Investment Performance Review Period Ending March 31, 2023

# **Austin Police**



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**1st Quarter 2023 Market Environment** 



#### The Economy

- US GDP growth is expected to wane in the coming quarters as the impact from higher interest rates continues to spread through the broader economy. The final measure of 1st quarter GDP was revised downward to 1.7%. Global GDP growth also remains challenged with higher energy prices continuing to act as a headwind, especially in Europe. China has fully reopened after almost three years of COVID-19 restrictions, which boosted estimates and performance for the region.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter with two successive 0.25% increases in the Fed Funds rate in January and February. While the Fed's policy remains hawkish on fighting high inflation, the press release from the February meeting took on a more dovish tone.
- The US labor market continues to show its resiliency, adding roughly 236 thousand jobs during the 1st quarter. As a result, the unemployment rate fell to 3.5% in March. Noticeably, the labor market is showing signs of declining growth which could soon signal an inflection point in economic output and the fight against inflation.
- The global banking sector came under duress in the 1st quarter of 2023, triggered by the second and third-largest regional bank failures in US history. The combination of aggressive Fed rate hikes and questionable capital deployment by Silicon Valley Bank led to a flurry of depositor withdrawals and rocked general confidence in the overall banking system.

### Equity (Domestic and International)

- US equities moved broadly higher during the 1st quarter despite concerns regarding stubbornly high inflation, the potential for additional rate hikes, slowing global GDP growth, and shaken confidence in the global banking system. Large cap growth was the best performing domestic segment of the equity market during the period while small cap value performed the worst.
- International stocks also experienced strong returns during the 1st quarter. US Dollar (USD) and local currency (LCL) performance were both solid as the USD remained largely unchanged for the quarter. Non-US GDP growth, particularly in Europe, remained under pressure as restrictive central bank policies and elevated energy prices acted as a headwind. Finally, China's reopening from its restrictive COVID-19 policies is well underway and has proven to be a greater tailwind to the region than previously expected.

#### **Fixed Income**

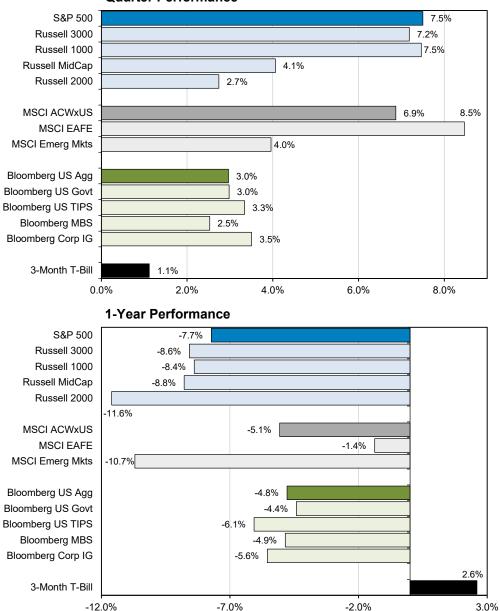
- While inflation continues to decline quarter-over-quarter, the Fed maintained their inflation-fighting policy stance, increasing interest rates twice, totaling 0.50%. Despite the short-term increases, yields beyond 1-year actually fell during the quarter with the bellwether US 10-Year Treasury bond closing March at 3.48%, 0.40% lower than year-end.
- Performance across domestic bond market sectors was positive during the quarter, led by corporate investment grade bonds. Global bonds slightly outperformed domestic fixed income for the quarter.
- A combination of higher coupons and narrower credit spreads were the primary drivers of lower quality corporate results during the period.
- US Treasury bonds rebounded this quarter as yields at longer maturities fell and investors fled to safety amidst troubles in the banking sector.

### **Market Themes**

- Central banks remained vigilant in their fight against inflation with the Fed, the Bank of England, and the European Central Bank continuing on the path of raising interest rates during the quarter. However, recession fears and softening inflation readings led to a recovery in asset prices as market expectations grew there may be fewer, less drastic rate hikes going forward.
- The conflict in Ukraine continues as a major geopolitical event without a clear resolution in sight. Energy costs remain elevated, which continues to negatively impact the economic growth outlook for the region.
- Short-term interest rates rose across most developed markets as central banks continued to tighten. Despite concerns about the potential for slowing economic growth, lower-quality corporate bonds slightly outpaced higher-quality government bonds.
- Both US and international equity markets continued to recover from the disappointing year that was 2022 on expectations that inflation would continue to moderate and central banks would slow the pace of monetary tightening.

- Domestic equity markets started 2023 with solid results led by large cap companies, but each index remains negative over the trailing 1-year period. Factors contributing to the quarter's results include declining inflation readings, expectations the Fed would slow the pace of future interest rate increases, and China's economic reopening from its self-imposed COVID-19 restrictions. For the period, the S&P 500 large cap benchmark returned 7.5%, versus 4.1% for mid cap, and 2.7% for small cap benchmarks.
- Like domestic equities, international developed and emerging market equities delivered positive results for the 1st quarter. Europe continues to face headwinds from higher-than-expected inflation, elevated energy prices, geopolitical risks related to the conflict in Ukraine, and rising interest rates. Emerging markets benefited from China's return to the global economy. The developed market MSCI EAFE Index returned 8.5% for the quarter and the MSCI Emerging Markets Index rose by 4.0%.
- For the quarter, performance of the bond market was broadly positive due to lower inflation and falling yields beyond 1-year maturities. The Bloomberg (BB) US Aggregate Index returned 3.0% for the period while investment grade corporate bonds posted a moderately higher return of 3.5%.
- US equity markets were negative over the trailing 1-year period, though much of this weak performance occurred at the beginning of the timeframe and will continue to roll off in the coming quarters. The S&P 500 Index return of -7.7% for the year was largely driven by concerns related to rising inflation, tighter monetary policy, and recession fears. The weakest relative performance for the year was the Russell 2000 Index, which declined -11.6%.
- Over the trailing 1-year period, international markets also declined. The MSCI EAFE Index returned -1.4% while the MSCI Emerging Markets Index fell a much larger -10.7%. Continued concerns related to Ukraine, elevated inflation, and slowing global economic growth negatively impacted markets. However, USD weakness and easing energy prices acted as a tailwind to international performance in the second half of 2022.
- Bond markets followed a largely similar narrative to equities, finishing the trailing 1-year period in negative territory. While bond market performance was impacted by similar factors to equity market performance, the primary driver of results over the prior year was dramatically higher interest rates, which directly and immediately impact bond prices and index performance. US mortgage backed and Government issues were the least negative sectors returning 4.9% and -4.4%, respectively, for the year. US TIPS suffered the year's largest loss, falling -6.1%.

Source: Investment Metrics

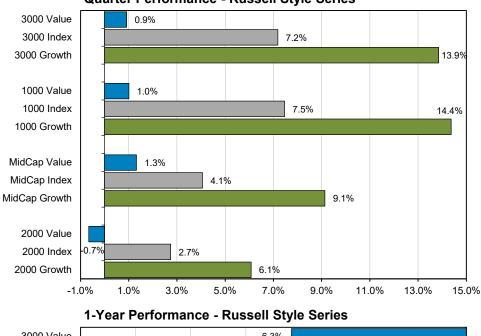


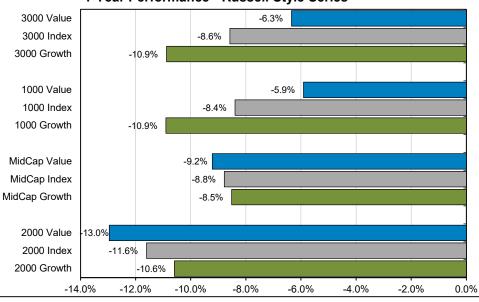




- Domestic equity core benchmarks pulled back from their February highs, but each finished the quarter with solid, positive results. Concerns regarding the regional banking sector and the financial sector's large weight in the value benchmarks weighed heavily on style-based index performance. Large cap stocks led results for the capitalization-based benchmarks and finished well ahead of both the mid cap and small cap indices for the quarter. Growth benchmarks, with their lower weight in the financial sector and larger weight in the information technology sector, produced the quarter's strongest results at all capitalization levels. The Russell 1000 Growth Index topped the quarter, returning 14.4% followed by the Russell Mid Cap Growth Index and the Russell 2000 Growth Index, which rose by 9.1% and 6.1%, respectively.
- Large, mid, and small cap growth stocks each outperformed their value counterparts by a wide margin for the quarter. While it is only a single quarter, this performance reversed 2022's dominant trend of value-based benchmarks outpacing their growth counterparts. Large and mid cap stocks managed small, positive returns of 1.0% and 1.3%, respectively, for the quarter while the Russell 2000 Value Index fell -0.7%.

- The 1st quarter's positive performance was not enough to offset the challenging performance experienced by domestic equity markets during 2022. All market capitalizations and styles remain in sizable negative territory over the trailing 1-year period. Within large cap stocks, the Russell 1000 Value Index returned a disappointing -5.9% but was down much less than the Russell Large Cap Growth Index, which fell -10.9% for the year.
- Outside of large cap issues, 2023's strong 1st quarter growth benchmark results were enough to push growth results over their value equivalents at both mid and small cap levels for the year. The Russell Mid Cap Value Index returned -9.2% and the small cap Russell 2000 Value Index returned -13.0% for the period. The growth benchmark counterparts at both capitalization levels were each down less than value.



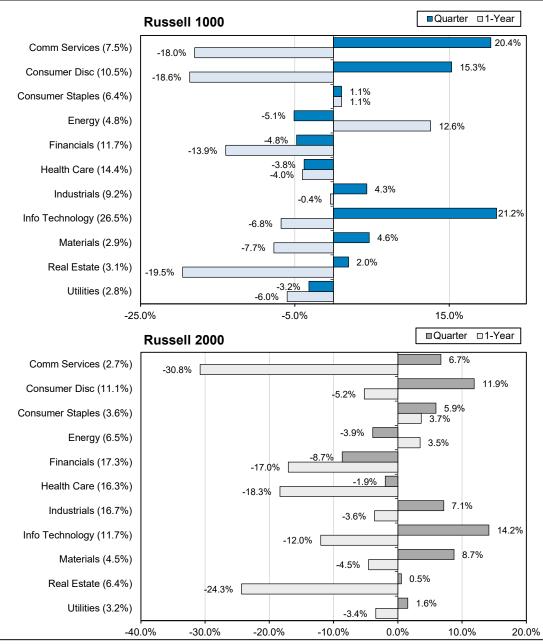


Quarter Performance - Russell Style Series

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Source: Investment Metrics

- Economic sector performance was mixed during the quarter. Seven of 11 economic sectors posted positive absolute performance for the quarter but just three managed to outpace the return of the broad index.
- After a challenging 2022, the information technology sector rebounded during the quarter on hopes that inflation was softening, and that the Fed would soon end its rate hiking cycle. The sector returned an impressive 21.2% in the quarter. The other two sectors that outpaced the headline index's return for the quarter were communication services (20.4%) and consumer discretionary (15.3%). The energy (-5.1%), financials (-4.8%), health care (-3.8%), and utilities (-3.2%) sectors each posted negative performance for the quarter.
- Eight small cap economic sectors posted positive results during the quarter and six exceeded the 2.7% return of the broader Russell 2000 Index. The consumer discretionary (11.9%) and information technology (14.2%) sectors each posted double-digit gains for the quarter while the energy (-3.9%), financials (-8.7%), and health care (1.9%) sectors posted negative returns.
- For the full year, seven economic sectors exceeded the return of the broad large cap benchmark, but only the energy (12.6%) and consumer staples (1.1%) sectors managed to post positive performance for the period. The weakest economic sector in the Russell 1000 for the year was Real Estate, which declined by -19.5% and was heavily impacted by rising interest rates.
- Similar to large cap sector performance, for the trailing 1-year period only two small cap sectors were positive. Energy was the best performing sector followed by consumer staples, which posted returns of 3.5% and 3.7%, respectively. Four of the 11 economic sectors were down less than the broad small cap benchmark's return of -11.6%. The worst performing sector for the year was communication services with a return of -30.8%. However, the information technology (-12.0%), financials (-17.0%), health care (-18.3%), and real estate (-24.3%) sectors were also down significantly for the year.



performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



Source: Morningstar Direct

As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking

The Market Environment Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000 As of March 31, 2023

	Top 10 W	eighted Stoo	:ks	
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.5%	27.1%	-5.0%	Information Technology
Microsoft Corp	5.7%	20.5%	-5.6%	Information Technology
Amazon.com Inc	2.4%	23.0%	-36.6%	Consumer Discretionary
NVIDIA Corp	1.7%	90.1%	1.9%	Information Technology
Alphabet Inc Class A	1.6%	17.6%	-25.4%	Communication Services
Berkshire Hathaway Inc Class B	1.5%	0.0%	-12.5%	Financials
Alphabet Inc Class C	1.4%	17.2%	-25.5%	Communication Services
Tesla Inc	1.4%	68.4%	-42.2%	Consumer Discretionary
Meta Platforms Inc Class A	1.2%	76.1%	-4.7%	Communication Services
Exxon Mobil Corp	1.2%	0.2%	37.5%	Energy

Top 10 Weighted Stocks							
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector			
Iridium Communications Inc	0.3%	20.7%	53.9%	Communication Services			
ShockWave Medical Inc	0.3%	5.5%	4.6%	Health Care			
EMCOR Group Inc	0.3%	9.9%	45.0%	Industrials			
Crocs Inc	0.3%	16.6%	65.5%	Consumer Discretionary			
Texas Roadhouse Inc	0.3%	19.4%	31.8%	Consumer Discretionary			
Saia Inc	0.3%	29.8%	11.6%	Industrials			
Inspire Medical Systems Inc	0.3%	-7.1%	-8.8%	Health Care			
RBC Bearings Inc	0.3%	11.2%	20.0%	Industrials			
Kinsale Capital Group Inc	0.3%	14.8%	31.9%	Financials			
Apellis Pharmaceuticals Inc	0.3%	27.6%	29.8%	Health Care			

Top 10 Performing Stocks (by Quarter)							
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector			
Sotera Health Co Ordinary Shares	0.0%	115.0%	-17.3%	Health Care			
Carvana Co Class A	0.0%	106.5%	-91.8%	Consumer Discretionary			
Coinbase Global Inc Ordinary Shares	0.0%	90.9%	-64.4%	Financials			
NVIDIA Corp	1.7%	90.1%	1.9%	Information Technology			
Oak Street Health Inc Ordinary Shares	0.0%	79.8%	43.9%	Health Care			
Meta Platforms Inc Class A	1.2%	76.1%	-4.7%	Communication Services			
DraftKings Inc Ordinary Shs - Class A	0.0%	70.0%	-0.6%	Consumer Discretionary			
Spotify Technology SA	0.0%	69.2%	-11.5%	Communication Services			
Tesla Inc	1.4%	68.4%	-42.2%	Consumer Discretionary			
Roku Inc Class A	0.0%	61.7%	-47.5%	Communication Services			

Top 10 Performing Stocks (by Quarter)								
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector				
Cipher Mining Inc	0.0%	316.1%	-36.0%	Information Technology				
SelectQuote Inc Ordinary Shares	0.0%	223.0%	-22.2%	Financials				
C3.ai Inc Ordinary Shares - Class A	0.1%	200.0%	47.9%	Information Technology				
Riot Platforms Inc	0.1%	194.7%	-52.8%	Information Technology				
Oscar Health Inc Class A	0.0%	165.9%	-34.4%	Financials				
Marathon Digital Holdings Inc	0.0%	155.0%	-68.8%	Information Technology				
Aurinia Pharmaceuticals Inc	0.1%	153.7%	-11.5%	Health Care				
Reata Pharmaceuticals Inc Class A	0.1%	139.3%	177.5%	Health Care				
Atlas Technical Consultants Inc	0.0%	136.7%	N/A	Industrials				
Berkshire Grey Inc Ordinary Shares	0.0%	128.5%	-52.1%	Industrials				

Bottom 10 Performing Stocks (by Quarter)			Bottom	n 10 Perform	ning Stocks (	by Quarter)			
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
First Republic Bank	0.0%	-88.5%	-91.3%	Financials	Cerberus Cyber Sentinel Corp	0.0%	-86.7%	-93.6%	Information Technology
PacWest Bancorp	0.0%	-57.2%	-76.6%	Financials	Cyxtera Technologies Inc	0.0%	-84.1%	-97.5%	Information Technology
Lumen Technologies Inc Ordinary Shs	0.0%	-49.2%	-75.4%	Communication Services	Bed Bath & Beyond Inc	0.0%	-83.0%	-98.1%	Consumer Discretionary
WeWork Inc	0.0%	-45.6%	-88.6%	Real Estate	Pear Therapeutics Inc Class A	0.0%	-78.4%	-95.0%	Health Care
Enviva Inc	0.0%	-44.4%	-61.2%	Energy	Veru Inc	0.0%	-78.0%	-76.0%	Consumer Staples
Western Alliance Bancorp	0.0%	-40.0%	-56.3%	Financials	Sunlight Financial Holdings Inc	0.0%	-75.8%	-93.8%	Financials
Zions Bancorp NA	0.0%	-38.6%	-52.9%	Financials	Esperion Therapeutics Inc	0.0%	-74.5%	-65.7%	Health Care
Charles Schwab Corp	0.2%	-36.9%	-37.1%	Financials	Nektar Therapeutics	0.0%	-68.9%	-87.0%	Health Care
Comerica Inc	0.0%	-34.0%	-49.8%	Financials	Vintage Wine Estates Inc Ordinary Shs	0.0%	-67.2%	-89.2%	Consumer Staples
DISH Network Corp Class A	0.0%	-33.5%	-70.5%	Communication Services	Bright Health Group Inc	0.0%	-66.1%	-88.6%	Financials

Source: Morningstar Direct



- ∎USD □Local Currencv **Quarter Performance** 6.9% AC World x US (48) 6.2% 8.0% WORLD x US (22) 7.1% 8.5% EAFE (21) 7.5% 10.5% Europe & ME (16) 8.6% 4.7% Pacific (5) 5.6% 4.0% Emerging Mkt (26) 3.8% -1.1% EM EMEA (11) 0.1% 4.8% EM Asia (9) 5.0% 3.9% EM Latin Amer (6) -1.3% 0.0% 3.0% 6.0% -3.0% 9.0% 12.0% ∎USD □Local Currency **1-Year Performance** -5.1% AC World x US (48) -0.1% -2.7% WORLD x US (22) 2.7% -1.4% EAFE (21) 3.8% 1.1% Europe & ME (16) 4.7% -6.0% Pacific (5) 2.2% -10.7% Emerging Mkt (26) -6.7% 7.8% EM EMEA (11) -12.3% -9.4% EM Asia (9) -5.3% -11.1% EM Latin Amer (6) -9.6% -15.0% -10.0% -5.0% 0.0% -20.0% 5.0%
- Many of the International developed and emerging market benchmarks posted positive performance in both USD and LCL terms for the 1st quarter. A weakening USD acted as a slight tailwind for non-US index performance during the quarter. Higher energy prices and the reopening of China drove performance, especially in emerging markets. Europe and Middle East sub-index led results, returning a strong 10.5% in USD and 8.6% in LCL. The developed market MSCI EAFE Index returned a solid 8.5% in USD and 7.5% in LCL terms for the period, and the MSCI Emerging Markets Index rose by 4.0% in USD and 3.8% in LCL terms.

The trailing 1-year results for international developed and emerging markets remain in negative territory in USD terms. A strong dollar over most of the trailing 1-year period was the dominant USD performance factor, shaving 5.2% off broad developed market performance and 4.0% from emerging market results. Developed market performance was positive in LCL terms with the MSCI EAFE Index returning -1.4% in USD and 3.8% in LCL terms for the year. The MSCI Emerging Markets Index declined by -10.7% in USD and -6.7% in LCL terms for the period. Performance in the EMEA (Europe, Middle East, and Africa) regional benchmark significantly detracted from emerging market index performance with a return of -17.8% in USD and -12.3% in LCL terms.



Source: MSCI Global Index Monitor (Returns are Net)

The Market Environment

**US Dollar International Index Attribution & Country Detail** 

As of March 31, 2023

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.5%	10.5%	-6.5%
Consumer Discretionary	12.0%	17.0%	5.0%
Consumer Staples	10.4%	7.6%	1.3%
Energy	4.5%	0.4%	9.6%
Financials	17.7%	2.5%	-1.1%
Health Care	13.2%	5.4%	-2.6%
Industrials	15.6%	11.9%	-0.5%
Information Technology	8.6%	19.0%	-4.1%
Materials	7.7%	7.6%	-6.5%
Real Estate	2.4%	-2.1%	-20.4%
Utilities	3.4%	8.2%	-1.2%
Total	100.0%	8.5%	-1.4%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.1%	11.2%	-7.1%
Consumer Discretionary	11.9%	11.3%	1.7%
Consumer Staples	8.9%	6.5%	1.1%
Energy	5.5%	-0.3%	0.8%
Financials	19.9%	1.4%	-7.5%
Health Care	9.6%	4.2%	-4.4%
Industrials	12.7%	10.0%	-1.8%
Information Technology	11.8%	17.2%	-9.5%
Materials	8.3%	5.9%	-10.5%
Real Estate	2.1%	-1.7%	-19.7%
Utilities	3.2%	3.3%	-5.9%
Total	100.0%	6.9%	-5.1%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	10.6%	12.6%	-7.4%
Consumer Discretionary	13.9%	1.5%	-3.9%
Consumer Staples	6.3%	2.4%	-0.6%
Energy	4.7%	-0.3%	-4.8%
Financials	21.0%	-0.9%	-13.6%
Health Care	3.8%	-4.9%	-15.4%
Industrials	6.0%	2.2%	-6.3%
Information Technology	20.5%	14.7%	-13.9%
Materials	8.7%	2.4%	-15.6%
Real Estate	1.9%	-1.6%	-18.7%
Utilities	2.6%	-10.5%	-14.4%
Total	100.0%	4.0%	-10.7%

	MSCI-EAFE	MSCI-ACWIxUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	21.5%	13.9%	6.2%	-5.2%
Jnited Kingdom	14.8%	9.6%	6.1%	-0.8%
France	12.5%	8.1%	14.6%	8.8%
Switzerland	10.0%	6.5%	6.7%	-6.8%
Germany	8.7%	5.6%	14.7%	2.2%
Australia	7.5%	4.8%	2.8%	-9.2%
Netherlands	4.6%	3.0%	16.6%	2.0%
Sweden	3.4%	2.2%	9.5%	-7.2%
Denmark	3.1%	2.0%	12.4%	14.2%
Hong Kong	2.7%	1.8%	-2.4%	-5.3%
Spain	2.6%	1.7%	15.7%	11.9%
taly	2.5%	1.6%	14.7%	9.1%
Singapore	1.5%	1.0%	7.1%	-3.1%
Belgium	1.0%	0.7%	6.3%	-2.2%
Finland	1.0%	0.6%	-0.3%	-4.2%
reland	0.8%	0.5%	21.4%	12.1%
srael	0.8%	0.5%	0.8%	-20.6%
Norway	0.7%	0.4%	-7.2%	-21.6%
,	0.7%	0.4%	-7.2%	-21.6%
Portugal				
New Zealand	0.2%	0.1%	8.0%	2.1%
Austria	0.2%	0.1% 64.8%	2.6%	-5.7% -14.5%
	100.0%		17.3%	
		7.5%	4.3%	-13.1%
Total Developed Countries		72.3%	16.2%	-14.3%
China		9.1%	4.7%	-4.7%
laiwan		4.2%	14.8%	-13.7%
ndia		3.6%	-6.4%	-12.2%
Korea		3.3%	9.6%	-14.4%
Brazil		1.4%	-3.2%	-18.7%
Saudi Arabia		1.1%	0.1%	-19.0%
South Africa		1.0%	-0.6%	-20.6%
Mexico		0.7%	20.3%	8.6%
Thailand		0.6%	-1.7%	-0.9%
ndonesia		0.5%	6.0%	0.2%
Malaysia		0.4%	-3.6%	-10.9%
Jnited Arab Emirates		0.3%	-7.5%	-28.4%
Qatar		0.3%	-0.7%	-22.6%
Kuwait		0.2%	-3.7%	-11.3%
Philippines		0.2%	2.4%	-13.7%
Poland		0.2%	-1.0%	-20.1%
Furkey		0.2%	-9.4%	52.8%
Chile		0.2%	5.2%	-3.0%
Greece		0.1%	15.8%	14.8%
Peru		0.1%	8.3%	-12.2%
Czech Republic		0.1%	33.0%	10.3%
Hungary		0.1%	2.9%	-12.1%
Columbia		0.0%	-13.5%	-39.2%
Eqypt		0.0%	-3.6%	-2.6%
Fotal Emerging Countries		27.7%	4.0%	-10.7%
Total ACWIxUS Countries		100.0%	6.9%	-5.1%

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



#### The Market Environment Domestic Bond Sector & Broad/Global Bond Market Performance (Duration) As of March 31, 2023

- After a challenging 2022 in fixed income markets brought on by the largest and most rapid increase in interest rates since the early 80's, the 1st quarter's positive bond benchmark results were a welcome relief. Despite two additional rate increases during the quarter, bond prices were aided by softening inflation and expectations that the Fed was nearing the end of its historic rate hiking cycle.
- The BB US Aggregate Bond Index, the bellwether US investment grade benchmark, returned a solid 3.0% for the period. Performance across the investment grade index's segments was also positive during the period with the US Corporate Investment Grade Index returning 3.5% and the US Mortgage Index component posting a return of 2.5%. Outside of the aggregate index's components, high yield bonds rose 3.6% and US TIPS posted a return of 3.3% for the quarter. The Bloomberg Global Aggregate ex US Index posted a similar return to the US bond benchmark with a return of 3.1% for the quarter.
- **Quarter Performance** U.S. Treasury (6.3) 3.0% U.S. Mortgage (5.9) 2.5% U.S. Corporate IG (7.2) 3.5% U.S. High Yield (3.7) 3.6% U.S. TIPS (5.0) 3.3% 2.8% AAA (6.0) AA (7.1) 3.4% 3 3% A (7.0) Baa (7.3) 3.6% Aggregate (6.3) 3.0% Intermediate Agg (4.6) 2.4% Global Agg x US (7.3) 3.1% Multiverse (6.7) 3.0% 1.0% 2.0% 0.0% 3.0% 4.0% **1-Year Performance** U.S. Treasury (6.3) -4.5% U.S. Mortgage (5.9) -4.9% U.S. Corporate IG (7.2) -5.6% U.S. High Yield (3.7) -3.3% U.S. TIPS (5.0) -6.1% AAA (6.0) -4.5% AA (7.1) -5.3% A (7.0) -5.5% -5.5% Baa (7.3)

-4.8%

-6.0%

-2.8%

-2.0%

-4.0%

Aggregate (6.3)

Multiverse (6.7)

-10.7%

-10.0%

-12.0%

-7.9%

-8.0%

Intermediate Agg (4.6)

Global Agg x US (7.3)

- Over the trailing 1-year period, the BB US Aggregate Bond Index declined by -4.8% and each of the benchmark's sub-components fell in a narrow band above and below the broad index's return. US TIPS, which are excluded from the aggregate index, dropped by -6.1% for the year. Lower quality high yield corporate bonds, which have a much shorter duration, were down less than their investment grade counterparts with the Bloomberg US High Yield Index returning -3.3% for the year.
- Performance for non-US bonds was also negative for the year with the developed market Bloomberg Global Aggregate ex US Index falling by -10.7%. The combination of rising interest rates, elevated inflation, geopolitical risks, and USD strength earlier in the year hindered non-US index performance.

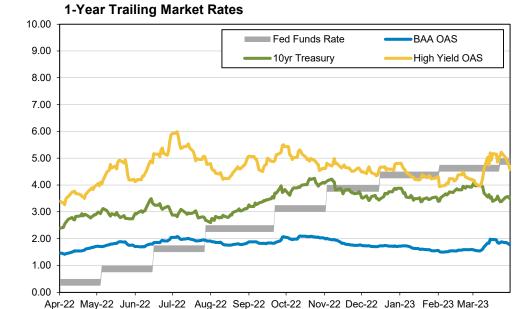
Source: Bloomberg

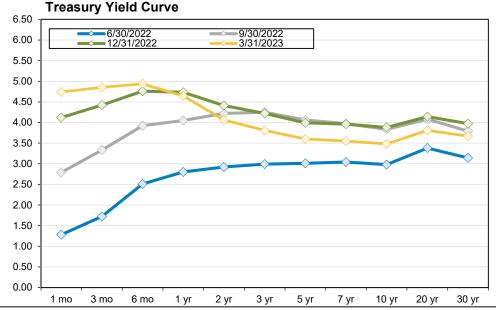


0.0%

- The gray band across the graph illustrates the range of the current Fed Funds Rate. During the 1st quarter the Fed raised the lower end of its target rate range from 4.25% to 4.75% through two successive 0.25% increases in February and March. After its March meeting, the Federal Open Market Committee (FOMC) altered a phrase in its press release that had been included since the beginning of this rate increase cycle. Their revised release stated - "some additional policy firming may be appropriate" and it removed "ongoing increases in the target range will be appropriate." The FOMC also stated that it would continue its policy of removing liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting those proceeds. While subtle, the capital market interpreted this change favorably in terms of the future path of interest rates.
- The yield on the US 10-year Treasury (green line) ended the period slightly lower as concerns over the state of the economy and March's banking disruption drove yields. The closing yield on the 10-Year Treasury was 3.88% at year-end but finished the quarter 0.40% lower at 3.48%. The benchmark's rate peaked in October, cresting at just over 4.00% before pulling back to its current level.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues. For the full year, the spread widened slightly from 1.42% to 1.80%. High Yield OAS spreads rose from roughly 3.27% at the beginning of the year to 4.74% at year-end. High yield spreads reached their highs in July 2022 at a level of 5.80% before trading lower the remainder of the year. A spike in both the BAA OAS and High Yield spreads is visible in March following a short-lived banking crisis of confidence addressed quickly by the FDIC and supported further by the Fed's aggressive short-term par loan program. Both spread measures traded lower on the news of the Government's intervention but were still elevated from pre-crisis levels at the end of the quarter.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Short-term rates continued to rise during the 1st quarter as the Fed increased interest rates twice to combat elevated inflation. Despite these short-term rate increases, at the end of the quarter both intermediate and longer-term yields were slightly lower than they were at the end of the 3rd quarter of 2022. The yield curve remains inverted (short-term rates higher than long-term rates) between 2-year and 10-year maturities. Historically, a persistent inversion of these two key rates has been a precursor of an economic recession within 6- to 24-months.







#### \_\_\_\_\_



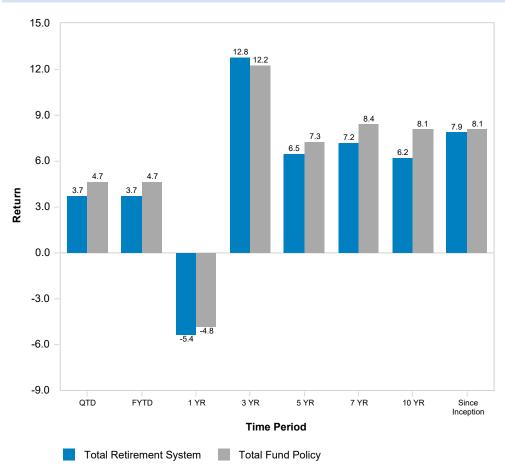
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### Asset Allocation and Performance At-A-Glance **Total Fund** As of March 31, 2023

Asset Allocation by Segment	Gain/Loss Summary			
Mar-2023:\$962,807,908		QTD	FYTD	1 YR
	Total Retirement System			
	Beginning Market Value	933,934,678	933,934,678	1,041,909,951
	Net Contributions	-5,993,461	-5,993,461	-22,056,782
	Return on Investment	35,667,880	35,667,880	-54,597,364
	Ending Market Value	962,807,908	962,807,908	962,807,908

#### **Comparative Performance**



#### Allocation

	Market Value	Allocation
Total Domestic Equity	398,452,102	41.4
Total International Equity	129,825,254	13.5
Total Other Equity	97,113,298	10.1
Total Core Fixed Income	126,644,627	13.2
Total Non Core Fixed Income	47,488,171	4.9
Total Other Fixed Income	11,628,610	1.2
Total Real Estate	146,471,094	15.2
Total Timber Funds	1,258,953	0.1
Total Multi Asset Funds	-	0.0
Cash Account	2,224,423	0.2
Cash Account PE	-	0.0
APRS Building	1,701,375	0.2

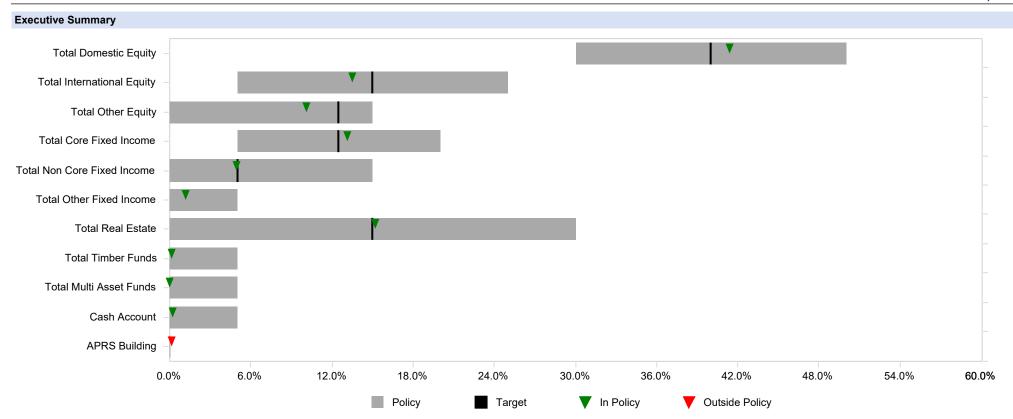
Market values subject to availability from Northern Trust and individual managers. All performance data is Net of Fees. Please refer to the end of the report for Investment Pricing Summary and Additional Notes.



Mar-2023:\$962,807,908	Allocation		
		Market Value	Allocation
	NT Collective Russell 3000 Index	240,005,754	24.9
	Baird Mid Cap Growth	51,208,050	5.3
	Nuance Mid Cap Value	51,146,887	5.3
	Kennedy Small Cap Value	56,091,410	5.8
	Driehaus International Small Cap Growth	19,601,980	2.0
	WCM Focused Intl Growth LP	39,148,747	4.1
	Thompson Siegel & Walmsley	52,319,363	5.4
	Wellington Emerging Markets Fund	18,755,164	1.9
	Huff Energy Fund	19,396,200	2.0
	Franklin Park Private Equity	77,717,098	8.1
	Orleans Capital	126,644,627	13.2
	Pimco Diversified Income Fund	47,488,171	4.9
	LBC Credit Partners III	1,531,158	0.2
	LBC Credit Partners IV	4,157,723	0.4
	Providence Debt Fund III	2,822,534	0.3
	Capital Point Partners (Princeton Capital)	3,117,195	0.3
	Edison Investments	2,315,711	0.2
	India Property Fund	173,212	0.0
	Gainesville Property	1,644,315	0.2
	Morgan Stanley	81,582,553	8.5
	AEW Partners Fund VIII	3,725,317	0.4
	GreenOak US III	10,514,718	1.1
	Brookfield Premier RE Partners	27,170,411	2.8
	Artemis Real Estate IV	549,295	0.1
	Stockbridge Smart Markets	18,795,562	2.0
	Domain Environmental Investments II	1,258,953	0.1
	Cash Account	2,224,423	0.2
	APRS Building	1,701,375	0.2



Market values subject to availability from Northern Trust and individual managers. Please refer to the end of the report for Investment Pricing Summary and Additional Notes.



#### Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
Total Retirement System	962,807,908	100.0	N/A	N/A	100.0
Total Domestic Equity	398,452,102	41.4	30.0	50.0	40.0
Total International Equity	129,825,254	13.5	5.0	25.0	15.0
Total Other Equity	97,113,298	10.1	0.0	15.0	12.5
Total Core Fixed Income	126,644,627	13.2	5.0	20.0	12.5
Total Non Core Fixed Income	47,488,171	4.9	0.0	15.0	5.0
Total Other Fixed Income	11,628,610	1.2	0.0	5.0	0.0
Total Real Estate	146,471,094	15.2	0.0	30.0	15.0
Total Timber Funds	1,258,953	0.1	0.0	5.0	0.0
Total Multi Asset Funds	-	0.0	0.0	5.0	0.0
Cash Account	2,224,423	0.2	0.0	5.0	0.0
APRS Building	1,701,375	0.2	0.0	0.0	0.0



Financial Reconciliation Quarter to Date										
	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2023
Total Retirement System	933,934,678	-	18,262,787	-24,256,248	-728,699	-72,491	4,354,413	31,313,467	35,667,880	962,807,908
Total Equity	616,613,154	-23,524,272	-	-	-668,095	-	1,031,370	31,938,496	32,969,866	625,390,654
Total Domestic Equity	397,664,840	-22,566,253	-	-	-433,747	-	949,550	22,837,712	23,787,262	398,452,102
NT Collective Russell 3000 Index	223,929,044	21,875	-	-	-21,875	-	-	16,076,710	16,076,710	240,005,754
Baird Mid Cap Growth	53,296,257	-8,000,000	-	-	-	-	112,342	5,799,451	5,911,793	51,208,050
Nuance Mid Cap Value	63,994,131	-14,858,328	-	-	-141,672	-	561,935	1,590,821	2,152,756	51,146,887
Kennedy Small Cap Value	56,445,407	270,200	-	-	-270,200	-	275,273	-629,270	-353,997	56,091,410
Total International Equity	120,605,613	30,521	-	-	-32,387	-	79,260	9,142,248	9,221,508	129,825,254
Driehaus International Small Cap Growth	18,794,285	-1,866	-	-	-	-	-	809,561	809,561	19,601,980
Thompson Siegel & Walmsley	48,366,324	-	-	-	-	-	-	3,953,039	3,953,039	52,319,363
WCM Focused Intl Growth LP	35,451,214	-	-	-	-	-	-	3,697,533	3,697,533	39,148,747
Wellington Emerging Markets Fund	17,993,789	32,387	-	-	-32,387	-	79,260	682,115	761,375	18,755,164
Total Other Equity	98,342,702	-988,540	-	-	-201,960	-	2,560	-41,464	-38,904	97,113,298
Huff Energy Fund	19,396,200	-	-	-	-	-	-	-	-	19,396,200
Sail Venture Fund I	1	-	-	-	-	-	-	-1	-1	-
Sail Venture Fund II	1	-	-	-	-	-	-	-1	-1	-
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-1	-1	-
Excelsior Investors, Ltd.	122,366	-83,465	-	-	-	-	-	-38,901	-38,901	-
Franklin Park Private Equity	78,824,133	-905,075	-	-	-201,960	-	2,560	-2,560	-	77,717,098
Total Fixed Income	104,845,570	77,460,037	-	-	-16,655	-	1,302,229	2,170,228	3,472,457	185,761,408
Orleans Capital	46,504,138	77,754,937	-	-	-17,439	-	635,977	1,767,014	2,402,991	126,644,627
Pimco Diversified Income Fund	46,278,146	-	-	-	-	-	547,097	662,927	1,210,025	47,488,171
Total Other Fixed Income	12,063,285	-294,900	-	-	784	-	119,154	-259,713	-140,559	11,628,610
Capital Point Partners (Princeton Capital)	3,257,754	-	-	-	-	-	-	-140,559	-140,559	3,117,195
LBC Credit Partners III	1,531,158	-784	-	-	784	-	-	-	-	1,531,158
LBC Credit Partners IV	4,295,655	-137,932	-	-	-	-	69,403	-69,403	-	4,157,723
Providence Debt Fund III	2,978,718	-156,184	-	-	-	-	49,751	-49,751	-	2,822,534



Please refer to the end of the report for additional notes.

### Financial Reconciliation Total Fund

1 Quarter Ending March 31, 2023

Market Value	Not								
01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2023
150,592,903	-390,563	-	-	-43,949	-29,816	1,174,922	-3,573,449	-2,398,527	147,730,047
148,252,053	666,138	-	-	-43,949	-29,816	1,174,922	-3,548,253	-2,373,331	146,471,094
2,304,992	-8,537	-	-	-	-	8,537	10,719	19,256	2,315,711
173,212	-	-	-	-	-	-	-	-	173,212
1,644,315	2,509	-	-	-	-2,509	-	-	-	1,644,315
82,607,316	-	-	-	-	-	816,125	-1,840,888	-1,024,763	81,582,553
3,725,317	-	-	-	-	-	-	-	-	3,725,317
10,019,132	494,803	-	-	-	-	-	783	783	10,514,718
28,185,074	-	-	-	-	-	-	-1,014,663	-1,014,663	27,170,411
399,234	177,363	-	-	-	-27,307	6,143	-6,138	5	549,295
19,193,461	-	-	-	-43,949	-	344,117	-698,067	-353,950	18,795,562
2,340,850	-1,056,701	-	-	-		-	-25,196	-25,196	1,258,953
1,021,897	-996,701	-	-	-	-	-	-25,196	-25,196	-
1,318,953	-60,000	-	-	-	-	-	-	-	1,258,953
	<b>150,592,903</b> <b>148,252,053</b> 2,304,992 173,212 1,644,315 82,607,316 3,725,317 10,019,132 28,185,074 399,234 19,193,461 <b>2,340,850</b> 1,021,897	150,592,903     -390,563       148,252,053     666,138       2,304,992     -8,537       173,212     -       1,644,315     2,509       82,607,316     -       3,725,317     -       10,019,132     494,803       28,185,074     -       399,234     177,363       19,193,461     -       2,340,850     -1,056,701       1,021,897     -996,701	150,592,903   -390,563   -     148,252,053   666,138   -     2,304,992   -8,537   -     173,212   -   -     1,644,315   2,509   -     82,607,316   -   -     3,725,317   -   -     10,019,132   494,803   -     28,185,074   -   -     399,234   177,363   -     19,193,461   -   -     1,021,897   -996,701   -	150,592,903   -390,563   -   -     148,252,053   666,138   -   -     2,304,992   -8,537   -   -     173,212   -   -   -     1,644,315   2,509   -   -     3,725,317   -   -   -     10,019,132   494,803   -   -     399,234   177,363   -   -     19,193,461   -   -   -     1,021,897   -996,701   -   -	150,592,903   -390,563   -   -   -43,949     148,252,053   666,138   -   -   -43,949     2,304,992   -8,537   -   -   -     173,212   -   -   -   -     1,644,315   2,509   -   -   -     1,644,315   2,509   -   -   -     3,725,317   -   -   -   -     10,019,132   494,803   -   -   -     28,185,074   -   -   -   -     399,234   177,363   -   -   -     19,193,461   -   -   -   -     19,193,461   -   -   -   -     1,021,897   -996,701   -   -   -	150,592,903   -390,563   -   -   -43,949   -29,816     148,252,053   666,138   -   -   -43,949   -29,816     2,304,992   -8,537   -   -   -43,949   -29,816     2,304,992   -8,537   -   -   -   -     173,212   -   -   -   -   -     1,644,315   2,509   -   -   -   -   -     1,644,315   2,509   -	150,592,903   -390,563   -   -   -43,949   -29,816   1,174,922     148,252,053   666,138   -   -   -43,949   -29,816   1,174,922     2,304,992   -8,537   -   -   -43,949   -29,816   1,174,922     2,304,992   -8,537   -   -   -   -43,949   -29,816   1,174,922     2,304,992   -8,537   -   -   -   -   8,537     173,212   -   -   -   -   -   8,537     1,644,315   2,509   -   -   -   -   -     82,607,316   -   -   -   -   816,125   -     3,725,317   -	150,592,903   -390,563   -   -   -43,949   -29,816   1,174,922   -3,573,449     148,252,053   666,138   -   -   -43,949   -29,816   1,174,922   -3,548,253     2,304,992   -8,537   -   -   -43,949   -29,816   1,174,922   -3,548,253     2,304,992   -8,537   -   -   -   -   8,537   10,719     173,212   -   -   -   -   -   -   8,537   10,719     173,212   -	150,592,903   -390,563   -   -   -43,949   -29,816   1,174,922   -3,573,449   -2,398,527     148,252,053   666,138   -   -   -43,949   -29,816   1,174,922   -3,548,253   -2,373,331     2,304,992   -8,537   -   -   -   -43,949   -29,816   1,174,922   -3,548,253   -2,373,331     2,304,992   -8,537   -   -   -   -   8,537   10,719   19,256     173,212   -

	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2023
Total Multi Asset Funds	53,241,377	-54,737,498	-	-	-	-	717,929	778,192	1,496,121	-
BlackRock Multi Asset Fund	53,241,377	-54,737,498	-	-	-	-	717,929	778,192	1,496,121	-
Cash Account APRS Building	6,940,300 1,701,375	1,192,295 -	18,262,787 -	-24,256,248 -	-	-42,675 -	127,964 -	-	127,964 -	2,224,423 1,701,375

Financial Reconciliation Year to Date										
	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2023
						=0.404				
Total Retirement System	933,934,678	-	18,262,787	-24,256,248	-728,699	-72,491	4,354,413	31,313,467	35,667,880	962,807,908
Total Equity	616,613,154	-23,524,272	-	-	-668,095	-	1,031,370	31,938,496	32,969,866	625,390,654
Total Domestic Equity	397,664,840	-22,566,253	-	-	-433,747	-	949,550	22,837,712	23,787,262	398,452,102
NT Collective Russell 3000 Index	223,929,044	21,875	-	-	-21,875	-	-	16,076,710	16,076,710	240,005,754
Baird Mid Cap Growth	53,296,257	-8,000,000	-	-	-	-	112,342	5,799,451	5,911,793	51,208,050
Nuance Mid Cap Value	63,994,131	-14,858,328	-	-	-141,672	-	561,935	1,590,821	2,152,756	51,146,887
Kennedy Small Cap Value	56,445,407	270,200	-	-	-270,200	-	275,273	-629,270	-353,997	56,091,410
Total International Equity	120,605,613	30,521	-	-	-32,387	-	79,260	9,142,248	9,221,508	129,825,254
Driehaus International Small Cap Growth	18,794,285	-1,866	-	-	-	-	-	809,561	809,561	19,601,980
Thompson Siegel & Walmsley	48,366,324	-	-	-	-	-	-	3,953,039	3,953,039	52,319,363
WCM Focused Intl Growth LP	35,451,214	-	-	-	-	-	-	3,697,533	3,697,533	39,148,747
Wellington Emerging Markets Fund	17,993,789	32,387	-	-	-32,387	-	79,260	682,115	761,375	18,755,164
Total Other Equity	98,342,702	-988,540	-	-	-201,960	-	2,560	-41,464	-38,904	97,113,298
Huff Energy Fund	19,396,200	-	-	-	-	-	-	-	-	19,396,200
Sail Venture Fund I	1	-	-	-	-	-	-	-1	-1	-
Sail Venture Fund II	1	-	-	-	-	-	-	-1	-1	-
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-1	-1	-
Excelsior Investors, Ltd.	122,366	-83,465	-	-	-	-	-	-38,901	-38,901	-
Franklin Park Private Equity	78,824,133	-905,075	-	-	-201,960	-	2,560	-2,560	-	77,717,098
Total Fixed Income	104,845,570	77,460,037	-		-16,655	-	1,302,229	2,170,228	3,472,457	185,761,408
Orleans Capital	46,504,138	77,754,937	-	-	-17,439	-	635,977	1,767,014	2,402,991	126,644,627
Pimco Diversified Income Fund	46,278,146	11,154,951	-	-	-17,439		547,097	662,927	1,210,025	47,488,171
Total Other Fixed Income	, ,	-	-	-	- 784	-	,	,	- <b>140,559</b>	47,400,171 <b>11,628,610</b>
	12,063,285	-294,900	-	-	/ 04	-	119,154	-259,713		3,117,195
Capital Point Partners (Princeton Capital) LBC Credit Partners III	3,257,754	- -784	-	-	- 784	-	-	-140,559	-140,559	, ,
LBC Credit Partners III LBC Credit Partners IV	1,531,158		-	-	/ 84	-	-	-	-	1,531,158
	4,295,655	-137,932	-	-	-	-	69,403	-69,403	-	4,157,723
Providence Debt Fund III	2,978,718	-156,184	-	-	-	-	49,751	-49,751	-	2,822,534



Please refer to the end of the report for additional notes.

### Financial Reconciliation Total Fund

Year To Date Ending March 31, 2023

								i cui i	o Date Enaling	
	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2023
Total Real Estate & Timber	150,592,903	-390,563	-	-	-43,949	-29,816	1,174,922	-3,573,449	-2,398,527	147,730,047
Total Real Estate	148,252,053	666,138	-	-	-43,949	-29,816	1,174,922	-3,548,253	-2,373,331	146,471,094
Edison Investments	2,304,992	-8,537	-	-	-	-	8,537	10,719	19,256	2,315,711
India Property Fund	173,212	-	-	-	-	-	-	-	-	173,212
Gainesville Property	1,644,315	2,509	-	-	-	-2,509	-	-	-	1,644,315
Morgan Stanley	82,607,316	-	-	-	-	-	816,125	-1,840,888	-1,024,763	81,582,553
AEW Partners Fund VIII	3,725,317	-	-	-	-	-	-	-	-	3,725,317
GreenOak US III	10,019,132	494,803	-	-	-	-	-	783	783	10,514,718
Brookfield Premier Real Estate Partners	28,185,074	-	-	-	-	-	-	-1,014,663	-1,014,663	27,170,411
Artemis Real Estate IV	399,234	177,363	-	-	-	-27,307	6,143	-6,138	5	549,295
Stockbridge Smart Markets	19,193,461	-	-	-	-43,949	-	344,117	-698,067	-353,950	18,795,562
Total Timber Funds	2,340,850	-1,056,701	-	-	-	-	-	-25,196	-25,196	1,258,953
Capitol Timberland Investments	1,021,897	-996,701	-	-	-	-	-	-25,196	-25,196	-
Domain Environmental Investments II	1,318,953	-60,000	-	-	-	-	-	-	-	1,258,953

								· • • • • • • • • • • • • • • • • • • •				
	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2023		
Total Multi Asset Funds	53,241,377	-54,737,498	-	-	-	-	717,929	778,192	1,496,121			
BlackRock Multi Asset Fund	53,241,377	-54,737,498	-	-	-	-	717,929	778,192	1,496,121	-		
Cash Account	6,940,300	1,192,295	18,262,787	-24,256,248	-	-42,675	127,964	-	127,964	2,224,423		
APRS Building	1,701,375	-	-	-	-	-	-	-	-	1,701,375		

### Comparative Performance Total Fund As of March 31, 2023

Inception Date

10/01/1992

10/01/1992

01/01/1994

05/01/2013

01/01/2014

07/01/2014

04/01/2019

03/01/2016

Comparative Performance Trailing Returns								
				Pe	erformance (%)			
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception
Total Retirement System (Net)	3.73	3.73	-5.36	12.77	6.47	7.16	6.22	7.92
Total Retirement System (Gross)	3.81 (69)	3.81 (69)	- <mark>5.14</mark> (57)	13.03 (8)	6.73 (27)	7.41 (52)	6.49 (71)	8.23 (19)
Total Fund Policy	4.66	4.66	-4.80	12.25	7.26	8.41	8.07	8.06
Variance	-0.85	-0.85	-0.34	0.78	-0.53	-1.00	-1.58	0.17
All Public Plans-Total Fund Median	4.18	4.18	-4.96	10.97	6.18	7.45	7.05	7.79
Total Equity	5.28	5.28	-6.53	17.45	8.00	9.90	8.94	8.75
Total Equity Policy	7.43	7.43	-6.94	17.43	8.96	10.67	9.91	8.51
Variance	-2.15	-2.15	0.41	0.02	-0.96	-0.77	-0.97	0.24
Domestic Equity	5.91 (43)	5.91 (43)	- <b>7.99</b> (56)	18.04 (56)	9.33 (45)	11.21 (46)	N/A	10.25 (61)
Russell 3000 Index	7.18	7.18	-8.58	18.48	10.45	11.99	11.73	11.65
Variance	-1.27	-1.27	0.59	-0.44	-1.12	-0.78	N/A	-1.40
IM U.S. Equity (SA+CF+MF) Median	4.66	4.66	-7.46	18.56	8.87	10.84	10.61	10.95
NT Collective Russell 3000 Index	7.17 (38)	7.17 (38)	-8.52 (77)	18.48 (53)	10.46 (44)	12.00 (43)	N/A	10.53 (40)
Russell 3000 Index	7.18	7.18	-8.58	18.48	10.45	11.99	11.73	10.52
Variance	-0.01	-0.01	0.06	0.00	0.01	0.01	N/A	0.01
IM U.S. All Cap Core Equity (SA+CF) Median	5.10	5.10	-7.22	18.57	10.11	11.63	11.29	10.02
Baird Mid Cap Growth	11.36 (15)	11.36 (15)	-4.36 (5)	17.88 (17)	11.30 (18)	13.16 (22)	N/A	10.26 (46)
Russell Midcap Growth Index	9.14	9.14	-8.52	15.20	9.07	11.24	11.17	9.56
Variance	2.22	2.22	4.16	2.68	2.23	1.92	N/A	0.70
IM U.S. Mid Cap Growth Equity (SA+CF) Median	8.38	8.38	-11.03	15.35	9.78	11.88	11.64	10.13
Nuance Mid Cap Value	3.40 (29)	3.40 (29)	<b>-1.31</b> (11)	13.41 (100)	N/A	N/A	N/A	8.51 (62)

-9.22

7.91

-4.82

-12.96

-1.13

-5.04

-14.09 (97)

20.69

-7.28

23.05

21.01

1.51

24.50

22.52 (72)

6.54

N/A

7.64

4.55

-0.28

6.85

4.27 (94)

8.33

N/A

9.77

7.86

-0.27

9.59

7.59 (90)

8.80

N/A

9.93

N/A

7.22

N/A

9.28

7.47

1.04

9.56

8.99

-0.75

10.71

8.24 (94)

1.32

2.08

1.68

-0.66

-0.42

2.34

-1.08 (94)

1.32

2.08

1.68

-0.66

-0.42

2.34

-1.08 (94)



Russell Midcap Value Index

Kennedy Small Cap Value

Russell 2000 Value Index

IM U.S. Mid Cap Value Equity (SA+CF) Median

IM U.S. Small Cap Value Equity (SA+CF) Median

Variance

Variance

As of March 31, 2023

QTR		YT	<b>D</b>							
			D	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
7.69 (4	45)	7.69	(45)	- <mark>5.15</mark> (59)	13.09 (48)	1.37 (74)	4.83 (87)	N/A	4.67 (77)	05/01/2013
7.00		7.00		-4.56	12.32	2.97	6.37	4.65	4.30	
0.69		0.69		-0.59	0.77	-1.60	-1.54	N/A	0.37	
7.30		7.30		-3.91	12.81	3.19	6.67	5.65	5.67	
3.91 (8	37)	3.91	(87)	<mark>-8.28</mark> (40)	15.44 (12)	3.67 (8)	7.86 (6)	7.61 (6)	9.01 (8)	09/01/2012
5.69		5.69		-12.61	13.62	1.97	5.89	5.57	6.64	
-1.78		1.78		4.33	1.82	1.70	1.97	2.04	2.37	
6.30		6.30		-9.10	12.39	1.04	5.40	5.04	6.34	
8.17 (4	49)	8.17	(49)	<b>-1.56</b> (40)	15.64 (15)	3.10 (72)	5.48 (78)	N/A	4.01 (83)	10/01/2014
8.47		8.47		-1.38	12.99	3.52	6.21	5.00	4.16	
-0.30		0.30		-0.18	2.65	-0.42	-0.73	N/A	-0.15	
8.11		8.11		-2.78	13.39	3.84	6.69	5.91	4.97	
10.43 (3	33) 1	0.43	(33)	<b>-5.42</b> (73)	N/A	N/A	N/A	N/A	-0.92 (59)	12/01/2020
8.59		8.59		-6.35	9.49	3.36	6.47	5.08	-3.32	
1.84		1.84		0.93	N/A	N/A	N/A	N/A	2.40	
9.63		9.63		-3.35	11.75	3.59	6.46	5.31	-0.35	
4.05 (6	69)	4.05	(69)	<b>-11.24</b> (77)	6.35 (87)	N/A	N/A	N/A	<b>-2.02</b> (91)	02/01/2020
3.96		3.96		-10.70	7.83	-0.91	4.91	2.00	0.15	
0.09		0.09		-0.54	-1.48	N/A	N/A	N/A	-2.17	
4.94		4.94		-8.78	10.01	0.69	6.07	3.30	1.93	
-0.24		0.24		0.58	15.66	11.88	N/A	N/A	5.90	01/01/2017
	$\begin{array}{c} 7.00\\ 0.69\\ 7.30\\ 3.91\\ (8\\ 5.69\\ -1.78\\ 6.30\\ 8.17\\ (4\\ 8.47\\ -0.30\\ 8.11\\ 10.43\\ (5\\ 8.59\\ 1.84\\ 9.63\\ 4.05\\ (6\\ 3.96\\ 0.09\\ 4.94\\ \end{array}$	$\begin{array}{c} 7.00\\ 0.69\\ 7.30\\ 3.91 (87)\\ 5.69\\ -1.78\\ 6.30\\ 8.17 (49)\\ 8.47\\ -0.30\\ 8.11\\ 10.43 (33)\\ 1\\ 8.59\\ 1.84\\ 9.63\\ 4.05 (69)\\ 3.96\\ 0.09\\ 4.94\\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7.00 $7.00$ $7.00$ $0.69$ $0.69$ $7.30$ $7.30$ $3.91$ (87) $3.91$ (87) $5.69$ $5.69$ $-1.78$ $-1.78$ $6.30$ $6.30$ $8.17$ (49) $8.17$ (49) $8.47$ $8.47$ $-0.30$ $-0.30$ $8.11$ $8.11$ $10.43$ (33) $10.43$ (33) $8.59$ $8.59$ $1.84$ $1.84$ $9.63$ $9.63$ $4.05$ (69) $4.05$ (69) $3.96$ $3.96$ $0.09$ $0.09$ $4.94$ $4.94$	7.00 $7.00$ $-4.56$ $0.69$ $0.69$ $-0.59$ $7.30$ $7.30$ $-3.91$ $3.91$ $(87)$ $-8.28$ $(40)$ $5.69$ $-12.61$ $-1.78$ $-1.78$ $4.33$ $6.30$ $6.30$ $-9.10$ $8.17$ $(49)$ $8.17$ $(49)$ $8.17$ $(49)$ $-1.78$ $-1.38$ $-0.30$ $-0.30$ $-0.18$ $8.11$ $8.11$ $2.78$ $10.43$ $(33)$ $10.43$ $(33)$ $10.43$ $(33)$ $-5.42$ $(73)$ $8.59$ $8.59$ $-6.35$ $-6.35$ $1.84$ $1.84$ $0.93$ $9.63$ $9.63$ $9.63$ $-3.96$ $3.96$ $-10.70$ $0.09$ $0.09$ $0.09$ $-0.54$ $4.94$ $4.94$ $-8.78$	7.00 $7.00$ $-4.56$ $12.32$ $0.69$ $0.69$ $-0.59$ $0.77$ $7.30$ $7.30$ $-3.91$ $12.81$ $3.91$ $(87)$ $3.91$ $(87)$ $-8.28$ $(40)$ $15.44$ $(12)$ $5.69$ $5.69$ $-12.61$ $13.62$ $-1.78$ $-1.78$ $4.33$ $1.82$ $6.30$ $6.30$ $-9.10$ $12.39$ $8.17$ $(49)$ $8.17$ $(49)$ $-1.56$ $(40)$ $8.47$ $8.47$ $-1.38$ $12.99$ $-0.30$ $-0.30$ $-0.18$ $2.65$ $8.11$ $8.11$ $-2.78$ $13.39$ $10.43$ $(33)$ $10.43$ $(33)$ $-5.42$ $(73)$ $10.43$ $(33)$ $10.43$ $(33)$ $-5.42$ $(73)$ $1.84$ $1.84$ $0.93$ $N/A$ $9.63$ $9.63$ $-3.35$ $11.75$ $4.05$ $(69)$ $4.05$ $(69)$ $-11.24$ $(77)$ $6.35$ $8.96$ $-10.70$ $7.83$ $0.09$ $0.09$ $-0.54$ $-1.48$ $4.94$ $4.94$ $-8.78$ $10.01$	7.00 $7.00$ $4.56$ $12.32$ $2.97$ $0.69$ $0.69$ $-0.59$ $0.77$ $-1.60$ $7.30$ $7.30$ $-3.91$ $12.81$ $3.19$ $3.91$ $(87)$ $3.91$ $(87)$ $-8.28$ $(40)$ $15.44$ $(12)$ $3.67$ $(8)$ $5.69$ $5.69$ $-12.61$ $13.62$ $1.97$ $-1.78$ $-1.78$ $4.33$ $1.82$ $1.70$ $6.30$ $6.30$ $-9.10$ $12.39$ $1.04$ $8.17$ $(49)$ $8.17$ $(49)$ $-1.56$ $(40)$ $15.64$ $(15)$ $8.47$ $8.47$ $-1.38$ $12.99$ $3.52$ $-0.30$ $-0.30$ $-0.18$ $2.65$ $-0.42$ $8.11$ $8.11$ $-2.78$ $13.39$ $3.84$ $10.43$ $(33)$ $10.43$ $(33)$ $-5.42$ $(73)$ $N/A$ $N/A$ $8.59$ $-6.35$ $9.49$ $3.36$ $1.84$ $1.84$ $0.93$ $N/A$ $N/A$ $9.63$ $9.63$ $-3.35$ $11.75$ $3.59$ $4.05$ $(69)$ $4.05$ $(69)$ $-11.24$ $(77)$ $6.35$ $(87)$ $0.09$ $0.09$ $-0.54$ $-1.48$ $N/A$ $4.94$ $4.94$ $-8.78$ $10.01$ $0.69$	7.007.007.004.5612.322.976.370.690.69-0.590.77-1.60-1.547.307.30-3.9112.813.196.673.91(87)3.91(87)-8.28(40)15.44(12)3.67(8)7.86(6)5.695.69-12.6113.621.975.89-1.78-1.784.331.821.701.976.306.30-9.1012.391.045.408.17(49)8.17(49)-1.56(40)15.64(15)3.10(72)5.48(78)8.478.47-1.3812.993.526.21-0.30-0.30-0.182.65-0.42-0.738.118.11-2.7813.393.846.6910.43(33)10.43(33)-5.42(73)N/AN/AN/A8.598.59-6.359.493.366.471.841.840.93N/AN/AN/AN/A9.639.63-3.3511.753.596.464.05(69)4.05(69)-11.24(77)6.35(87)N/AN/A9.639.63-5.42-1.48N/AN/A1.910.090.09-0.54-1.48N/AN/A4.944.94-8.7810.010.696.07-1.481.441.44-1.48	7.007.004.5612.322.976.374.650.690.69-0.590.77-1.60-1.54N/A7.307.30-3.9112.813.196.675.653.91(87)3.91(87)-8.28(40)15.44(12)3.67(8)7.86(6)7.61(6)5.695.69-12.6113.621.975.895.575.75.48(70)1.972.046.306.30-9.1012.391.045.405.048.17(49)8.17(49)-1.56(40)15.64(15)3.10(72)5.48(78)N/A8.478.47-1.3812.993.526.215.00-0.30-0.30-0.182.65-0.42-0.73N/A8.118.11-2.7813.393.846.695.9110.43(33)10.43(33)-5.42(73)N/AN/AN/A8.598.59-6.359.493.366.475.081.841.840.93N/AN/AN/AN/A9.63-3.3511.753.596.465.314.05(69)4.05(69)-11.24(77)6.35(87)N/AN/A9.639.63-3.3511.753.596.465.314.05(69)4.05(69)-11.24(77)6.35(87)N/AN/AN/A<	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Huff Energy Fund

Franklin Park Private Equity



Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.

As of March 31, 2023

				Pe	erformance (%)				
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Total Fixed Income	1.97	1.97	-4.25	-0.20	-0.02	0.66	0.33	5.68	12/01/1993
Total Fixed Income Policy	3.14	3.14	-5.73	-2.59	0.03	0.56	0.90	4.20	
Variance	-1.17	-1.17	1.48	2.39	-0.05	0.10	-0.57	1.48	
Orleans Capital	2.13 (100)	2.13 (100)	- <u>5.50</u> (96)	-2.05 (65)	0.74 (100)	0.90 (95)	N/A	1.68 (98)	01/01/2014
BImbg. U.S. Aggregate Index	2.96	2.96	-4.78	-2.77	0.90	0.88	1.36	1.69	
Variance	-0.83	-0.83	-0.72	0.72	-0.16	0.02	N/A	-0.01	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.16	3.16	-4.67	-1.82	1.34	1.39	1.78	2.13	
Pimco Diversified Income Fund	2.61 (62)	2.61 (62)	<b>-4.84</b> (41)	N/A	N/A	N/A	N/A	<b>-1.80</b> (27)	07/01/2020
Blmbg. Global Credit (Hedged)	2.97	2.97	-4.83	0.02	1.36	2.18	2.51	-2.60	
Variance	-0.36	-0.36	-0.01	N/A	N/A	N/A	N/A	0.80	
IM Global Fixed Income (MF) Median	2.76	2.76	-6.10	-1.50	-0.41	0.40	0.35	-3.41	
Total Other Fixed Income	-1.16	-1.16	2.28	7.96	4.28	N/A	N/A	3.32	01/01/2017

LBC Credit Partners III

LBC Credit Partners IV

Providence Debt Fund III



				P	erformance (%)				
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Alternative Investments									
Other Assets									
Cash Account	1.06	1.06	2.45	0.85	1.28	1.10	0.78	4.12	06/01/1988
Other Alternative Assets									
Total Real Estate	-1.63	-1.63	-2.04	8.86	7.28	5.67	8.41	4.79	08/01/2005
NCREIF Property Index	-1.81	-1.81	-1.63	7.15	6.71	6.85	8.34	7.81	
Variance	0.18	0.18	-0.41	1.71	0.57	-1.18	0.07	-3.02	
Morgan Stanley	-1.24	-1.24	-2.05	8.62	7.70	8.08	N/A	8.07	01/01/2016
NCREIF Fund Index-ODCE (EW)	-3.50	-3.50	-3.69	8.17	7.13	7.23	8.82	7.30	
Variance	2.26	2.26	1.64	0.45	0.57	0.85	N/A	0.77	
Brookfield Premier Real Estate Partners	-3.60	-3.60	-1.79	9.86	N/A	N/A	N/A	9.51	11/01/2019
NCREIF Fund Index-ODCE (EW)	-3.50	-3.50	-3.69	8.17	7.13	7.23	8.82	7.77	
Variance	-0.10	-0.10	1.90	1.69	N/A	N/A	N/A	1.74	
Stockbridge Smart Markets	-2.07	-2.07	N/A	N/A	N/A	N/A	N/A	-5.71	08/01/2022
NCREIF Fund Index-ODCE (EW)	-3.50	-3.50	-3.69	8.17	7.13	7.23	8.82	-7.70	
Variance	1.43	1.43	N/A	N/A	N/A	N/A	N/A	1.99	
Total Timber Funds	-1.77	-1.77	9.33	9.06	5.17	1.89	2.15	2.71	08/01/2005
NCREIF Timberland Index	1.75	1.75	11.31	8.09	5.54	5.02	5.82	6.62	
Variance	-3.52	-3.52	-1.98	0.97	-0.37	-3.13	-3.67	-3.91	



## Comparative Performance Total Fund As of March 31, 2023

**Comparative Performance Fiscal Year Returns** 

				Pe	erformance (%)				
	YTD	2022	2021	2020	2019	2018	2017	2016	2015
Total Retirement System (Net)	3.73	-11.54	17.68	11.65	20.92	-6.18	11.89	7.67	-1.05
Total Retirement System (Gross)	3.81 (69)	-11.36 (32)	17.86 (11)	11.99 (59)	21.23 (14)	- <b>5.95</b> (89)	12.17 (92)	7.87 (46)	- <mark>0.83</mark> (70)
Total Fund Policy	4.66	-11.78	16.63	13.40	19.81	-3.12	15.79	8.04	2.43
Variance	-0.85	0.42	1.23	-1.41	1.42	-2.83	-3.62	-0.17	-3.26
All Public Plans-Total Fund Median	4.18	-12.77	14.01	12.54	18.57	-4.02	15.17	7.69	-0.11
Total Equity	5.28	-15.13	21.06	15.97	29.88	-9.83	18.49	11.41	-2.87
Total Equity Policy	7.43	-17.82	22.48	17.62	29.04	-7.34	22.07	9.61	-0.51
Variance	-2.15	2.69	-1.42	-1.65	0.84	-2.49	-3.58	1.80	-2.36
Domestic Equity	5.91 (43)	- <mark>18.31</mark> (58)	24.49 (56)	19.11 (42)	31.15 (36)	<b>-7.18</b> (54)	17.39 (59)	15.76 (36)	- <mark>3.09</mark> (70)
Russell 3000 Index	7.18	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74	0.48
Variance	-1.27	0.90	-1.17	-1.78	0.13	-1.94	-3.74	3.02	-3.57
IM U.S. Equity (SA+CF+MF) Median	4.66	-16.41	25.61	15.39	28.77	-6.58	19.22	12.51	-0.60
NT Collective Russell 3000 Index	7.17 (38)	<mark>-19.15</mark> (76)	25.68 (58)	20.83 (41)	31.02 (36)	<b>-5.23</b> (54)	21.15 (48)	12.79 (38)	0.49 (47)
Russell 3000 Index	7.18	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74	0.48
Variance	-0.01	0.06	0.02	-0.06	0.00	0.01	0.02	0.05	0.01
IM U.S. All Cap Core Equity (SA+CF) Median	5.10	-17.15	26.28	18.60	29.00	-5.10	20.92	10.86	0.37
Baird Mid Cap Growth	11.36 (15)	-27.51 (50)	21.76 (9)	35.15 (58)	36.27 (51)	<b>-1.60</b> (33)	26.98 (37)	5.35 (50)	<b>-3.03</b> (82)
Russell Midcap Growth Index	9.14	-26.72	12.73	35.59	35.47	-4.75	25.27	7.33	-0.20
Variance	2.22	-0.79	9.03	-0.44	0.80	3.15	1.71	-1.98	-2.83
IM U.S. Mid Cap Growth Equity (SA+CF) Median	8.38	-27.56	13.70	38.57	36.32	-4.26	25.98	5.29	1.22
Nuance Mid Cap Value	3.40 (29)	<mark>-3.68</mark> (17)	12.23 (100)	5.24 (45)	N/A	N/A	N/A	N/A	N/A
Russell Midcap Value Index	1.32	-12.03	28.34	4.96	27.06	-12.29	13.34	20.00	-4.78
Variance	2.08	8.35	-16.11	0.28	N/A	N/A	N/A	N/A	N/A
IM U.S. Mid Cap Value Equity (SA+CF) Median	1.68	-8.49	29.45	4.63	29.05	-13.44	15.65	19.53	-3.02
Kennedy Small Cap Value	<b>-1</b> .08 (94)	<b>-17.75</b> (91)	38.92 (15)	4.93 (51)	25.37 (47)	<b>-19.83</b> (94)	12.51 (43)	N/A	N/A
Russell 2000 Value Index	-0.66	-14.48	28.27	4.63	22.39	-12.86	7.84	31.74	-7.47
Variance	-0.42	-3.27	10.65	0.30	2.98	-6.97	4.67	N/A	N/A
IM U.S. Small Cap Value Equity (SA+CF) Median	2.34	-10.61	29.80	5.13	24.99	-14.08	11.59	27.32	-4.31



Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.

As of March 31, 2023

				Pe	erformance (%)				
	YTD	2022	2021	2020	2019	2018	2017	2016	2015
International Equity	7.69 (45)	-21.97 (70)	11.90 (38)	12.54 (55)	20.92 (69)	-16.28 (64)	27.37 (65)	0.67 (70)	-2.40 (60
MSCI AC World ex USA	7.00	-15.57	8.29	11.13	22.13	-13.78	27.77	5.01	-5.25
Variance	0.69	-6.40	3.61	1.41	-1.21	-2.50	-0.40	-4.34	2.85
IM International Equity (SA+CF+MF) Median	7.30	-17.76	10.16	14.29	23.41	-14.92	29.73	2.84	-0.60
Driehaus International Small Cap Growth	3.91 (87)	<mark>-24.34</mark> (45)	12.49 (49)	29.79 (17)	30.57 (11)	<b>-16.92</b> (32)	41.19 (6)	-6.24 (89)	12.59 (11
MSCI AC World ex USA Small Growth	5.69	-25.85	11.83	23.99	24.96	-18.07	33.99	-0.04	6.74
Variance	-1.78	1.51	0.66	5.80	5.61	1.15	7.20	-6.20	5.85
IM International SMID Cap Growth Equity (MF) Median	6.30	-25.69	12.40	14.79	24.29	-19.24	34.22	-0.76	6.36
Thompson Siegel & Walmsley	8.17 (49)	-13.89 (33)	13.82 (29)	6.62 (79)	21.18 (70)	<b>-15.93</b> (74)	22.70 (93)	0.47 (64)	1.38 (39
MSCI EAFE (Net) Index	8.47	-14.45	11.26	7.82	22.01	-13.79	25.03	1.00	-0.81
Variance	-0.30	0.56	2.56	-1.20	-0.83	-2.14	-2.33	-0.53	2.19
IM International Large Cap Core Equity (SA+CF) Median	8.11	-15.89	12.13	11.69	23.58	-14.32	27.80	1.53	0.61
WCM Focused Intl Growth LP	10.43 (33)	-28.63 (88)	17.64 (3)	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA Growth (Net)	8.59	-23.05	5.09	22.20	27.34	-14.43	32.01	0.12	-1.25
Variance	1.84	-5.58	12.55	N/A	N/A	N/A	N/A	N/A	N/A
IM International Large Cap Growth Equity (MF) Median	9.63	-20.24	8.88	20.00	27.50	-14.67	28.61	-1.94	0.25
Wellington Emerging Markets Fund	4.05 (69)	-24.51 (77)	<mark>-2.23</mark> (62)	N/A	N/A	N/A	N/A	N/A	N/A
MSCI Emerging Markets (Net) Index	3.96	-20.09	-2.54	18.31	18.42	-14.57	37.28	11.19	-14.92
Variance	0.09	-4.42	0.31	N/A	N/A	N/A	N/A	N/A	N/A
IM Emerging Markets Equity (SA+CF) Median	4.94	-19.72	0.75	18.93	20.64	-15.23	36.88	9.87	-12.21
Total Other Equity	-0.24	26.45	13.85	-5.66	65.17	-22.42	-17.60	N/A	N/A

Huff Energy Fund

Franklin Park Private Equity



# Comparative Performance Total Fund As of March 31, 2023

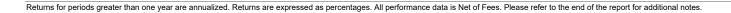
				Pe	erformance (%)				
	YTD	2022	2021	2020	2019	2018	2017	2016	2015
Total Fixed Income	1.97	-11.28	1.69	4.10	4.08	0.06	2.86	4.36	-0.97
Total Fixed Income Policy	3.14	-14.66	-2.05	8.28	7.93	-0.66	5.60	2.77	-1.37
Variance	-1.17	3.38	3.74	-4.18	-3.85	0.72	-2.74	1.59	0.40
Orleans Capital	2.13 (100)	<b>-12.93</b> (47)	-1.34 (56)	7.16 (93)	8.80 (68)	0.07 (47)	3.87 (59)	3.79 (28)	0.57 (7
Blmbg. U.S. Aggregate Index	2.96	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65	0.55
Variance	-0.83	0.08	0.21	-0.35	0.08	0.06	0.33	1.14	0.02
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.16	-12.96	-1.23	8.51	9.18	0.06	4.01	3.08	0.82
Pimco Diversified Income Fund	2.61 (62)	<mark>-13.81</mark> (50)	0.26 (5)	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Credit (Hedged)	2.97	-13.75	-0.41	7.53	12.08	-0.81	5.89	7.33	-0.20
Variance	-0.36	-0.06	0.67	N/A	N/A	N/A	N/A	N/A	N/A
IM Global Fixed Income (MF) Median	2.76	-14.66	-2.73	8.15	8.08	-1.78	6.82	2.92	-3.83
Total Other Fixed Income	-1.16	4.87	12.76	0.48	3.66	1.27	-0.49	N/A	N/A

Capital Point Partners (Princeton Capital)

LBC Credit Partners III

LBC Credit Partners IV

Providence Debt Fund III



					Performance (%	<b>6</b> )			
	YTD	2022	2021	2020	2019	2018	2017	2016	2015
Iternative Investments									
ther Assets									
Cash Account	1.06	1.38	0.01	0.43	2.11	1.72	0.76	0.27	0.01
ther Alternative Assets									
Total Real Estate	-1.63	6.27	24.27	-0.45	5.75	5.14	2.90	0.76	5.40
NCREIF Property Index	-1.81	5.52	17.70	1.60	6.42	6.72	6.96	7.97	13.33
Variance	0.18	0.75	6.57	-2.05	-0.67	-1.58	-4.06	-7.21	-7.93
Morgan Stanley	-1.24	6.14	21.48	1.26	6.16	7.96	8.74	9.20	N/A
NCREIF Fund Index-ODCE (EW)	-3.50	7.56	21.88	0.75	5.18	7.30	6.92	8.36	14.18
Variance	2.26	-1.42	-0.40	0.51	0.98	0.66	1.82	0.84	N/A
Brookfield Premier Real Estate Partners	-3.60	10.55	25.66	0.57	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-3.50	7.56	21.88	0.75	5.18	7.30	6.92	8.36	14.18
Variance	-0.10	2.99	3.78	-0.18	N/A	N/A	N/A	N/A	N/A
Stockbridge Smart Markets	-2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-3.50	7.56	21.88	0.75	5.18	7.30	6.92	8.36	14.18
Variance	1.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Timber Funds	-1.77	21.88	6.99	1.43	-1.12	0.13	-3.94	-6.92	1.93
NCREIF Timberland Index	1.75	12.90	9.17	0.81	1.30	3.21	3.63	2.59	4.97
Variance	-3.52	8.98	-2.18	0.62	-2.42	-3.08	-7.57	-9.51	-3.04

# Comparative Performance - IRR Other Alternative Investments

Comparative Performance - IRR									
	Market Value (\$)	МТН	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
Total Real Estate Investments	146,471,094	-1.65	-1.65	-1.65	-2.63	8.31	7.07	6.95	07/31/2005
Edison Investments	2,315,711	0.84	0.84	0.84	3.24	3.07	9.34	11.94	09/30/1996
India Property Fund	173,212	0.00	0.00	0.00	-15.83	-19.67	-30.60	-8.07	05/24/2007
Gainesville Property	1,644,315	0.00	-0.15	-0.15	-0.91	-0.88	-0.91	-6.30	01/31/2008
Morgan Stanley	81,582,553	-1.24	-1.24	-1.24	-2.05	8.62	7.74	8.03	12/31/2015
AEW Partners Fund VIII	3.725.317	0.00	0.00	0.00	4.44	27.88	22.62	19.74	06/26/2017
GreenOak US III	10,514,718	0.00	0.01	0.01	-0.95	2.37	N/A	-0.65	06/22/2018
Brookfield Premier Real Estate Partners	27,170,411	-3.60	-3.60	-3.60	-1.79	9.86	N/A	9.37	10/01/2019
Artemis Real Estate IV	549,295	-6.27	-6.63	-6.63	N/A	N/A	N/A	-59.87	06/23/2022
Stockbridge Smart Markets	18,795,562	-2.07	-2.07	-2.07	N/A	N/A	N/A	-7.36	07/01/2022
Total Timber Funds	1,258,953	-1.77	-1.60	-1.60	15.80	6.74	2.08	0.17	07/31/2005
Domain Environmental Investments II	1,258,953	0.00	0.00	0.00	-10.47	-9.23	-5.00	-2.44	04/30/2008
Total Other Equity	97,113,298	0.00	-0.24	-0.24	0.59	16.15	13.94	29.93	01/01/2017
Huff Energy Fund	19,396,200	0.00	0.00	0.00	0.00	8.71	10.18	5.60	12/31/2006
Franklin Park Private Equity	77,717,098	0.00	-0.26	-0.26	0.73	19.81	16.70	16.48	01/31/2018
Total Other Fixed Income	11,628,610	0.00	-1.17	-1.17	2.23	9.05	3.75	N/A	12/21/2016
Capital Point Partners (Princeton Capital)	3,117,195	0.00	-4.31	-4.31	18.83	14.46	-0.30	0.28	03/31/2007
LBC Credit Partners III	1,531,158	0.00	0.05	0.05	-17.65	8.47	2.20	7.62	03/07/2014
LBC Credit Partners IV	4,157,723	0.00	0.00	0.00	4.36	6.64	6.54	7.54	09/19/2016
Providence Debt Fund III	2,822,534	0.00	0.00	0.00	-4.17	10.11	3.02	6.27	04/21/2014



Summary of Partnerships Other Alternative Investments

Private Equity Summary of Partnership	Descure	Maukat			
Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Real Estate Investments					
Edison Investments	8,146,177	2,315,711	19,982,352	11.9	2.7
India Property Fund	4,354,162	173,212	2,359,366	-8.1	0.6
Gainesville Property	5,496,047	1,644,315	746,061	-6.3	0.4
Morgan Stanley	50,000,000	81,582,553	-	8.0	1.6
AEW Partners Fund VIII	15,381,261	3,725,317	18,323,472	19.7	1.4
GreenOak US III	12,151,340	10,514,718	1,434,323	-0.6	1.0
Brookfield Premier Real Estate Partners	20,000,000	27,170,411	-	9.4	1.4
Artemis Real Estate IV	887,203	549,295	102,524	-59.9	0.7
Stockbridge Smart Markets	20,000,000	18,795,562	-	-7.4	0.9
Total Timber Investments					
Domain Environmental Investments II	7,623,603	1,258,953	5,063,231	-2.4	0.8

Summary of Partnerships Other Alternative Investments

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Other Equity					
Huff Energy Fund	11,095,509	19,396,200	1,786,358	5.6	1.9
Franklin Park Private Equity	64,741,159	77,717,098	8,859,478	16.5	1.3
Total Other Fixed Income					
Capital Point Partners (Princeton Capital)	12,058,210	3,117,195	9,145,851	0.3	1.0
LBC Credit Partners III	18,851,406	1,531,158	21,497,042	7.6	1.2
LBC Credit Partners IV	18,000,000	4,157,723	17,565,658	7.5	1.2
Providence Debt Fund III	11,128,113	2,822,534	11,525,392	6.3	1.3



#### Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund 17.00 32.00 14.00 26.00 • • • 11.00 20.00 • 8.00 • • 14.00 0 igodot0 0 5.00 8.00 $\circ$ $\circ$ $oldsymbol{\circ}$ 0 Return Return $\circ \circ$ 2.00 2.00 0 -1.00 -4.00 -4.00 -10.00 • • 00 -7.00 -16.00 -10.00 -22.00 -13.00 -28.00

			1 YR	2 YR	3 YR	4 YR	5 YR		202	-2	2021	202	.0 20	19	201	0
Total Retirement System 3	3.73 (73)	3.73 (73)	-5.36 (61)	1.99 (18)	12.77 (10)	7.25 (28)	6.47 (37)	Total Retirement System	11.54	(34) 17.	68 (13)	11.65	(64) 20.92	(17)	-6.18	(91)
Total Fund Policy	4.66 (29)	4.66 (29)	-4.80 (46)	2.00 (18)	12.25 (18)	7.70 (16)	7.26 (11)	Total Fund Policy	11.78	(38) 16.	63 (22)	13.40	(39) 19.81	(32)	-3.12	(31)
Median	4.18	4.18	-4.96	0.17	10.97	6.65	6.18	Median	12.77	14.0	)1	12.54	18.57		-4.02	
Comparative Performance																
		1 Qtr Ending Dec-2022	2	Enc	Qtr ling 2022		1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022		E	l Qtr nding c-2021				Qtr ling 2021	
Total Retirement System		4.91 (7	1)	-3.49	(19)	4	9.89 (51)	-3.04 (22)		5.8	8 (7)			0.97	(19)	
Total Fund Policy		5.67 (4	8)	-3.69	(25)	-1	0.63 (69)	-3.01 (22)		5.5	4 (13)	)		0.92	(19)	
All Public Plans-Total Fund Med	dian	5.60		-4.31		-8	9.88	-4.28		4.3	6			0.04		

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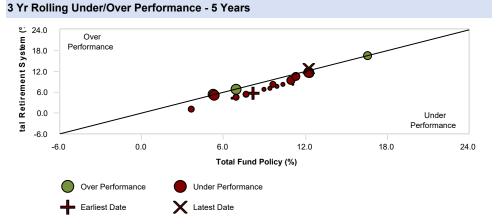
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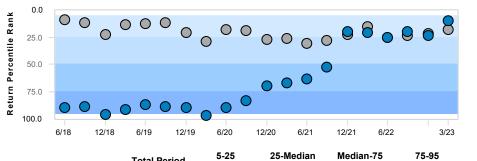
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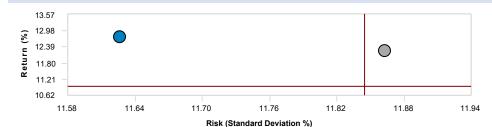


#### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	Count	Count	Count	Count	
Total Retirement System	20	6 (30%)	0 (0%)	4 (20%)	10 (50%)	
O Total Fund Policy	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)	

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

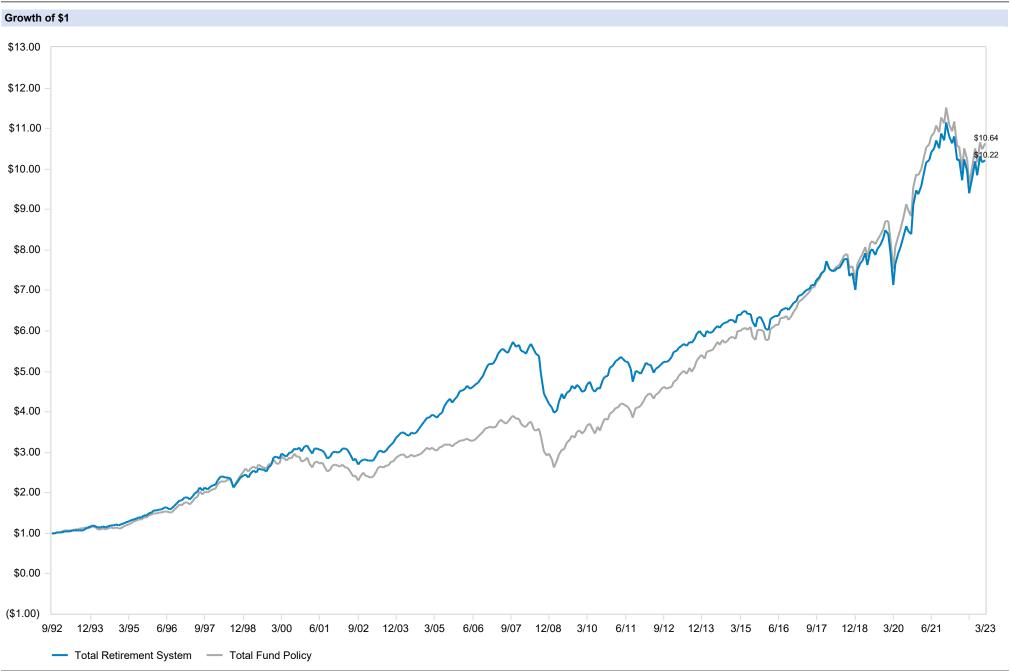
	Return	Standard Deviation		Return	Standard Deviation
Total Retirement System	12.77	11.63	Total Retirement System	6.47	12.15
Total Fund Policy	12.25	11.86	Total Fund Policy	7.26	11.62
Median	10.97	11.84	Median	6.18	11.57

#### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.35	99.48	95.33	0.76	0.32	1.01	0.97	6.48
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.96	1.00	6.88

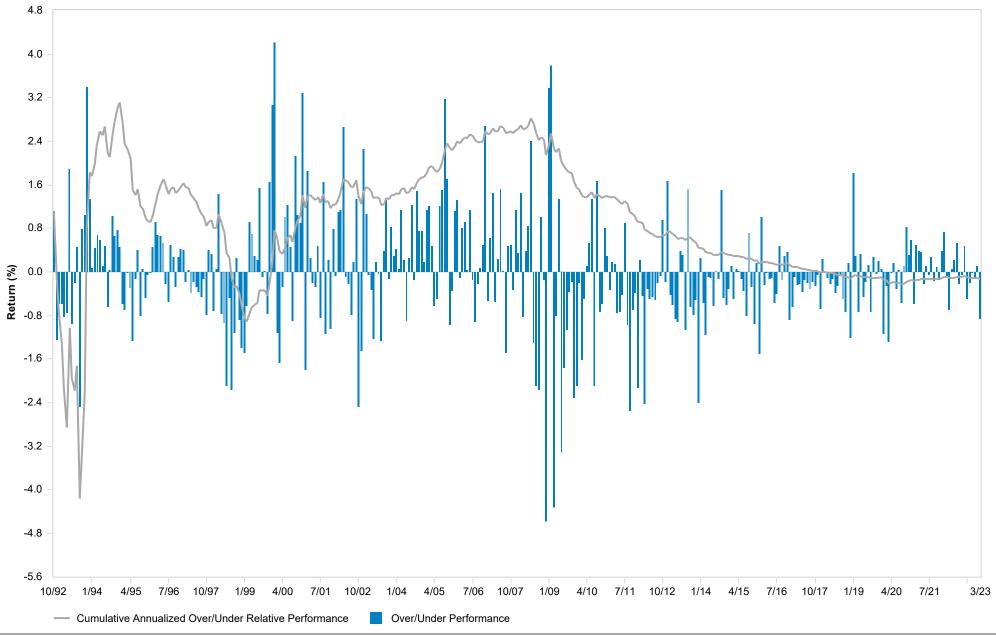
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.77	100.44	106.06	-0.95	-0.38	0.46	1.04	8.22
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.54	1.00	7.79





Calculation based on monthly periodicity.

#### **Relative Performance**



Calculation based on monthly periodicity.

Total Fund Compliance:	Yes	No	N/A
The total plan return equaled or exceeded the total plan benchmark over the trailing three and five year periods.		•	
The total plan return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.	•		
The total plan return equaled or exceeded the actuarial earnings assumption of 7.25% over the three and five year periods.		•	

Equity Compliance:	Yes	No	N/A
Total domestic equity return equaled or exceeded the benchmark over the trailing three and five year periods.		•	
Total domestic equity return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
Total international equity return equaled or exceeded the benchmark over the trailing three and five year periods.		•	
Total international equity return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
The total equity allocation was less than or equal to 90% but greater than or equal to 35% of the total fund value at market.	•		
The total domestic equity allocation was less than or equal to 50% but greater than or equal to 30% of the total fund value at market.	•		
The total international equity allocation was less than or equal to 25% but greater than or equal to 5% of the total fund value at market.	•		

Fixed Income Compliance:	Yes	No	N/A
Total core fixed income return equaled or exceed the benchmark over the trailing three and five year periods.		•	
Total core fixed income return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
Total non-US fixed income return equaled or exceed the benchmark over the trailing three and five year periods.			•
Total non-US fixed income return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.			•
The total fixed income allocation was less than or equal to 40% but greater than or equal to 5% of the total fund value at market.	•		
The core fixed income allocation was less than or equal to 20% but greater than or equal to 5% of the total fund value at market.	•		
The total non-US fixed income allocation was less than or equal to 15% of the total fund value at market.	•		



#### Austin Police Retirement System Compliance Checklist As of March 31, 2023

	Baird Mid Cap		Nuance MC Kennedy SC		sc	Driehaus		S	TS&W		,				
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
Manager outperformed the index over the trailing three and five year periods.	•				•		•			•				•	
Manager ranked within the top 50%-tile over trailing three and five year periods.	•				•			•		•				•	
Less than four consecutive quarters of under performance relative to the benchmark.	•			•			•			•			•		
Three and five-year downside capture ratios less than 100%	•			•			•			•				•	
Manager maintained style consistency for the mandate	•			•			•			•			•		
Manager maintained low turnover in portfolio team or senior management.	•			•			•			•			•		
Benchmark and index remained the same for the portfolio.	•			•			•			•			•		
Manager sustained compliance with IPS.	•			•			•			•			•		
No investigation by SEC was conducted on the manager.	•			•			•			٠			•		
Manager did not experience significant asset flows into or out of the company.	•			•			•			٠			•		
Manager is charging the same fee.	•			•			•			•			•		
No reported servicing issues with manager.	•			•			•			•			•		

	WCM		Wellington		Orleans		PIMCO		)						
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
Manager outperformed the index over the trailing three and five year periods.			•		•			•				•			
Manager ranked within the top 50%-tile over trailing three and five year periods.			•		•			•				•			
Less than four consecutive quarters of under performance relative to the benchmark.	•			•			•			•					
Three and five-year downside capture ratios less than 100%			•		•			•				•			
Manager maintained style consistency for the mandate	•			•			•			•					
Manager maintained low turnover in portfolio team or senior management.	•			•			•			•					
Benchmark and index remained the same for the portfolio.	•			•			•			•					
Manager sustained compliance with IPS.	•			•			•			•					
No investigation by SEC was conducted on the manager.	•			•			•			•					
Manager did not experience significant asset flows into or out of the company.	•			•			•			•					
Manager is charging the same fee.	•			•			•			•					
No reported servicing issues with manager.	•			•			•			•					

\*The 3 & 5 year periods used for evaluation represent the historical performance of composite portfolios. As such, this data represents a combination of current managers, strategies and allocations as well as the realized performance of terminated portfolios and prior allocation strategies. The peer universes used are gross of fees therefore the manager returns used for the purpose of measuring compliance are also gross.



# Austin Police Retirement System Investment Pricing Summary as of 3/31/2023

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Retirement System			
Total Equity			
Total Domestic Equity			
NT Collective Russell 3000 Fund	3/31/2023	Monthly	Custodian
Baird Mid Cap Growth	3/31/2023	Monthly	Custodian
Nuance Mid Cap Value	3/31/2023	Monthly	Custodian
Kennedy Small Cap Value	3/31/2023	Monthly	Custodian
Total International Equity			
Thompson Siegel & Walmsley	3/31/2023	Monthly	Custodian
Driehaus International Small Cap Growth	3/31/2023	Monthly	Custodian
WCM Focused Intl	3/31/2023	Monthly	Custodian
Wellington Emerging Markets	3/31/2023	Monthly	Custodian
Total Other Equity			
Huff Energy Fund	12/31/2021	Quarterly	Manager
Franklin Park	12/31/2022	Quarterly	Manager
Total Fixed Income			
Total Fixed Income Funds			
Orleans Capital	3/31/2023	Monthly	Custodian
PIMCO Diversified	3/31/2023	Monthly	Custodian
Total Other Fixed Income Funds			
Capital Point Partners	12/31/2022	Quarterly	Manager
LBC Credit Partners III	12/31/2022	Quarterly	Manager

# Austin Police Retirement System Investment Pricing Summary as of 3/31/2023

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
LBC Credit Partners IV	12/31/2022	Quarterly	Manager
Providence Debt Fund III	12/31/2022	Quarterly	Manager
Total Alternatives			
Total Real Estate (Composite)(6091100)			
Edison Investments	3/31/2023	Quarterly	Manager
India Property Fund	12/31/2022	Quarterly	Manager
Gainesville Property	12/31/2017	Quarterly	Manager
Morgan Stanley	3/31/2023	Quarterly	Manager
AEW Parters VIII	12/31/2022	Quarterly	Manager
GreenOak US III	12/31/2022	Quarterly	Manager
Brookfield	12/31/2022	Quarterly	Manager
Artemis IV	12/31/2022	Quarterly	Manager
Stockbridge	3/31/2023	Quarterly	Manager
Total Timber Funds			
Domain Environmental	12/31/2022	Quarterly	Manager
Cash Account	3/31/2023	Monthly	Custodian
APRS Building			

## Austin Police Fee Analysis

As of March 31, 2023

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Domestic Equity	0.33	398,452,102	1,311,118	
NT Collective Russell 3000 Index	0.02	240.005.754	48,001	0.02 % of Assets
		, ,	,	
Baird Mid Cap Growth	0.70	51,208,050	357,248	0.70 % of First \$50 M 0.60 % Thereafter
Nuance Mid Cap Value	0.67	51,146,887	344,955	0.70 % of First \$25 M 0.65 % Thereafter
Kennedy Small Cap Value	1.00	56,091,410	560,914	1.00 % of Assets
Total International Equity	0.76	129,825,254	989,922	
Thompson Siegel & Walmsley	0.65	52,319,363	340,076	0.65 % of Assets
Driehaus International Small Cap Growth	0.90	19,601,980	176,418	0.90 % of Assets
WCM Focused Intl Growth LP	0.85	39,148,747	332,764	0.85 % of Assets
Wellington Emerging Markets Fund	0.75	18,755,164	140,664	0.75 % of Assets
Total Other Equity	0.36	97,113,298	354,293	
Huff Energy Fund	0.77	19,396,200	150,000	
*Franklin Park Private Equity	0.25	77,717,098	194,293	0.25 % of Assets
*In addition to the 25 bps management fee, a 1% commitment fee for the first				
year of that commitment and can potentially earn an incentive fee of 5% after				
APRS receives an 8% IRR preferred return on its investment.				
Total Fixed Income	0.36	185,761,408	673,905	
Orleans Capital	0.13	126,644,627	166,974	0.15 % of First \$50 M 0.12 % Thereafter
Pimco Diversified Income Fund	0.75	47,488,171	356,161	0.75 % of Assets
Total Other Fixed Income	1.30	11,628,610	150,770	
Capital Point Partners (Princeton Capital)	1.65	3,117,195	51,434	
LBC Credit Partners III	1.25	1,531,158	19,139	
	1.20	.,	,	
LBC Credit Partners IV	1.25	4,157,723	51,972	



## Austin Police Fee Analysis

As of March 31, 2023

Annual Fee	Market Value	Estimated Annual Fee	Fee Schedule
(%)	(*)	(\$)	
1.00	2,315,711	23,157	1.00 % of Assets
2.00	173,212	3,464	2.00 % of Assets
0.00	1,644,315	-	0.00 % of Assets
0.90	81,582,553	734,243	0.90 % of Assets
1.25	3,725,317	46,566	1.25 % of Assets
1.50	10,514,718	157,721	1.50 % of Assets
1.00	27,170,411	271,704	1.00 % of Assets
1.50	549,295	8,239	1.50 % of Assets
0.70	18,795,562	131,569	0.70 % of Assets
1.25	1,258,953	15,737	
1.25	1,258,953	15,737	1.25 % of Assets
0.00	2,224,423	-	0.00 % of Assets
0.00	1,701,375	-	0.00 % of Assets
0.49	962,807,908	4,721,639	
	(%) 0.94 1.00 2.00 0.00 0.90 1.25 1.50 1.00 1.50 0.70 1.25 1.25 1.25 0.00 0.00 0.00	0.94     146,471,094       1.00     2,315,711       2.00     173,212       0.00     1,644,315       0.90     81,582,553       1.25     3,725,317       1.50     10,514,718       1.00     27,170,411       1.50     549,295       0.70     18,795,562       1.25     1,258,953       1.25     1,258,953       0.00     2,224,423       0.00     1,701,375	(%)(\$)(\$) $0.94$ 146,471,0941,376,664 $1.00$ 2,315,71123,157 $2.00$ 173,2123,464 $0.00$ 1,644,315- $0.90$ 81,582,553734,243 $1.25$ 3,725,31746,566 $1.50$ 10,514,718157,721 $1.00$ 27,170,411271,704 $1.50$ 549,2958,239 $0.70$ 18,795,562131,5691.251,258,95315,737 $1.25$ 1,258,95315,737 $0.00$ 2,224,423- $0.00$ 1,701,375-



## Austin Police Retirement System Historical Hybrid Compositions As of March 31, 2023

Total Fund Policy			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1976		Jan-2021	
S&P 500 Index	60.00	Russell 3000 Index	42.50
Blmbg. U.S. Aggregate Index	40.00	MSCI World ex U.S.	15.00
		Blmbg. U.S. Aggregate Index	10.00
Jan-2014		Blmbg. Global Credit	5.00
Russell 3000 Index	30.00	NCREIF Property Index	15.00
MSCI World ex U.S.	15.00	HFRI Fund of Funds Composite Index	5.00
Blmbg. U.S. Aggregate Index	5.00	Credit Suisse Leveraged Loan Index	5.00
Blmbg. Global Multiverse	5.00	Cambridge Associates Private Equity Index	2.50
NCREIF Property Index	15.00		
NCREIF Timberland Index (Monthly)	5.00	Mar-2022	
Russell 3000 + 300 bps	12.50	Russell 3000 Index	45.00
HFRI Fund of Funds Composite Index	10.00	MSCI World ex U.S.	15.00
FTSE 3 Month T-Bill	2.50	Blmbg. U.S. Aggregate Index	5.00
		Blmbg. Global Credit	5.00
Jan-2017	45.00	NCREIF Property Index	15.00
Russell 3000 Index	45.00	HFRI Fund of Funds Composite Index	5.00
MSCI World ex U.S.	15.00	Credit Suisse Leveraged Loan Index	2.50
Blmbg. U.S. Aggregate Index	5.00	Cambridge Associates Private Equity Index	7.50
Blmbg. Global Multiverse	5.00		
NCREIF Property Index	15.00		
NCREIF Timberland Index (Monthly)	2.50		
HFRI Fund of Funds Composite Index	5.00		
Credit Suisse Leveraged Loan Index	5.00		
Cambridge Associates Private Equity Index	2.50		
Jan-2018			
Russell 3000 Index	42.50		
MSCI World ex U.S.	15.00		
Blmbg. U.S. Aggregate Index	10.00		
Blmbg. Global Multiverse	5.00		
NCREIF Property Index	15.00		
HFRI Fund of Funds Composite Index	5.00		
Credit Suisse Leveraged Loan Index	5.00		
Cambridge Associates Private Equity Index	2.50		



Total Equity Policy		Total Private Equity Policy		Wellington Energy Hybrid	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1979		May-2013		Jan-1999	
Russell 3000 Index	67.00	Russell 3000 Index	100.00	Russell 3000 Energy SP	100.00
MSCI World ex U.S.	33.00				
		Jan-2017		Oct-2015	
Jan-2017		Credit Suisse Leveraged Loan Index	67.00	S&P 500 Energy	100.00
Russell 3000 Index	75.00	Cambridge Associates Private Equity Index	33.00		
MSCI World ex U.S.	25.00				

Total Hedge Fund Policy								
Allocation Mandate	Weight (%)							
Jan-1990								
HFRI Fund of Funds Composite Index	100.00							

Total Fixed Income Policy			
Allocation Mandate	Weight (%)	Total Timber Daliau	
Dec-1993		Total Timber Policy	
Blmbg. U.S. Aggregate Index	100.00	Allocation Mandate	Weight (%)
		Apr-1987	
Jan-1999		NCREIF Timberland Index	100.00
Blmbg. U.S. Aggregate Index	50.00		
Blmbg. Global Multiverse	50.00		
Jan-2021			
Blmbg. U.S. Aggregate Index	50.00		
Blmbg. Global Credit	50.00		
		Total Real Estate Policy	
		Allocation Mandate	Weight (%)
		Jan-1978	
		NCREIF Property Index	100.00



- All market value and performance information through April 30, 2013 is provided by the previous consultant, CSG.
- All historical return data is presented Net of Fees.
- Best efforts have been made to acquire the most accurate data but due to reporting lag times Private Fixed Income, Real Estate, Timber, Private Equity and Hedge Fund information may not be current. Market values for these investments are subject to revision in future reports as more current information becomes available.
- NCREIF Property Index is updated quarterly. One month return information is shown as 0.00%.
- Effective May 1, 2013 the Sail Xtreme APRS Fund, LP and Xtreme Power, Inc. investments have been reclassified as Private Fixed Income under the Alternative Investments category. Prior to that they were listed as Fixed Income by the prior consultant.
- Returns for all Real Estate, Timber and Private Equity managers are Internal Rates or Return. All other managers are Time Weighted Rates of Return.
- Actuarial Assumption is currently 7.25%
- Prior to 1/1/2009 Capital Point (Princeton Capital) and Clinton Magnolia performance is included in the Total Fixed Income performance.
- The information contained in this report is obtained from third party sources and is not warranted to be accurate, complete or timely. All returns and market values are preliminary and subject to revision in future reports upon final reconciliation.
- Pricing may differ between the custodian and manager for reasons beyond the control of AndCo Consulting. Every effort will be made to use the most accurate and timely information available when the report is generated.
- \* Xtreme Power declared bankruptcy in January 2014. After discussions with the Fund's Accountant, Auditor and Legal Counsel the investments in this company have been marked down to \$0.00 as of December 31st.
  If any proceeds are recovered in the bankruptcy process they will be credited to the Fund at that time.
- As of 12/31/14 the Excelsior Investors, LTD position was reclassified to from the Hedge Fund composite to the Private Equity composite.



Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.	
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.	
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.	
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.	
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This mult shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against	
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance	
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.	
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.	
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.	
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.	
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.	
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.	
Return	- Compounded rate of return for the period.	
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.	
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.	
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life	
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.	
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.	
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.	



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

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