Merrill Lynch High Yield II Constrained Index by 0.5%. The long duration portfolio's return for the quarter was a gain of 1.3%, outperforming the custom long duration benchmark by 0.3%. The emerging market debt portfolio gained 9.8%, outperforming the JPM EMBI Global Diversified benchmark return by 1.7%. Our global inflation-linked bond portfolio, combined with a portable alpha overlay, recorded a loss of 3.9%, underperforming the custom benchmark by 6.1%. The underperformance was driven primarily by the overlay, where the strategy's alphas in developed market currencies, emerging market currencies, nominal short rates, and commodities detracted.



Private Debt: Q4 saw 51 funds raising $39 billion with an average size of $1 billion. North America remained the number one market for private debt with 30 funds raising $23 billion of capital in Q4. European debt funds managed to raise $13 billion over the same period while Asian funds raised only $1.3 billion. Average fund sizes in the U.S. and Europe were $1.1 billion and $2.1 billion, respectively. Direct lending funds led fundraising with $19 billion, followed by special situations funds with $9 billion and mezzanine funds that raised $4 billion in Q4. Some of the largest funds closed during the calendar year were GS Mezzanine Partners VIII with $15 billion and Clearlake Capital Partners VII with $14.1 billion. Dry powder as of November 2022 was $414 billion, with $120 billion related to direct lending, which continued to remain the highest amount ever recorded by Preqin.

During the quarter, our private debt managers called a combined $16.8 million and paid distributions of $9.9 million. Our current allocation to private debt is 3.4%, with a market value of $157.5 million. From 2013 through September 30, 2022, the private debt program generated a net internal rate of return of 12.2% versus an 5.2% return for the dollar-weighted public market equivalent benchmark (ICE BofA Merrill Lynch High Yield Master II Constrained + 300 bps).

Private Real Assets: During the quarter, natural resource prices continued to moderate; however, producers are still enjoying strong margins at current price levels. For Q4 2022, natural resource fund raising picked up as managers raised $35 billion across 32 fund closures compared to $13 billion across 22 fund closures for the prior quarter. Within infrastructure, funds with energy merchant risk outperformed as wholesale energy prices are higher than best case scenarios. From a fundraising perspective, 27 funds raised $32 billion compared to 19 funds raising $13 billion in the prior quarter. Real estate prices were down 3.5% for the quarter driven by a 4.8% decline in office values, industrial properties down 3.6%, and apartments down 3.2%. The only sector to advance was hotels, which was up 3.4%. From a fundraising perspective, 121 funds raised $55 billion compared to 110 funds raising $33 billion for the prior quarter.

During the quarter, our private real asset managers called a combined $11.1 million and paid distributions of $11.0 million. Our current allocation to private real assets is 9.6%, with a market value of $442.3 million. From its 2006 inception through September 30, 2022, the total private real assets program (including fund-of-funds) has generated a net internal rate of return of 7.4% versus a 7.6% gain for the long-term benchmark (CPI plus 500 bps).

Public Real Assets: Global listed real estate securities as measured by the FTSE EPRA/NAREIT Developed Index posted a gain of 6.9% for the quarter, underperforming global equities by over 2.5% but outperforming bonds (4.5%). Europe was the best regional performer (13.6%), supported by currency tailwinds in both the euro and British pound. Though inflation remains resilient, the European economy has

slowed less than had been predicted earlier in the year. United Kingdom markets have also stabilized as the third U.K. government of 2022 adopted a more conventional approach to economic policy versus its predecessor. Retail was also a strong performer as investors had renewed appetite for value stocks. APAC was also a strong performer (9.0%) lifted by a rally in rate sensitive Australian REITs. Australian REITs were fueled by a lower-than-expected inflation print and dovish comments from the Reserve Bank of Australia. Hong Kong was the other standout performer as China executed an abrupt U-turn away from its zero-COVID-19 policy and launched significant measures to prop up the beleaguered property market. The Americas posted positive returns (4.9%) as well but was a relative laggard. While the pace of interest rate hikes slowed in December, upward revisions to the Fed's terminal rate and unemployment forecasts limited market gains. Forward REIT earnings estimates also continued to weaken, despite robust earnings from most companies, reflecting nervousness about a looming economic slowdown as well as financing cost pressures. Strength from retail and industrial was driven by healthy leasing activity and guidance upgrades. Meanwhile, several residential REITs suffered from elevated expenses and signs of moderating pricing power. Office stocks also lagged following layoff announcements from high-profile technology companies, remote work headwinds, and larger negative estimate revisions.

Listed infrastructure securities posted a gain of 9.6% during the quarter as measured by the Dow Jones Brookfield Global Infrastructure Index, this was a similar gain as global equities (9.9%) and significantly ahead of bonds (4.5%). Overall, for the quarter, European regulated utilities, airports, water & waste, electricity transmission & distribution, ports and gas midstream outperformed the index, while communications, other utilities, pipeline companies, gas distribution utilities and toll roads underperformed. The broad absolute strength of listed infrastructure can be attributed to a combination of resilient earnings results and a more constructive view on cost of capital, with long-term interest rates peaking in late-October/early November.

For the quarter, the public real asset portfolio gained 8.0%, underperforming the custom benchmark's gain of 8.2% by 0.2% primarily due to underperformance by our Global Listed REIT Manager, Principal.

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, 2022, and fiscal year-to-date.

Employees' Retirement System
Contributions and Investment Income (millions)

	Qtr 12/31/2022	Fiscal YTD
Employer Contributions	$ 13.1	$ 26.8
Member Contributions	9.2	17.4
Net Investment Income (Loss)	134.1	(105.4)
	$ 156.4	$ (61.2)

Deductions

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

Employees' Retirement System
Deductions by Type (millions)

	Qtr 12/31/2022	Fiscal YTD
Benefits	$ 74.2	$ 148.9
Refunds	4.0	7.1
Administrative Expenses	0.7	1.5
	$ 78.9	$ 157.5

Outlook

2022 was the worst year on record for bonds driven by the Fed's aggressive interest rate hikes which drove bond prices down, especially long-term bonds. Equities did not fare any better, with all three of the major U.S. indices posting their worth returns since 2008. Markets during the year were driven by the energy price shock from the Russia/Ukraine war, high inflation, and large central bank rate hikes. These themes, combined with increased fears of a global recession, are likely to continue capturing the headlines and driving markets in 2023. The OECD has forecasted that global growth will fall to 2.2% in 2023 before rebounding to 2.7% in 2024 and central banks seem biased towards further tightening, which could potentially result in overshooting, putting further downward pressure on growth.

The Fed hiked rates twice during the fourth quarter, with the federal funds rate ending the year at 4.5-4.75%, an increase of 425 bps year-over-year. Statements by Federal Reserve Chair Jerome Powell make it clear that the Fed wants growth to slow for a time so that inflation can subside and will continue to raise rates until it achieves this goal. Experts believe the fed funds rate will eventually rise to 5.1% with no cuts until 2024. Previously, they had projected a terminal rate of 4.6%. While it is still possible for inflation and growth indicators to slow by enough to allow the Fed to pivot to a more dovish position, most economists are expecting a mild recession at a minimum. The OECD sees U.S. GDP growth falling from 1.8% in 2022 to 0.5% in 2023.

In the eurozone, the outlook has improved, and it now seems the region could narrowly avoid the technical recession that economists had forecasted for the turn of the year. The region's success in increasing gas storage ahead of the winter, the mild weather, and the energy savings measures implemented within the industrial sector, have all contributed to this improved outlook. After reaching an all-time high of 10.6% in October, inflation has decreased, and should continue to fall to 5.6% in 2023 and to 2.5% in 2024. Despite this encouraging news, more European Central Bank (ECB) tightening seems likely given the labor market pressures: the unemployment rate, at 6.6%, is the lowest since the launch of the common currency. The market expects the ECB deposit rate will peak at 2.75-3.0% by the second quarter. These rate hikes could weigh on business activity and exert a drag on investment.

The outlook is markedly darker for the UK. The IMF is predicting the economy will contract by 0.6% in 2023, making the UK the only major economy forecasted to post negative growth in 2023. A combination of monetary tightening, fiscal tightening, the energy price shock, and supply-side constraints from Brexit are likely to drive the economy into a recession. Labor-supply shortages have driven the unemployment rate to the lowest level since 1973, which in turn continues to put upward pressure on inflation. Markets expect the Bank of England (BOE) to lift the rates from 3% currently to 4.5% by the second quarter of next year to tackle inflation.

Japan is set for a year of softer economic growth in 2023. Domestic demand is weakening and there is slowing demand for Japanese exports. Unlike the rest of the world, Japan is still operating below capacity. This means it doesn't face the risk of monetary overtightening. Although inflation has been rising, most of it is driven by imported inflation. The country has been an outlier relative to its developed market peers as the Bank of Japan (BoJ) has been able to maintain its accommodative monetary policy, a policy experts expect will continue in 2023. A growth tailwind for Japan could be a revival of the tourism sector following the depreciation in the currency and the recently reopened borders. The IMF is predicting the economy will grow at 1.8% in 2023 before falling to 0.9% in 2024.

The outlook for emerging market economies in 2023 will largely depend on the trajectory of inflation. Eastern Europe, Africa, and Latin America faced a more pronounced inflationary cycle in 2022, and higher interest rates combined with cost-of-living increases are expected to weaken domestic demand in these regions. Having faced a more benign inflationary cycle, Middle Eastern and Asian economies are expected to face less headwinds in 2023. This outlook is dependent on several factors. First, continued conflict in Ukraine combined with China reopening could drive up commodity prices, creating challenges for commodity importers and opportunities for exporters. Second, China reopening could be a boost for emerging market exporters. Finally, slower growth in the U.S. and Europe could contribute to a weaker external environment which could harm emerging market economies, although a weaker dollar could be a tailwind.

Sources: BlackRock, Bloomberg, Bridgewater, FRM, MSCI, NCREIF, Northern Trust, T. Rowe Price, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, The World Bank, European Central Bank, Bank of Japan, Albourne, MSIM, Principal, JP Morgan, Goldman Sachs, Preqin, Pitchbook, Standard and Poor's.

EMPLOYEES' RETIREMENT SYSTEM
STATEMENTS OF FIDUCIARY NET POSITION

December 31, 2022

Assets	
Equity in pooled cash and investments	$ 643,625
Investments:	
Northern Trust	4,599,864,525
Aetna	584,388
Fidelity - Elected Officials Plan	749,137
Fidelity - DRSP/DROP	16,132,601
Total investments	4,617,330,651
Contributions receivable	3,982,907
Total assets	4,621,957,183
Liabilities	
Benefits payable and other liabilities	4,449,148
Net position restricted for pensions	**$ 4,617,508,035**

EMPLOYEES' RETIREMENT SYSTEM
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the Quarter Ended December 31, 2022

	Quarter	Fiscal YTD
Additions		
Contributions:		
Employer	$ 13,078,289	$ 26,758,929
Member	9,180,675	17,389,316
Total contributions	22,258,964	44,148,245
Investment Income (Loss)	137,615,726	(94,462,478)
Less investment expenses	3,538,190	10,967,309
Net investment Income (Loss)	134,077,536	(105,429,787)
Total income (loss)	156,336,500	(61,281,542)
Deductions		
Retiree benefits	56,403,972	113,214,277
Disability benefits	14,892,618	29,795,689
Survivor benefits	2,916,968	5,855,639
Refunds	3,978,329	7,124,319
Administrative expenses	727,204	1,536,435
Total deductions	78,919,091	157,526,359
Net Income (Loss)	**77,417,409**	**(218,807,901)**
Net position restricted for pensions		
Beginning of period	**4,540,090,626**	**4,836,315,936**
End of period	**$ 4,617,508,035**	**$ 4,617,508,035**