# MercedCERA INVESTMENT RETIREMENT BOARD AGENDA <br> THURSDAY, MAY 27, 2021 - 8:15 A.M. <br> MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION <br> TELEPHONE NUMBER: 1-310-372-7549, CONFERENCE CODE: 975839 

ALTERNATE CONFERENCE CALL NUMBER (FOR USE ONLY IF PRIMARY NUMBER MALFUNCTIONS): 669-900-6833, Meeting ID: 9303019 5748, Passcode: 095484

CALL TO ORDER: 8:15 A.M.

## Important Notice Regarding SARS-COV-2

Based on guidance from the California Department of Public Health and the California Governor's Office, in order to minimize the spread of the SARS-COV-2 virus, MercedCERA's building will be closed to the public during MercedCERA Board meetings. Members of the MercedCERA Board will participate in this meeting offsite via conference call. Members of the public may listen to the meeting and offer public comment telephonically by calling into the telephone number provided above and entering the stated conference code. If you have any issues participating in the meeting telephonically or require reasonable accommodation for your participation, please contact MercedCERA staff at 209-726-2724. Please turn your cell phone or other electronic device to non-audible mode.

## ROLL CALL

## APPROVAL OF MINUTES - May 13, 2021

## PUBLIC COMMENT

Members of the public may comment on any item under the Board's jurisdiction. Matters presented under this item will not be discussed or acted upon by the Board at this time. For agenda items, the public may make comments at the time the item comes up for Board consideration. Persons addressing the Board will be limited to a maximum of five (5) minutes in total. Please state your name for the record.

## REGULAR CALENDAR

## BOARD ACTION/DISCUSSION

Pursuant to Govt. Code § 31594 and MercedCERA’s Investment Objectives \& Policy Statement due diligence analysis requirement:

1. Discussion and possible action regarding April monthly and quarterly performance reporting as of March 31, 2021 - Meketa Group.
2. Discussion on The Role of the Fed: Pre and Post Pandemic Role of the Department of US Treasury, Discussion on Inflation and Interest Rates - Orray Taft, Meketa Group.
3. Discussion on information regarding a retirement system going independent from its county - Staff.
4. Review calendar of any training sessions and authorize expenditures for Trustees and Plan Administrator. Pursuant to Govt. Code § 31522.8 and MercedCERA’s Trustees Education and Training Policy requirements. Examples of upcoming training and educational sessions:

- CALAPRS Trustee Roundtable, May 28, 2021 (virtual conference).
- SACRS/UC Berkeley Public Pension Investment Management Program, July 13-22, 2021 (virtual conference).
- SACRS Fall Conference, November 9-12, 2021, Hollywood, CA.


## INFORMATION ONLY

## MercedCERA UPCOMING BOARD MEETINGS:

Please note: The MercedCERA Board Meeting and/or Education Day times and dates may be changed in accordance with the Ralph M. Brown Act by the MercedCERA Board as required.

- June 10, 2021
- June 24, 2021


## ADJOURNMENT

The Agenda and supporting documentation, including any material that was submitted to the Merced County Employees’ Retirement Association Board after the distribution of the Agenda, are available online at www.co.merced.ca.us/retirement.

All supporting documentation for Agenda items, including any material that was submitted to the retirement board after the distribution of the Agenda, is also available for public inspection Monday through Friday from 8:00 a.m. to 5:00 p.m. at the administrative office for the Merced County Employees' Retirement Association located at 3199 M Street, Merced, California 95348.

Persons who require accommodation for a disability in order to review an agenda, or to participate in a meeting of the Merced County Employees’ Retirement Association per the American Disabilities Act (ADA), may obtain assistance by requesting such accommodation in writing addressed to Merced County Employees' Association, 3199 M Street, Merced, CA 95348 or telephonically by calling (209) 726-2724. Any such request for accommodation should be made at least 48 hours prior to the scheduled meeting for which assistance is requested.

Persons who require accommodation for any audio, visual or other disability or Spanish or Hmong interpretation in order to review an agenda, or to participate in a meeting of the Merced County Employees’ Retirement Association per the American Disabilities Act (ADA), may obtain assistance by requesting such accommodation. Please address your written request to Merced County Employees' Association, 3199 M Street, Merced, CA 95348 or telephonically by calling (209) 7262724. Any such request for accommodation should be made at least 48 hours prior to the scheduled meeting for which assistance is requested.

Spanish and Hmong interpreters are available.
Interpretes de espanol y hmong estan disponibles.
Peb muaj tug paab txhais lug Mev hab Hmoob.

# MercedCERA ADMINISTRATIVE BOARD MEETING Minutes <br> THURSDAY, MAY 13, 2021 <br> MERCED COUNTY EMPLOYEES' RETIREMENT ASSOCIATION <br> TELEPHONE NUMBER: 1-310-372-7549, CONFERENCE CODE: 975839 <br> ALTERNATE CONFERENCE CALL IN NUMBER (FOR USE ONLY IF PRIMARY <br> NUMBER MALFUNCTIONS): 669-900-6833, Meeting ID: 9303019 5748, Passcode: 095484 

CALL TO ORDER 8:15 A.M.
Board members present: Scott Johnston, Al Peterson, Michael Harris, Karen Adams, Janey Cabral, Aaron Rosenberg, Scott Silveira, David Ness and Wendy Alvares. Absent: Ryan Paskin. Counsel: Jeff Grant. Staff: Kristen Santos, Alexis Curry, Martha Sanchez, Mark Harman, Ninebra Maryoonani, Sheri Villagrana and Brenda Mojica.

APPROVAL OF MINUTES - April 22, 2021.
The MercedCERA Board voted unanimously via roll call vote to approve the April 22, 2021 minutes as presented.
Silveira/Peterson U/A (8-0)

## PUBLIC COMMENT

## No Comments.

## CONSENT CALENDAR

Consent matters are expected to be routine and may be acted upon, without discussion, as one unit. If an item is taken off the Consent Calendar for discussion, it will be heard as the last item(s) of the Board Action/Discussion as appropriate.

RETIREMENTS: Pursuant to Govt. Code § 31663.25 or § 31672
All items of earnable compensation for service or disability retirements listed below are in compliance with the pay code schedule approved by the Board of Retirement. The retirement is authorized; however, administrative adjustments may be necessary to alter the amount due to: audit, late arrival of data, court order, etc.

| a. Masasso, Robert | Solid Waste | 6 Yrs. Svc. | Eff. 04/12/2021 |
| :--- | :--- | :--- | :--- |
| b. Cervantez, Audrey | H.S.A. | 20 Yrs. Svc. | Eff. 04/10/2021 |
| c. Callahan, Caroline | B.O.S. | 23 Yrs. Svc. | Eff. 04/10/2021 |
| d. Hulsizer, Carol | Beh. Health | 22 Yrs. Svc. | Eff. 05/01/2021 |
| e. Hernandez, Jose | D.P.W. | 23 Yrs. Svc. | Eff. 05/01/2021 |
| f. Szakala, Heidi | Probation | 16 Yrs. Svc. | Eff. 04/24/2021 |
| g. Xiong, Khou | Public Health | 28 Yrs. Svc. | Eff. 05/11/2021 |
| h. Mua, Kua | Probation | 25 Yrs. Svc. | Eff. 05/01/2021 |
| i. Magnuson, David | H.S.A. | 20 Yrs. Svc. | Eff. 05/08/2021 |

YTD fiscal year 2020/2021 retirees: 76
YTD fiscal year 2019/2020 retirees: 104
YTD fiscal year 2018/2019 retirees: 103
REFUND OF SERVICE PURCHASE: None
DEATH BENEFIT: None
MONTHLY BUDGET REPORT: Submitted.

The MercedCERA Board voted unanimously via roll call vote to approve the consent calendar.
Adams/Silveira U/A (8-0)

## BOARD ACTION 1 ¹/DISCUSSION

1. Discussion and possible action to direct the voting delegate to support the SACRS Omnibus Bill, which will be included in the SACRS Spring Conference Business Meeting - Staff.
The MercedCERA Board voted unanimously via roll call vote to approve the voting delegate Kristen Santos to support the SACRS Omnibus Bill.
Silveira/Cabral U/A (8-0)
2. Review calendar of any training sessions and authorize expenditures for Trustees and Plan Administrator. Pursuant to Govt. Code § 31522.8 and MercedCERA’s Trustees Education and Training Policy requirements. Examples of upcoming training and educational sessions:

- CALAPRS Advanced Principles of Pension Governance for Trustees, June 7, 9, 11, 2021.
- SACRS/UC Berkeley Public Pension Investment Management Program, July 13-22, 2021 (virtual conference).
- SACRS Fall Conference, November 9-12, 2021 (in person/virtual conference TBD).

The MercedCERA Board voted unanimously via roll call vote to approve Trustees Rosenberg, Ness, Alvares, Silveira, Johnston, Peterson and the Plan Administrator Kristen Santos to attend the SACRS Fall Conference in Hollywood, CA.
Cabral/Adams U/A (8-0)

## INFORMATION ONLY

- Trustee Adams- Have a good day.
- Trustee Peterson- Blessed day to all.
- Plan Administrator- Wanted to let the board know Trustee Kalisa Rochester has resigned effective May 10, 2021. It has not been decided when the next election will be run.


## ADJOURNMENT

The meeting adjourned at 8:34 AM
Respectfully submitted,

Scott Johnston, Vice Chair

Al Peterson, Secretary

## All supporting documentation is available for public review at www.co.merced.ca.us/retirement

Any material related to an item on this Agenda submitted to the Merced County Employees' Retirement Association, after distribution of the Agenda packet is available for public inspection at www.co.merced.ca.us/retirement

Persons who require accommodation for a disability in order to review an agenda, or to participate in a meeting of the Merced County Employees’ Retirement Association per the American Disabilities Act (ADA), may obtain assistance by requesting such accommodation by emailing the Merced County Employees’ Association at MCERA@co.merced.ca.us, or telephonically by calling (209) 7262724. Any such request for accommodation should be made at least 48 hours prior to the scheduled meeting for which assistance is requested.

## MEKETA

INVESTMENT GROUP

## Merced County Employees' <br> Retirement Association

May 27, 2021

Performance Update

## MEKETA

1. Executive Summary
2. Economic and Market Update
3. Performance Highlights
4. Preliminary Performance Update as of April 30, 2021
5. Performance Update as of March 31, 2021
6. Educational Session on Inflation
7. Disclaimer, Glossary, and Notes

## Executive Summary <br> As of March 31, 2021

## Performance Overview - Q1 2021

|  | alue | Q1 Results |  | QTD Relative Results |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 2021 | \$1,085,971,253 | Merced CERA | 2.9\% | Merced CERA vs Policy Benchmark | -1.3\% |
| Q4 2020 | \$1,054,502,272 | Policy Benchmark | 4.2\% |  |  |

As of March 31,2021 , the value of the Fund's assets was $\$ 1.09$ billion.

- The Merced CERA portfolio returned $2.9 \%$ for the quarter. This translates to annualized returns of $10.5 \%, 10.7 \%$ and $8.5 \%$ over the three, five and ten-year trailing periods. The portfolio's since inception annualized return is $8.4 \%$.
- The portfolio underperformed the policy benchmark by (1.3\%) over the quarter, but has kept pace with the benchmark over the five-year trailing period. The portfolio underperformed the benchmark by ( $0.5 \%$ ) over the trailing ten-year period, while outperforming by $+1.9 \%$ since inception.
- US Equities, up 5.5\%, Hedge Funds, 4.8\%, and Private Equity, 12.1\%, led positive performance in the portfolio, while US Fixed Income, down $-3.4 \%$, and Emerging Market equities, down $-1.0 \%$, were the only asset classes that posted negative returns.
- Relative to policy targets, overweight positions in equities contributed positively, while the underweight position in Private Equity likely detracted from performance.


## Public Manager Highlights Q1 2021

9 out of 12 Public Active Managers ${ }^{1}$ either outperformed or matched their respective benchmarks for Q1 2021.
Total Equity (Active)

- US Equity, up $5.5 \%$, trailed its benchmark by 80 basis points. Mellon Dynamic US Equity, Merced CERA's active US large cap manager, returned $5.2 \%$, trailing their benchmark by ( $1.0 \%$ ). Champlain, the active small cap manager, returned $4.9 \%$, underperforming their benchmark by (7.8\%).
- Developed International Equity returned 3.1\%, underperforming its benchmark by 80 basis points. In this sleeve, the small cap active managers, Driehaus, up $4.4 \%$ and Acadian, up $10.7 \%$, outperformed their large cap counterparts on an absolute basis, as well as relative to their respective benchmarks- by $+1.1 \%$ and $+5.2 \%$ respectively. On the other hand, GQG, up $2.5 \%$ and First Eagle, up $1.3 \%$, trailed their benchmarks by (10\%) and (2.2\%) respectively.
- Emerging Markets Equity returned - $1.0 \%$, underperforming its benchmark by 330 basis points. In this sleeve, RWC returned $2.7 \%$ to beat its benchmark by $+0.4 \%$, while Artisan Developing World returned $-2.3 \%$, trailing the benchmark by (4.6\%).

[^0]
## Total Fixed Income (Active)

- US Fixed Income returned $-3.4 \%$, matching the benchmark. Barrow Hanley, the only active manager in this sleeve, returned $-3.5 \%$ beating the benchmark by $+0.1 \%$.
- Opportunistic Credit returned 2.5\%, outperforming the benchmark by 350 basis points. In this sleeve GoldenTree and Sculptor Credit registered positive returns of $2.4 \%$ and $6.9 \%$, outpacing their benchmarks by $+1.0 \%$ and $+5.5 \%$ respectively. PIMCO Income, however, posted a negative return of $-0.2 \%$, albeit beating its benchmark by $+3.6 \%$.
Manager Updates


## Asset Allocation and Manager Updates

- During the quarter, rebalancing recommendations made by Meketa were approved and effected, bringing the portfolio closer to policy targets.
- New mandates funded this quarter include Accel- KKR Capital Partners VI, Khosla Ventures Seed E and TCV XI in the private equity sleeve.


## Active Manager Expectations

| Manager | Strategy Description | $\begin{gathered} \text { Beta } \\ \text { (High/Neutral/Low) } \end{gathered}$ | $\qquad$ | Environments Manager Underperforms |
| :---: | :---: | :---: | :---: | :---: |
| Domestic Equity |  |  |  |  |
| Champlain Small Cap | Moderately diversified small cap portfolio | Low | 4.0\% to 7.0\% | In low quality rallies |
| Mellon Capital MCM Dynamic U.S. Equity | Very diversified, quantitative, large cap core portfolio. | Neutral (higher in more recent periods) | 2.5\% to 5.0\% | When investors misprice forward looking return/risk characteristics; when returns are concentrated in one sector. |
| Developed Markets Equity (Non-U.S.) |  |  |  |  |
| Driehaus International Small Cap Growth | Diversified growth manager that seeks to invest in companies experiencing positive growth inflections, using a combination of fundamental and macroeconomic analysis. | Low | 4.0\% to 7.0\% | At market inflection points, with abrupt leadership change. Deep value, low quality market environments. |
| Acadian ACWI ex US Small Cap Equity | Very diversified international small cap portfolio, employing highly adaptive quantitative models. | Neutral | 2.5\% to 4.5\% | During narrow markets, abrupt changes in leadership. In "value" challenged periods. |
| First Eagle International Value Fund | Benchmark agnostic, diversified international value manager with strategic gold allocation and willingness to utilize cash when valuations are elevated across the market. | Low | 5.0\% to 10.0\% | In growth- and momentum-led rallies, where value discipline and an allocation to cash will be headwinds, and if physical gold underperforms. |
| GQG International Equity | Benchmark agnostic, concentrated international quality-growth equity manager with valuation discipline and macro awareness. Willing to invest in US-listed companies. | Low | 5.0\% to 10.0\% | In cyclical recoveries where deep value, asset-heavy, smaller cap stocks rally. |

Merced County Employees ' Retirement Association

## Active Manager Expectations (Continued)

| Manager | Strategy Description | ```Beta (High/Neutral/Low)``` | Tracking Error Range (bps) | Environments Manager Underperforms |
| :---: | :---: | :---: | :---: | :---: |
| Emerging Markets Equity |  |  |  |  |
| Artisan Developing World | Concentrated, benchmark agnostic emerging markets strategy focused on high quality companies, overlaid with top-down macro (currency) awareness. | Neutral | 5.0\% to 10.0\% | During cyclical rallies concentrated in deeper value, smaller cap stocks. |
| RWC Emerging Markets | Concentrated, growth-at-a-reasonable-price emerging markets equity strategy focused on mid cap stocks. | High | 6.0\% to 10.0\% | Narrow rallies in large cap stocks where small and mid-caps lag, periods of heightened market volatility, deep drawdowns in asset-heavy cyclicals. |
| Investment Grade Bonds |  |  |  |  |
| Barrow Hanley Core Fixed Income | Conservative, low tracking-error core strategy focused on bottom-up security selection. | Neutral | 0.2\% to 0.7\% | At market Inflection points, but should track the index very closely. |
| Opportunistic Credit |  |  |  |  |
| PIMCO Income | Global multi-sector, benchmark agnostic approach, utilizing firm's resources to identify best income ideas while staying senior in the capital structure. | Low | 1.5\% to 3.5\% | During periods of lower quality bond rallies and volatility in interest rates and certain currencies. |
| GoldenTree Multi-Sector Credit | Bottom-up security selection, managing risk and adding value through credit sector rotation. | Low | 2.5\% to 4.5\% | During initial periods of economic recovery and rapid spread tightening. |

## Merced County Employees ' Retirement Association

## Manager Monitor

| Manager | Significant Events (Yes/No) | Last Meeting w Board of Retirement | Last <br> Meeting <br> with MIG | Comments |
| :---: | :---: | :---: | :---: | :---: |
| Domestic Equity Assets |  |  |  |  |
| Mellon Capital BNY Mellon MCM Dynamic US Equity Fund | No | - | Mar-17 | Merger of smaller boutiques - Met Mellon in March 2017 to go over HY Beta Strategy \& conference call for Carbon Efficiency strategy. |
| Mellon Capital EB DV Large Cap Stock Index Fund | No | - | Mar-17 | Merger of smaller boutiques - Met Mellon in March 2017 to go over HY Beta Strategy \& conference call for Carbon Efficiency strategy. |
| Champlain Small Cap | No | - | Oct-20 | Review of strategy, no changes to conviction level. |
| Developed Markets Equity (Non-U.S.) Assets |  |  |  |  |
| Driehaus International Small Cap Growth | No | - | Oct-19 | Review of strategy, no changes to conviction level. |
| Acadian ACWI ex US Small Cap Equity | No | - | Jun-20 | Review of strategy, no changes to conviction level. |
| First Eagle International Value Fund |  |  | Mar-20 | Review of strategy, no changes to conviction level. |
| GQG International Equity | No | - | Mar-21 | Review of strategy, no changes to conviction level. |
| Emerging Markets Equity Assets |  |  |  |  |
| Artisan Developing World |  |  | Feb- 20 | Review of strategy, no changes to conviction level. |
| RWC Emerging Markets | No | - | Apr-20 | Review of strategy, no changes to conviction level. |
| US Fixed Income Assets |  |  |  |  |
| Barrow Hanley Core Fixed Income Fund | No | Apr-19 | Feb-20 | On 7/26/20 BH announced that Perpetual Limited, an Australian financial services firm, will acquire Brightsphere's 75.1\% majority stake in BH. |
| Opportunistic Credit |  |  |  |  |
| PIMCO Income Fund | No | - | Jan-20 | Regular high-level meeting discussing positioning and detractors for Income and Total Return strategies. |
| GoldenTree Multi-Sector Credit | No | - | Jul-20 | Meeting in London for regular strategy update. |
| Sculptor Opportunistic Credit | No |  | Nov-20 | Update on legacy legal issues coming to a close. |
| Private Equity Program | N/A | N/A | N/A | Oversight by Cliffwater. |
| Real Assets Program | N/A | N/A | N/A | Oversight by Cliffwater. |
| Hedge Fund Program | N/A | N/A | N/A | Oversight by Cliffwater. |

Merced County Employees ‘ Retirement Association

## Active Manager Peer Rankings ${ }^{1}$

| Investment Managers | Product | Peer Group | Market Value $(\$ \mathrm{~mm})$ | 1YR | 3YR | 5YR | 10YR | Client Inception | Years in Portfolio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Champlain | Small Cap Fund | US Small Cap Core | 35 | 83 | 22 | 12 | 16 | Nov-20 | 0.4 |
| Mellon Capital | Dynamic US Equity Strategy | US Large Cap Core | 128 | 63 | 12 | 5 | 1 | Dec-12 | 8.3 |
| Acadian | All-Country World ex US Small Cap | Non-US Div Small Cap | 14 | 22 | 39 | 32 | 36 | May-19 | 1.7 |
| Driehaus | International Small Cap Growth | ACWI ex US Small Cap Growth | 16 | 15 | 12 | 14 | 10 | May-19 | 2.0 |
| GQG | International Equity | All ACWI ex US Equity | 53 | 99 | 20 |  |  | Dec-19 | 1.3 |
| First Eagle | International Value | EAFE Value Equity | 49 | 99 | 22 | 75 | 45 | Dec-19 | 1.3 |
| Artisan | Developing World | Emerging Markets | 71 | 4 | 1 | 1 |  | Dec-19 | 1.3 |
| RWC | Emerging Markets | Emerging Markets | 30 | 4 | 27 | 8 |  | Dec-19 | 1.3 |
| Barrow Hanley | Core Fixed Income | US Core Fixed Income | 90 | 61 | 32 | 54 | 73 | Mar-10 | 10.0 |
| PIMCO | Income Fund | Global Multi-Sector Fixed Income | 25 | 66 | 33 | 13 | 11 | May-19 | 2.0 |
| GoldenTree | Multi-Sector Credit Strategy | Global Multi-Sector Fixed Income | 23 | 4 | 37 | 12 |  | Jun-19 | 1.8 |

[^1]
## Economic and Market Update

Data as of April 30, 2021


Economic and Market Update

## Market Returns ${ }^{1}$

| Indices | April | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| S\&P 500 | $5.3 \%$ | $11.8 \%$ | $46.0 \%$ | $18.6 \%$ | $17.4 \%$ | $14.2 \%$ |
| MSCI EAFE | $3.0 \%$ | $6.6 \%$ | $39.9 \%$ | $6.3 \%$ | $8.9 \%$ | $5.2 \%$ |
| MSCI Emerging Markets | $2.5 \%$ | $4.8 \%$ | $48.7 \%$ | $7.5 \%$ | $12.5 \%$ | $3.6 \%$ |
| MSCI China | $1.4 \%$ | $1.0 \%$ | $37.0 \%$ | $8.7 \%$ | $16.5 \%$ | $7.2 \%$ |
| Bloomberg Barclays Aggregate | $0.8 \%$ | $-2.6 \%$ | $-0.3 \%$ | $5.2 \%$ | $3.2 \%$ | $3.4 \%$ |
| Bloomberg Barclays TIPS | $1.4 \%$ | $-0.1 \%$ | $6.1 \%$ | $6.2 \%$ | $4.1 \%$ | $3.3 \%$ |
| Bloomberg Barclays High Yield | $1.1 \%$ | $2.0 \%$ | $19.7 \%$ | $7.0 \%$ | $7.5 \%$ | $6.4 \%$ |
| 10 -year US Treasury | $1.2 \%$ | $-5.9 \%$ | $-7.7 \%$ | $5.6 \%$ | $2.0 \%$ | $3.7 \%$ |
| 30-year US Treasury | $2.7 \%$ | $-13.6 \%$ | $-20.0 \%$ | $7.3 \%$ | $3.4 \%$ | $6.6 \%$ |

- Over the last year, global risk assets produced significant returns, largely driven by record fiscal and monetary policy stimulus and positive developments with the COVID-19 vaccine. US Treasuries did not fare as well over the same period given the rise in interest rates.
- In April, the decline in Treasury yields provided support for the bond market with TIPS erasing most of their year-to date losses.
- Equity markets across developed economies added to their 2021 gains in April, particularly in the US, as reopening optimism continued to be supportive. Emerging markets were also up in April, but trail developed markets year-to-date due to low returns in China and rising COVID-19 cases in some areas.

[^2]Economic and Market Update

## Sector Returns ${ }^{1}$



- Cyclical sectors like energy and financials continue to lead the way in 2021, as some investors rotate out of stay-at-home focused companies in the technology sector.
- The rotation into value stocks has largely been driven by expectations for the economy to reopen, potentially higher taxes, and rising interest rates. Growth stocks typically produce more of their cash flows further into the future and increased interest rates lead to larger discounts, reducing present values.

[^3]US Yield Curve Steepens ${ }^{1}$
$\longrightarrow$ Dec-20 Apr-21


- Thus far in 2021, the yield curve has steepened on inflation fears related to gradual signs of economic improvement, vaccine developments, and expectations for increased Treasury issuance to support fiscal policy measures.
- The yield curve may continue to steepen if growth and inflation pressures build. Higher relative rates compared to other countries, and the Fed potentially extending the duration of their quantitative easing purchases, could counterbalance the steepening trend though.

[^4]

- Inflation expectations, particularly over the short-term, continued to rise in recent months to above long-term averages, with the vaccine roll-out, rising raw material prices, and expected additional fiscal stimulus as key drivers.
- Looking forward, the track of economic growth and the inflationary effects of the unprecedented US fiscal response will be key issues. Additionally, changes to Fed policy focused on an average inflation target may play a role in the inflation market dynamics going forward.

[^5]
## Credit Spreads (High Yield \& Investment Grade) ${ }^{1}$



High Yield OAS
_High Yield OAS $\ldots$ Average


- Credit spreads (the spread above a comparable maturity Treasury) for investment grade and high yield corporate debt widened sharply at the start of the pandemic as investors sought safety.
- Policy support, the search for yield in the low rate environment, and recent increases in Treasury rates have led to a decline in credit spreads to below long-term averages, particularly for high yield.

[^6]GDP Data Shows Projected Improvements in 20211


- Major economies experienced historic declines in growth during the second quarter of 2020 that were followed by record increases in the third quarter driven by pent-up demand from the lockdown measures earlier in the year.
- Looking forward, strong growth is expected in 2021 particularly for China, projected to grow at an impressive $8.4 \%$ given their ability to quickly control the virus and reopen their economy. The US is expected to grow faster than the euro area this year, helped by improvements in vaccine distribution.

[^7]US Unemployment ${ }^{1}$


- In April, the unemployment rate (U3) rose for the first time in almost a year, from 6.0\% to 6.1\%.
- Despite a slight decline ( $-0.3 \%$ ) from March, the broader measure of unemployment (U6) that includes discouraged and underemployed workers is much higher at 10.4\%.
- Pandemic related concerns, childcare issues, and a mismatch of skills and available jobs have all contributed to slack in the labor market, and weak wage pressures creating a counterforce to inflationary pressures.

[^8]
## Performance Highlights

As of April 30, 2021

Market Review and Performance Summary for April 2021


## US Treasury 10 yr: -9 basis points

- In April, equity markets rose to fresh highs encouraged by positive economic data, positive momentum in the roll-out of the Covid-19 vaccines and stellar earnings reports from companies in the US. The rotation from growth into value stocks slowed as yields on treasuries declined across the yield curve. Although the dollar weakened against major currencies, returns in non-US equity markets were lower.
- Inflation expectations were little changed from the previous month as the Fed reiterated that inflation pressures building in the economy were expected to only be transitory.

As of April 30, 2021, total assets for the Merced CERA Portfolio are estimated at $\$ 1.10$ billion.

- Merced CERA reported a monthly return of $3.1 \%$. All major asset classes reported positive returns, led by US Equity and Emerging Markets equities that returned $5.7 \%$ and $5.2 \%$ respectively.


# Preliminary Performance Update as of April 30, 2021 

Total Fund | As of April 30, 2021


[^9]

Total Fund | As of April 30, 2021

|  | Asset Class Performance Summary |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value <br> (\$) | \% of Portfolio | 1 Mo (\%) | YTD <br> (\%) | Fiscal YTD (\%) | 1 Yr <br> (\%) | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception <br> (\%) | Inception Date |
| Total Fund ( Net )* | 1,104,434,899 | 100.0 | 3.1 | 6.1 | 22.9 | 29.4 | 11.3 | 11.2 | 8.3 | 8.5 | Dec-94 |
| Total Fund (Gross)* |  |  | 3.1 | 6.2 | 23.3 | 29.9 | 11.6 | 11.5 | 8.7 | 8.6 |  |
| Policy Index |  |  | 2.0 | 6.3 | 22.8 | 25.6 | 10.6 | 11.0 | 9.0 | 6.5 | Dec-94 |
| Total Fund w/o Alternatives (Net) | 770,947,307 | 69.8 | 3.8 | 5.8 | 25.7 | 34.9 | 13.3 | 12.7 | 9.5 | -- | Dec-94 |
| Total Fund w/o Alternatives (Gross) |  |  | 3.8 | 5.9 | 26.1 | 35.5 | 13.6 | 13.0 | 9.2 | -- |  |
| Policy Index w/o AI |  |  | 2.9 | 5.8 | 25.2 | 32.6 | 11.2 | 11.3 | -- | -- | Dec-94 |
| US Equity ( Net ) | 266,759,845 | 24.2 | 5.7 | 11.5 | 37.4 | 47.1 | 18.0 | 17.6 | 13.8 | 10.9 | Dec-94 |
| US Equity (Gross) |  |  | 5.7 | 11.6 | 37.7 | 47.4 | 18.3 | 17.8 | 14.0 | 11.0 |  |
| Russell 3000 |  |  | 5.2 | 11.8 | 40.1 | 50.9 | 18.3 | 17.5 | 13.8 | 10.8 | Dec-94 |
| International Equity (Net) | 244,644,585 | 22.2 | 4.8 | 6.3 | 37.9 | 56.3 | 15.2 | 15.0 | 7.3 | 6.9 | Dec-98 |
| International Equity (Gross) |  |  | 4.9 | 6.6 | 38.9 | 57.6 | 15.8 | 15.6 | 7.9 | 7.2 |  |
| International Equity Custom |  |  | 2.8 | 6.0 | 33.7 | 44.6 | 7.5 | 10.7 | 5.7 | 5.1 | Dec-98 |
| Developed International Equity (Net) | 138,558,948 | 12.5 | 4.6 | 7.8 | 27.4 | 36.7 | 8.5 | 10.7 | 5.7 | 5.0 | Jan-08 |
| Developed International Equity (Gross) |  |  | 4.6 | 8.0 | 28.1 | 37.7 | 8.9 | 11.0 | 6.2 | 5.4 |  |
| Custom Blended Developed International Equity Benchmark |  |  | 3.3 | 7.3 | 32.5 | 43.4 | 7.0 | 9.3 | 5.4 | 3.8 | Jan-08 |
| Emerging Markets Equity (Net) | 106,085,637 | 9.6 | 5.2 | 4.1 | 49.7 | 81.7 | 24.0 | 22.0 | -- | 10.7 | Apr-12 |
| Emerging Markets Equity (Gross) |  |  | 5.3 | 4.5 | 50.9 | 83.6 | 25.0 | 23.1 | -- | 11.7 |  |
| Custom Blended Emerging Markets Benchmark |  |  | 2.5 | 4.8 | 37.5 | 48.7 | 7.8 | 12.8 | 3.9 | 5.9 | Apr-12 |
| US Fixed Income (Net) | 192,707,723 | 17.4 | 0.8 | -2.5 | -1.3 | 0.1 | 4.7 | 3.5 | 3.7 | 5.2 | Dec-94 |
| US Fixed Income (Gross) |  |  | 0.9 | -2.5 | -1.2 | 0.2 | 4.8 | 3.7 | 4.0 | 5.4 |  |
| BBgBarc US Aggregate TR |  |  | 0.8 | -2.6 | -1.4 | -0.3 | 4.9 | 3.7 | 3.6 | 5.5 | Dec-94 |
| Opportunistic Credit (Net) | 66,835,154 | 6.1 | 1.2 | 3.8 | 13.5 | 19.9 | -- | -- | -- | 7.2 | May-19 |
| Opportunistic Credit (Gross) |  |  | 1.3 | 4.0 | 13.9 | 20.5 | -- | -- | -- | 7.5 |  |
| 50\% Barclays US Aggregate / 25\% Barclays US High Yield / 25\% Credit Suisse Leveraged Loans |  |  | 0.8 | -0.2 | 5.2 | 8.5 | -- | -- | -- | 5.5 | May-19 |

The current US Fixed Income benchmark is the Barclays US Agg. Please refer to the benchmark history for the composition of the US Fixed Income benchmark in earlier periods. Data prior to March 2018 provided by prior consultant

Total Fund | As of April 30, 2021

|  | Market Value <br> (\$) | \% of Portfolio | 1 Mo <br> (\%) | YTD <br> (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real Estate (Net) | 81,764,429 | 7.4 | NA | 4.1 | 4.5 | 3.8 | 2.9 | 4.8 | 6.8 | -- | Mar-99 |
| Real Estate (Gross) |  |  | NA | 4.1 | 4.5 | 3.8 | 2.9 | 4.9 | 7.5 | 8.0 |  |
| Custom Blended Real Estate Benchmark |  |  | NA | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| CPI + 5\% (Seasonally Adjusted) |  |  | 1.2 | 3.7 | 8.1 | 9.6 | 7.3 | 7.4 | 6.9 | -- | Mar-99 |
| Private Real Estate (Net) | 60,049,678 | 5.4 | NA | 1.1 | 1.0 | 0.2 | 1.7 | 4.1 | 6.4 | -- | Mar-99 |
| Private Real Estate (Gross) |  |  | NA | 1.1 | 1.0 | 0.2 | 1.7 | 4.2 | 7.1 | 7.8 |  |
| Custom Blended Real Estate Benchmark |  |  | NA | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| Private Equity (Net) | 75,402,239 | 6.8 | NA | 12.1 | 30.6 | 26.2 | 12.8 | 13.2 | 11.0 | 9.0 | Jun-05 |
| Private Equity (Gross) |  |  | NA | 12.1 | 30.6 | 26.2 | 12.8 | 13.2 | 11.2 | 9.1 |  |
| Custom Blended Private Equity Benchmark |  |  | NA | 15.2 | 41.8 | 33.5 | 21.8 | 21.6 | -- | -- | Jun-05 |
| Russell $3000+3 \% 1$-Quarter Lag |  |  | -0.2 | 15.3 | 55.8 | 24.0 | 15.7 | 20.1 | 16.9 | 13.2 | Jun-05 |
| Hedge Fund (Net) | 101,578,657 | 9.2 | 1.5 | 6.3 | 16.5 | 21.1 | 5.6 | 7.1 | -- | 4.9 | Jun-14 |
| Hedge Fund (Gross) |  |  | 1.5 | 6.7 | 17.3 | 22.3 | 6.2 | 7.5 | -- | 5.2 |  |
| Custom Blended Hedge Fund Benchmark |  |  | 2.4 | 4.3 | 17.6 | 22.6 | 6.2 | 6.2 | -- | 4.6 | Jun-14 |
| Real Assets (Net) | 66,538,775 | 6.0 | NA | 6.0 | 14.8 | 14.0 | 8.2 | 7.7 | 8.2 | -- | Mar-99 |
| Real Assets (Gross) |  |  | NA | 6.0 | 15.0 | 14.2 | 8.3 | 7.9 | 8.8 | -- |  |
| Custom Blended Real Assets Benchmark |  |  | NA | 5.4 | 12.4 | -4.1 | 4.9 | 6.8 | -- | -- | Mar-99 |
| CPI + 5\% (Seasonally Adjusted) |  |  | 1.2 | 3.7 | 8.1 | 9.6 | 7.3 | 7.4 | 6.9 | -- | Mar-99 |
| Private Infrastructure (Net) | 22,387,210 | 2.0 | NA | 5.9 | 9.6 | 17.8 | 12.1 | 11.7 | -- | 9.3 | Dec-14 |
| Private Infrastructure (Gross) |  |  | NA | 6.0 | 9.6 | 18.0 | 12.1 | 11.7 | -- | 9.4 |  |
| S\&P Global Infrastructure Net TR USD |  |  | 3.5 | 6.4 | 23.9 | 28.7 | 5.1 | 6.0 | 5.2 | 4.3 | Dec-14 |
| Private Natural Resources (Net) | 12,378,948 | 1.1 | NA | 1.8 | 12.1 | -8.4 | 3.1 | 9.3 | -- | 10.9 | Sep-15 |
| Private Natural Resources (Gross) |  |  | NA | 1.8 | 12.1 | -8.4 | 3.1 | 9.3 | -- | 10.9 |  |
| S\&P Global Natural Resources Index TR USD |  |  | 4.1 | 16.4 | 45.0 | 53.4 | 5.2 | 9.9 | 1.3 | 12.8 | Sep-15 |
| Cash (Net) | 8,203,492 | 0.7 | 0.0 | 0.0 | 0.2 | 0.2 | 0.8 | - | -- | -- |  |
| Cash (Gross) |  |  | 0.0 | 0.0 | 0.2 | 0.2 | 0.8 | -- | -- | -- |  |

[^10]Private Markets values are cash flow adjusted from 12/31/2020 NAVs unless otherwise noted.
Real Assets includes State Street Real Asset NL Fund.

Total Fund | As of April 30, 2021

|  | Trailing Net Performance |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value <br> (\$) | \% of Portfolio |  | $\begin{array}{r} 1 \mathrm{Mo} \\ (\%) \end{array}$ | YTD (\%) | Fisca YTD (\%) | $\begin{array}{r} 1 \mathrm{Yr} \\ (\%) \end{array}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs (\%) | Inception (\%) | Inception Date |
| Total Fund(Net)* | 1,104,434,899 | 100.0 | -- | 3.1 | 6.1 | 22.9 | 29.4 | 11.3 | 11.2 | 8.3 | 8.5 | Dec-94 |
| Policy Index |  |  |  | 2.0 | 6.3 | 22.8 | 25.6 | 10.6 | 11.0 | 9.0 | 6.5 | Dec-94 |
| Total Fund w/o Alternatives(Net) | 770,947,307 | 69.8 | 69.8 | 3.8 | 5.8 | 25.7 | 34.9 | 13.3 | 12.7 | 9.5 | -- | Dec-94 |
| Policy Index w/o AI |  |  |  | 2.9 | 5.8 | 25.2 | 32.6 | 11.2 | 11.3 | -- | -- | Dec-94 |
| US Equity (Net) | 266,759,845 | 24.2 | 34.6 | 5.7 | 11.5 | 37.4 | 47.1 | 18.0 | 17.6 | 13.8 | 10.9 | Dec-94 |
| Russell 3000 |  |  |  | 5.2 | 11.8 | 40.1 | 50.9 | 18.3 | 17.5 | 13.8 | 10.8 | Dec-94 |
| Mellon Dynamic US Equity(Net) | 121,058,672 | 11.0 | 45.4 | 6.3 | 11.8 | 34.9 | 42.9 | 20.2 | 19.5 | -- | 18.9 | Dec-12 |
| S\&P 500 |  |  |  | 5.3 | 11.8 | 36.6 | 46.0 | 18.7 | 17.4 | 14.2 | 16.1 | Dec-12 |
| Mellon Large Cap(Net) | 113,875,048 | 10.3 | 42.7 | 5.4 | 11.8 | 39.1 | 49.7 | 19.3 | 17.8 | -- | 17.6 | Mar-16 |
| Russell 1000 |  |  |  | 5.4 | 11.6 | 38.9 | 49.5 | 19.2 | 17.8 | 14.2 | 17.6 | Mar-16 |
| Champlain Small Cap(Net) | 31,826,124 | 2.9 | 11.9 | 4.4 | 9.6 | -- | -- | -- | -- | -- | 36.1 | Nov-20 |
| Russell 2000 |  |  |  | 2.1 | 15.1 | 58.6 | 74.9 | 15.2 | 16.5 | 11.6 | 48.1 | Nov-20 |
| International Equity(Net) | 244,644,585 | 22.2 | 31.7 | 4.8 | 6.3 | 37.9 | 56.3 | 15.2 | 15.0 | 7.3 | 6.9 | Dec-98 |
| International Equity Custom |  |  |  | 2.8 | 6.0 | 33.7 | 44.6 | 7.5 | 10.7 | 5.7 | 5.1 | Dec-98 |
| Developed International Equity(Net) | 138,558,948 | 12.5 | 56.6 | 4.6 | 7.8 | 27.4 | 36.7 | 8.5 | 10.7 | 5.7 | 5.0 | Jan-08 |
| Custom Blended Developed International Equity Benchmark |  |  |  | 3.3 | 7.3 | 32.5 | 43.4 | 7.0 | 9.3 | 5.4 | 3.8 | Jan-08 |
| GQG International Equity (Net) | 56,319,083 | 5.1 | 40.6 | 5.4 | 8.0 | 23.7 | 34.3 | -- | -- | -- | 17.1 | Dec-19 |
| MSCI ACWI ex USA |  |  |  | 2.9 | 6.5 | 32.5 | 43.0 | 7.0 | 9.8 | 4.7 | 15.7 | Dec-19 |
| First Eagle International Value Fund(Net) | 50,064,768 | 4.5 | 36.1 | 2.4 | 3.7 | 19.5 | 24.3 | -- | -- | -- | 7.8 | Dec-19 |
| MSCI EAFE |  |  |  | 3.0 | 6.6 | 29.6 | 39.9 | 6.3 | 8.9 | 5.2 | 12.8 | Dec-19 |
| MSCI World ex USA |  |  |  | 3.1 | 7.3 | 30.4 | 40.6 | 6.6 | 8.9 | 5.0 | 13.2 | Dec-19 |

[^11]Developed International Equity and Emerging Markets Equity composites were only reported as one composite prior to March 2018.

Total Fund | As of April 30, 2021

|  | Market Value (\$) | \% of Portfolio | \% of <br> Sector | $\begin{array}{r} 1 \text { Mo } \\ (\%) \end{array}$ | YTD <br> (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Driehaus International Small Cap Growth(Net) | 16,940,389 | 1.5 | 12.2 | 6.6 | 11.2 | 50.9 | 71.7 | -- | -- | -- | 28.5 | May-19 |
| MSCI ACWI ex US Small Cap Growth NR USD |  |  |  | 4.8 | 8.3 | 42.2 | 59.3 | 10.4 | 12.3 | 7.1 | 20.7 | May-19 |
| Acadian ACWI ex U.S. Small Cap Equity(Net) | 15,234,708 | 1.4 | 11.0 | 6.7 | 18.1 | 50.1 | 64.9 | -- | -- | -- | 22.4 | May-19 |
| MSCI ACWI ex US Small Cap |  |  |  | 4.6 | 10.4 | 44.6 | 58.4 | 7.8 | 10.8 | 6.3 | 17.0 | May-19 |
| Emerging Markets Equity(Net) | 106,085,637 | 9.6 | 43.4 | 5.2 | 4.1 | 49.7 | 81.7 | 24.0 | 22.0 | -- | 10.7 | Apr-12 |
| Custom Blended Emerging Markets Benchmark |  |  |  | 2.5 | 4.8 | 37.5 | 48.7 | 7.8 | 12.8 | 3.9 | 5.9 | Apr-12 |
| Artisan Developing World TR(Net) | 74,988,954 | 6.8 | 70.7 | 5.6 | 3.1 | 47.1 | 82.5 | -- | -- | -- | 55.5 | Dec-19 |
| MSCI Emerging Markets |  |  |  | 2.5 | 4.8 | 37.5 | 48.7 | 7.5 | 12.5 | 3.6 | 22.5 | Dec-19 |
| RWC(Net) | 31,096,683 | 2.8 | 29.3 | 4.3 | 7.2 | 58.4 | 78.5 | -- | -- | -- | 29.3 | Dec-19 |
| MSCI Emerging Markets |  |  |  | 2.5 | 4.8 | 37.5 | 48.7 | 7.5 | 12.5 | 3.6 | 22.5 | Dec-19 |
| US Fixed Income(Net) | 192,707,723 | 17.4 | 25.0 | 0.8 | -2.5 | -1.3 | 0.1 | 4.7 | 3.5 | 3.7 | 5.2 | Dec-94 |
| BBgBarc US Aggregate TR |  |  |  | 0.8 | -2.6 | -1.4 | -0.3 | 4.9 | 3.7 | 3.6 | 5.5 | Dec-94 |
| Vanguard Total Bond Market Index Fund(Net) | 91,825,756 | 8.3 | 47.7 | 1.0 | -2.7 | -1.4 | -0.2 | -- | -- | -- | 5.2 | May-19 |
| BBgBarc US Aggregate TR |  |  |  | 0.8 | -2.6 | -1.4 | -0.3 | 5.2 | 3.2 | 3.4 | 5.1 | May-19 |
| Barrow Hanley(Net) | 90,278,400 | 8.2 | 46.8 | 0.8 | -2.7 | -1.1 | 0.7 | 5.7 | 3.4 | 3.4 | 3.8 | Mar-10 |
| BBgBarc US Aggregate TR |  |  |  | 0.8 | -2.6 | -1.4 | -0.3 | 5.2 | 3.2 | 3.4 | 3.6 | Mar-10 |
| Vanguard Short-Term Treasury Index Fund(Net) | 10,603,567 | 1.0 | 5.5 | 0.1 | 0.0 | 0.1 | 0.2 | 2.8 | -- | -- | 2.7 | Feb-18 |
| BBgBarc US Govt 1-3 Yr TR |  |  |  | 0.0 | 0.0 | 0.1 | 0.3 | 2.9 | 1.7 | 1.3 | 2.7 | Feb-18 |
| BBgBarc US Govt 1-5 Yr TR |  |  |  | 0.2 | -0.4 | -0.3 | 0.0 | 3.5 | 2.0 | 1.7 | 3.3 | Feb-18 |

Total Fund | As of April 30, 2021

|  | Market Value (\$) | \% of Portfolio | \% of <br> Sector | $\begin{array}{r} 1 \mathrm{Mo} \\ (\%) \end{array}$ | YTD (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opportunistic Credit(Net) | 66,835,154 | 6.1 | 8.7 | 1.2 | 3.8 | 13.5 | 19.9 | -- | -- | -- | 7.2 | May-19 |
| 50\% Barclays US Aggregate / $25 \%$ Barclays US High Yield / 25\% Credit Suisse Leveraged Loans |  |  |  | 0.8 | -0.2 | 5.2 | 8.5 | -- | -- | -- | 5.5 | May-19 |
| PIMCO Income Fund(Net) | 25,521,646 | 2.3 | 38.2 | 1.1 | 0.9 | 8.6 | 13.1 | -- | -- | -- | 5.4 | Apr-19 |
| BBgBarc US Aggregate TR |  |  |  | 0.8 | -2.6 | -1.4 | -0.3 | 5.2 | 3.2 | 3.4 | 5.1 | Apr-19 |
| GoldenTree Multi-Sector Credit(Net) | 23,417,842 | 2.1 | 35.0 | 0.9 | 3.3 | 14.9 | 23.7 | -- | -- | -- | 7.3 | Jun-19 |
| 50\% BBgBarc US High Yield TR/50\% Credit Suisse Leveraged Loans |  |  |  | 0.8 | 2.2 | 12.1 | 18.0 | 5.6 | 6.3 | 5.4 | 6.2 | Jun-19 |
| Sculptor Credit Opportunities Domestic Partners, LP(Net) | 17,895,666 | 1.6 | 26.8 | 1.9 | 8.9 | 19.3 | -- | -- | -- | -- | 19.3 | Jul-20 |
| 50\% BBgBarc US High Yield TR/50\% Credit Suisse Leveraged Loans |  |  |  | 0.8 | 2.2 | 12.1 | 18.0 | 5.6 | 6.3 | 5.4 | 12.1 | Jul-20 |
| Real Estate(Net) | 81,764,429 | 7.4 | 7.4 | NA | 4.1 | 4.5 | 3.8 | 2.9 | 4.8 | 6.8 | -- | Mar-99 |
| Custom Blended Real Estate Benchmark |  |  |  | NA | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| CPI $+5 \%$ (Seasonally Adjusted) |  |  |  | 1.2 | 3.7 | 8.1 | 9.6 | 7.3 | 7.4 | 6.9 | -- | Mar-99 |
| Vanguard REIT Index(Net) | 21,714,751 | 2.0 | 26.6 | 8.0 | 17.4 | -- | -- | -- | -- | -- | 24.8 | Aug-20 |
| Spliced Vanguard REIT Benchmark |  |  |  | 8.0 | 17.4 | 30.0 | 35.6 | 13.6 | 8.4 | 9.2 | 24.9 | Aug-20 |
| Private Real Estate( Net ) | 60,049,678 | 5.4 | 73.4 | NA | 1.1 | 1.0 | 0.2 | 1.7 | 4.1 | 6.4 | -- | Mar-99 |
| Custom Blended Real Estate Benchmark |  |  |  | NA | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| UBS Trumbull Property(Net) | 33,291,925 | 3.0 | 55.4 | NA | -1.7 | -4.7 | -4.3 | -0.8 | 1.6 | 5.8 | 6.2 | Mar-99 |
| Patron Capital V(Net) | 7,768,625 | 0.7 | 12.9 | NA | -0.1 | 11.2 | 3.8 | -2.2 | 7.1 | -- | 6.8 | Jan-16 |

GoldenTree Multi-Sector Credit market value based on manager estimate.
Sculptor Credit Opportunities Domestic Partners market value based on manager estimate.
Private Markets values are cash flow adjusted from 12/31/2020 NAVs with the exception of Ardian Infrastructure Fund V, Invesco IV, and Invesco VI, which are cash flow adjusted from $9 / 30 / 2020$ NAVs.
Data prior to March 2018 provided by prior consultant.
 received information for, therefore it may not reflect the entire Private Real Estate composite at that given time.

Total Fund | As of April 30, 2021

|  | Market Value (\$) | \% of Portfolio | \% of <br> Sector | $\begin{array}{r} 1 \mathrm{Mo} \\ (\%) \end{array}$ | $\begin{array}{r} \text { YTD } \\ (\%) \end{array}$ | $\begin{gathered} \text { Fiscal } \\ \text { YTD } \\ (\%) \end{gathered}$ | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs (\%) | 10 Yrs (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Greenfield Gap VIII(Net) | 6,307,175 | 0.6 | 10.5 | NA | 15.1 | 18.0 | 12.6 | 13.6 | 13.6 | -- | 13.8 | Dec-14 |
| Taconic CRE Dislocation Fund ॥(Net) | 5,079,772 | 0.5 | 8.5 | NA | 2.0 | 4.3 | 6.2 | -- | -- | -- | 7.6 | Nov-18 |
| AG Realty Value Fund X, L.P.(Net) | 2,523,108 | 0.2 | 4.2 | NA | 7.7 | 14.2 | 11.6 | -- | -- | -- | -3.2 | Jun-19 |
| Cerberus Real Estate Debt Fund, L.P.(Net) | 2,068,549 | 0.2 | 3.4 | NA | 3.6 | 20.9 | -- | -- | -- | -- | 20.9 | Jul-20 |
| Carlyle Realty VIII(Net) | 1,900,832 | 0.2 | 3.2 | NA | 3.8 | -0.7 | 16.3 | -3.0 | -- | -- | -11.5 | Dec-17 |
| Rockpoint Real Estate Fund VI, L.P.(Net) | 783,471 | 0.1 | 1.3 | NA | 6.4 | 3.4 | 0.2 | -- | -- | -- | 0.2 | May-20 |
| Carmel Partners Investment Fund VII(Net) | 326,222 | 0.0 | 0.5 | NA | -5.8 | -20.1 | -26.9 | -- | -- | -- | -39.6 | Apr-19 |
| Private Equity(Net) | 75,402,239 | 6.8 | 6.8 | NA | 12.1 | 30.6 | 26.2 | 12.8 | 13.2 | 11.0 | 9.0 | Jun-05 |
| Custom Blended Private Equity Benchmark |  |  |  | NA | 15.2 | 41.8 | 33.5 | 21.8 | 21.6 | -- | -- | Jun-05 |
| Russell $3000+3 \% 1$-Quarter Lag |  |  |  | -0.2 | 15.3 | 55.8 | 24.0 | 15.7 | 20.1 | 16.9 | 13.2 | Jun-05 |
| Adams Street(Net) | 7,359,619 | 0.7 | 9.8 | NA | 20.5 | 57.6 | 40.6 | 18.3 | 16.9 | 15.2 | 8.9 | Sep-05 |
| Ocean Avenue II(Net) | 7,013,992 | 0.6 | 9.3 | NA | 47.2 | 59.7 | 68.8 | 27.2 | 26.7 | -- | 18.3 | Jun-14 |
| Invesco VI(Net) | 6,745,417 | 0.6 | 8.9 | NA | 0.0 | 30.6 | 24.8 | 13.0 | 14.0 | -- | 13.1 | Jun-13 |
| TCV $\times$ ( Net ) | 5,637,977 | 0.5 | 7.5 | NA | 29.8 | 80.0 | 76.2 | -- | -- | -- | 25.6 | Apr-19 |
| Davidson Kempner Long-Term Distressed Opportunities Fund IV(Net) | 5,049,406 | 0.5 | 6.7 | NA | 2.9 | 17.6 | 2.9 | 8.5 | -- | -- | 8.5 | Apr-18 |
| Summit Partners Growth Equity Fund X-A(Net) | 4,863,590 | 0.4 | 6.5 | NA | 4.9 | 16.0 | 36.7 | -- | -- | -- | 12.2 | Mar-20 |
| Cortec Group Fund VII(Net) | 4,047,991 | 0.4 | 5.4 | NA | 28.0 | 54.6 | 49.6 | -- | -- | -- | 31.9 | Dec-19 |
| Pantheon II(Net) | 3,982,671 | 0.4 | 5.3 | NA | 11.4 | 42.1 | 35.8 | 17.3 | 16.4 | -- | 13.5 | Dec-11 |

Adams Street includes Adams Street 2005, Adams Street 2007, and Adams Street 2011.
Pantheon I includes Pantheon US Fund VI and Pantheon Europe Fund IV.
Pantheon II includes Pantheon US Fund IX, Pantheon Asia Fund VI, and Pantheon Europe Fund VII.
Pantheon Secondary includes Pantheon GLO SEC III B

Total Fund | As of April 30, 2021

|  | Market Value (\$) | $\begin{array}{r} \% \text { of } \\ \text { Portfolio } \end{array}$ | \% of Sector | $\begin{array}{r} 1 \mathrm{Mo} \\ (\%) \end{array}$ | YTD (\%) | $\begin{gathered} \text { Fiscal } \\ \text { YTD } \\ (\%) \end{gathered}$ | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GTCR Fund XII(Net) | 3,812,824 | 0.3 | 5.1 | NA | 2.7 | 40.1 | 31.9 | -- | -- | -- | 10.0 | Jun-18 |
| Carrick Capital Partners III(Net) | 3,809,554 | 0.3 | 5.1 | NA | 15.7 | 26.6 | 20.1 | -- | -- | -- | 8.8 | Aug-18 |
| Genstar Capital Partners IX(Net) | 3,482,034 | 0.3 | 4.6 | NA | 9.8 | 38.3 | 30.2 | -- | -- | -- | 19.8 | Jul-19 |
| Silver Point Specialty Credit Fund II, L.P.(Net) | 3,183,882 | 0.3 | 4.2 | NA | 5.4 | 13.5 | -- | -- | -- | -- | 13.5 | Jul-20 |
| Spark Capital Growth Fund III(Net) | 3,031,339 | 0.3 | 4.0 | NA | -2.0 | -11.2 | -11.2 | -- | -- | -- | -9.7 | Mar-20 |
| Cressey \& Company Fund $\mathrm{VI}(\mathrm{Net})$ | 3,001,199 | 0.3 | 4.0 | NA | 4.8 | 28.9 | 27.3 | -- | -- | -- | 9.8 | Jan-19 |
| Raven Asset Fund ॥( Net ) | 2,609,774 | 0.2 | 3.5 | NA | -0.4 | -18.0 | -17.7 | $-5.4$ | -4.4 | -- | -4.3 | Aug-14 |
| Taconic Market Dislocation Fund III L.P. (Net) | 2,165,287 | 0.2 | 2.9 | NA | 10.7 | 10.7 | -- | -- | -- | -- | 10.7 | Jul-20 |
| Accel-KKR Growth Capital Partners III(Net) | 1,700,667 | 0.2 | 2.3 | NA | 1.4 | 5.9 | 5.9 | -- | -- | -- | -6.5 | Jul-19 |
| Marlin Heritage Europe II, L.P.(Net) | 1,159,190 | 0.1 | 1.5 | NA | -3.4 | -- | -- | -- | -- | -- | -3.4 | Oct-20 |
| Spark Capital VI(Net) | 913,434 | 0.1 | 1.2 | NA | -2.7 | -14.5 | -14.5 | -- | -- | -- | -12.6 | Mar-20 |
| TCV XI(Net) | 688,871 | 0.1 | 0.9 | NA | -- | -- | -- | -- | -- | -- | 0.0 | Feb-21 |
| Khosla Ventures VII(Net) | 636,000 | 0.1 | 0.8 | NA | 0.0 | -- | -- | -- | -- | -- | 0.0 | Jan-21 |
| Pantheon Secondary(Net) | 270,918 | 0.0 | 0.4 | NA | -3.4 | 11.5 | 1.1 | 1.7 | 1.8 | 1.7 | 2.6 | Jun-07 |
| Pantheon I(Net) | 198,506 | 0.0 | 0.3 | NA | 11.8 | 12.1 | 6.7 | $-9.1$ | $-2.3$ | 2.0 | 1.0 | Dec-05 |
| Accel-KKR Capital Partners VI(Net) | 135,496 | 0.0 | 0.2 | NA | -- | -- | -- | -- | -- | -- | -28.5 | Feb-21 |
| Invesco IV(Net) | 4,602 | 0.0 | 0.0 | NA | 0.0 | -19.6 | -42.3 | 6.6 | 12.4 | 11.3 | 9.9 | Jun-05 |
| Khosla Ventures Seed E(Net) | -102,000 | 0.0 | -0.1 | NA | -- | -- | -- | -- | -- | -- | 0.0 | Feb-21 |

Total Fund | As of April 30, 2021

|  | Market Value (\$) | \% of Portfolio | $\begin{array}{r} \text { \% of } \\ \text { Sector } \end{array}$ | $\begin{array}{r} 1 \mathrm{Mo} \\ (\%) \end{array}$ | YTD (\%) | $\begin{gathered} \text { Fiscal } \\ \text { YTD } \\ (\%) \end{gathered}$ | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs (\%) | 5 Yrs <br> (\%) | 10 Yrs (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hedge Fund(Net) | 101,578,657 | 9.2 | 9.2 | 1.5 | 6.3 | 16.5 | 21.1 | 5.6 | 7.1 | -- | 4.9 | Jun-14 |
| Custom Blended Hedge Fund Benchmark |  |  |  | 2.4 | 4.3 | 17.6 | 22.6 | 6.2 | 6.2 | -- | 4.6 | Jun-14 |
| Silver Point Capital(Net) | 15,679,529 | 1.4 | 15.4 | 2.2 | 11.4 | 28.3 | 37.0 | 8.1 | -- | -- | 8.3 | Nov-17 |
| Laurion Capital(Net) | 14,019,272 | 1.3 | 13.8 | 1.0 | 19.5 | 28.4 | 32.2 | -- | -- | -- | 21.6 | Aug-18 |
| Wellington-Archipelago(Net) | 13,874,360 | 1.3 | 13.7 | 2.7 | 3.4 | 11.9 | 17.5 | 6.0 | -- | -- | 6.2 | Aug-17 |
| Sculptor (OZ) Domestic II(Net) | 13,839,818 | 1.3 | 13.6 | 2.6 | 6.0 | 18.1 | 26.1 | 11.5 | 11.3 | -- | 8.4 | Jun-14 |
| Taconic Opportunity Fund(Net) | 13,701,521 | 1.2 | 13.5 | 1.1 | 6.0 | 14.2 | 17.9 | -- | -- | -- | 5.7 | Dec-18 |
| Marshall Wace Global Opportunities(Net) | 9,678,881 | 0.9 | 9.5 | 0.6 | -6.8 | 6.3 | 7.5 | -- | -- | -- | 7.5 | May-20 |
| KLS Diversified(Net) | 8,606,134 | 0.8 | 8.5 | -0.4 | 3.0 | 11.5 | 20.3 | -1.5 | -- | -- | -1.0 | Oct-17 |
| Graham Absolute Return(Net) | 8,181,212 | 0.7 | 8.1 | 0.3 | 6.4 | 16.6 | 21.3 | 2.8 | -- | -- | 3.4 | Aug-17 |
| Marshall Wace Eureka(Net) | 3,997,930 | 0.4 | 3.9 | 2.4 | 2.9 | 16.3 | 19.6 | 6.6 | -- | -- | 7.2 | Nov-17 |
| Real Assets(Net) | 66,538,775 | 6.0 | 6.0 | 2.2 | 6.0 | 14.8 | 14.0 | 8.2 | 7.7 | 8.2 | -- | Mar-99 |
| Custom Blended Real Assets Benchmark |  |  |  | NA | 5.4 | 12.4 | -4.1 | 4.9 | 6.8 | -- | -- | Mar-99 |
| CPI $+5 \%$ (Seasonally Adjusted) |  |  |  | 1.2 | 3.7 | 8.1 | 9.6 | 7.3 | 7.4 | 6.9 | -- | Mar-99 |
| SSgA(Net) | 31,772,617 | 2.9 | 47.8 | 4.7 | 10.2 | 27.1 | 31.9 | 6.1 | -- | -- | 6.3 | Apr-17 |
| Real Asset NL Custom Blended Index |  |  |  | 4.8 | 11.3 | 28.8 | 33.7 | 6.5 | -- | -- | 6.6 | Apr-17 |
| Private Infrastructure( Net ) | 22,387,210 | 2.0 | 33.6 | NA | 5.9 | 9.6 | 17.8 | 12.1 | 11.7 | -- | 9.3 | Dec-14 |
| S\&P Global Infrastructure Net TR USD |  |  |  | 3.5 | 6.4 | 23.9 | 28.7 | 5.1 | 6.0 | 5.2 | 4.3 | Dec-14 |
| KKR Global II(Net) | 8,292,205 | 0.8 | 37.0 | NA | 12.4 | 24.2 | 53.9 | 21.8 | 17.2 | -- | 15.9 | Dec-14 |
| North Haven Infrastructure ॥( $\mathrm{Net)}$ | 7,292,424 | 0.7 | 32.6 | NA | 1.6 | 0.2 | -1.8 | 7.3 | 9.0 | -- | 6.8 | May-15 |

Total Fund | As of April 30, 2021

|  | Market Value <br> (\$) | \% of Portfolio | \% of <br> Sector | $\begin{array}{r} 1 \mathrm{Mo} \\ (\%) \end{array}$ | $\begin{array}{r} \text { YTD } \\ (\%) \end{array}$ | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs (\%) | 5 Yrs <br> (\%) | 10 Yrs (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ISQ Global Infrastructure Fund ॥(Net) | 3,845,582 | 0.3 | 17.2 | NA | 8.1 | 15.0 | 16.2 | -- | -- | -- | -1.6 | Jul-18 |
| KKR Global Infrastructure Investors III(Net) | 2,285,956 | 0.2 | 10.2 | NA | -2.9 | 4.4 | 0.1 | -- | -- | -- | -6.9 | Jan-19 |
| Ardian Infrastructure Fund V ( Net ) | 671,043 | 0.1 | 3.0 | NA | 0.0 | -34.7 | -40.2 | -- | -- | -- | -29.2 | Oct-19 |
| Private Natural Resources(Net) | 12,378,948 | 1.1 | 18.6 | NA | 1.8 | 12.1 | -8.4 | 3.1 | 9.3 | -- | 10.9 | Sep-15 |
| S\&P Global Natural Resources Index TR USD |  |  |  | 4.1 | 16.4 | 45.0 | 53.4 | 5.2 | 9.9 | 1.3 | 12.8 | Sep-15 |
| GSO Energy Opportunities(Net) | 2,884,850 | 0.3 | 23.3 | NA | 7.0 | 35.8 | -11.6 | -1.5 | 7.4 | -- | 8.5 | Nov-15 |
| Tailwater Energy Fund IV, LP(Net) | 1,976,029 | 0.2 | 16.0 | NA | -2.0 | 3.1 | -24.7 | -- | -- | -- | -24.4 | Oct-19 |
| BlackRock Global Energy and Power Infrastructure Fund III LP(Net) | 1,786,273 | 0.2 | 14.4 | NA | 1.0 | 35.5 | 0.2 | -- | -- | -- | 20.7 | Jul-19 |
| EnCap XI(Net) | 1,582,714 | 0.1 | 12.8 | NA | 2.1 | -4.5 | -28.3 | -19.6 | -- | -- | -27.8 | Jul-17 |
| Taurus Mining Annex(Net) | 1,424,183 | 0.1 | 11.5 | NA | 0.9 | 8.6 | 15.0 | 19.7 | -- | -- | 24.1 | Jan-17 |
| Taurus Mining(Net) | 1,412,284 | 0.1 | 11.4 | NA | -3.7 | -4.3 | -16.8 | 2.8 | 7.3 | -- | 9.8 | Sep-15 |
| EnCap IV(Net) | 1,312,614 | 0.1 | 10.6 | NA | 4.8 | 8.7 | -1.1 | 3.9 | -- | -- | 0.9 | Feb-18 |
| Cash(Net) | 8,203,492 | 0.7 | 0.7 | 0.0 | 0.0 | 0.2 | 0.2 | 0.8 | -- | -- | -- |  |
| Cash(Net) | 6,613,776 | 0.6 | 80.6 | 0.0 | 0.0 | 0.2 | 0.2 | 1.2 | 1.1 | $-3.1$ | -- | Sep-03 |
| Treasury Cash(Net) | 1,589,716 | 0.1 | 19.4 |  |  |  |  |  |  |  |  |  |

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.


Merced County Employees' Retirement Association
Total Fund | As of April 30, 2021


| Name | Annual Investment Expense Analysis <br> As Of April 30, 2021 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Fee Schedule | Market Value | Estimated Fee Value | Estimated Fee |
| Total Fund w/o Alternatives |  | \$770,947,307 |  |  |
| US Equity |  | \$266,759,845 |  |  |
| Mellon Dynamic US Equity | 0.30\% of Assets | \$121,058,672 | \$363,176 | 0.30\% |
| Mellon Large Cap | 0.04\% of First 100.0 Mil, <br> $0.02 \%$ Thereafter | \$113,875,048 | \$42,775 | 0.04\% |
| Champlain Small Cap | 1.00\% of Assets | \$31,826,124 | \$318,261 | 1.00\% |
| International Equity |  | \$244,644,585 |  |  |
| Developed International Equity |  | \$138,558,948 |  |  |
| Acadian ACWI ex U.S. Small Cap Equity | 0.99\% of Assets | \$15,234,708 | \$150,824 | 0.99\% |
| Driehaus International Small Cap Growth | 0.90\% of Assets | \$16,940,389 | \$152,464 | 0.90\% |
| GQG International Equity | 0.50\% of Assets | \$56,319,083 | \$281,595 | 0.50\% |
| First Eagle International Value Fund | 0.79\% of Assets | \$50,064,768 | \$395,512 | 0.79\% |
| Emerging Markets Equity |  | \$106,085,637 |  |  |
| Artisan Developing World TR | 1.05\% of Assets | \$74,988,954 | \$787,384 | 1.05\% |
| RWC | 0.87\% of Assets | \$31,096,683 | \$270,541 | 0.87\% |
| US Fixed Income |  | \$192,707,723 |  |  |
| Barrow Hanley | $0.30 \%$ of First 50.0 Mil, $0.20 \%$ of Next 100.0 Mil, $0.15 \%$ Thereafter | \$90,278,400 | \$230,557 | 0.26\% |
| Vanguard Short-Term Treasury Index Fund | 0.05\% of Assets | \$10,603,567 | \$5,302 | 0.05\% |
| Vanguard Total Bond Market Index Fund | 0.04\% of Assets | \$91,825,756 | \$32,139 | 0.04\% |
| Opportunistic Credit |  | \$66,835,154 |  |  |
| PIMCO Income Fund | 0.50\% of Assets | \$25,521,646 | \$127,608 | 0.50\% |
| GoldenTree Multi-Sector Credit | 0.70\% of Assets | \$23,417,842 | \$163,925 | 0.70\% |
| Sculptor Credit Opportunities Domestic Partners, LP | Performance-based 1.00 and 20.00 | \$17,895,666 | \$178,957 | 1.00\% |

Merced County Employees' Retirement Association
Total Fund | As of April 30, 2021

| Name | Fee Schedule | Market Value | Estimated Fee Value | Estimated Fee |
| :---: | :---: | :---: | :---: | :---: |
| Real Estate |  | \$81,764,429 |  |  |
| Vanguard REIT Index | 0.10\% of Assets | \$21,714,751 | \$21,715 | 0.10\% |
| Private Real Estate |  | \$60,049,678 |  |  |
| Greenfield Gap VII |  | \$6,307,175 |  |  |
| Patron Capital V |  | \$7,768,625 |  |  |
| UBS Trumbull Property |  | \$33,291,925 |  |  |
| Carlyle Realty VIII |  | \$1,900,832 |  |  |
| Taconic CRE Dislocation Fund II |  | \$5,079,772 |  |  |
| Carmel Partners Investment Fund VII |  | \$326,222 |  |  |
| AG Realty Value Fund X, L.P. |  | \$2,523,108 |  |  |
| Rockpoint Real Estate Fund VI, L.P. |  | \$783,471 |  |  |
| Cerberus Real Estate Debt Fund, L.P. |  | \$2,068,549 |  |  |
| Invesco IV |  | \$4,602 |  |  |
| Invesco VI |  | \$6,745,417 |  |  |
| Ocean Avenue II |  | \$7,013,992 |  |  |
| Pantheon I |  | \$198,506 |  |  |
| Pantheon II |  | \$3,982,671 |  |  |
| Pantheon Secondary |  | \$270,918 |  |  |
| Raven Asset Fund II |  | \$2,609,774 |  |  |
| Davidson Kempner Long-Term Distressed Opportunities Fund IV |  | \$5,049,406 |  |  |
| GTCR Fund XII |  | \$3,812,824 |  |  |
| Carrick Capital Partners III |  | \$3,809,554 |  |  |
| Cressey \& Company Fund VI |  | \$3,001,199 |  |  |
| TCV X |  | \$5,637,977 |  |  |
| Accel-KKR Growth Capital Partners III |  | \$1,700,667 |  |  |
| Genstar Capital Partners IX |  | \$3,482,034 |  |  |

Merced County Employees' Retirement Association
Total Fund | As of April 30, 2021

| Name | Fee Schedule | Market Value | Estimated Fee Value | Estimated Fee |
| :---: | :---: | :---: | :---: | :---: |
| Cortec Group Fund VII |  | \$4,047,991 |  |  |
| Spark Capital Growth Fund III |  | \$3,031,339 |  |  |
| Spark Capital VI |  | \$913,434 |  |  |
| Summit Partners Growth Equity Fund X-A |  | \$4,863,590 |  |  |
| Taconic Market Dislocation Fund III L.P. |  | \$2,165,287 |  |  |
| Silver Point Specialty Credit Fund II, L.P. |  | \$3,183,882 |  |  |
| Marlin Heritage Europe II, L.P. |  | \$1,159,190 |  |  |
| Khosla Ventures VII |  | \$636,000 |  |  |
| Accel-KKR Capital Partners VI |  | \$135,496 |  |  |
| Khosla Ventures Seed E |  | -\$102,000 |  |  |
| TCV XI |  | \$688,871 |  |  |
| Hedge Fund |  | \$101,578,657 |  |  |
| Sculptor (OZ) Domestic II | Performance-based 1.50 and 20.00 | \$13,839,818 | \$280,647 | 2.03\% |
| Graham Absolute Return | Performance-based 1.75 and 20.00 | \$8,181,212 | \$150,371 | 1.84\% |
| Wellington-Archipelago | Performance-based 1.00 and 20.00 | \$13,874,360 | \$217,844 | 1.57\% |
| KLS Diversified | Performance-based 2.00 and 20.00 | \$8,606,134 | \$172,123 | 2.00\% |
| Marshall Wace Eureka | Performance-based 2.00 and 20.00 | \$3,997,930 | \$99,121 | 2.48\% |
| Silver Point Capital | Performance-based 1.50 and 20.00 | \$15,679,529 | \$305,751 | 1.95\% |
| Laurion Capital | Performance-based 2.00 and 20.00 | \$14,019,272 | \$308,424 | 2.20\% |
| Taconic Opportunity Fund | Performance-based 1.40 and 20.00 | \$13,701,521 | \$223,061 | 1.63\% |
| Marshall Wace Global Opportunities | Performance-based 2.00 and 20.00 | \$9,678,881 | \$205,443 | 2.12\% |
| Real Assets |  | \$66,538,775 |  |  |
| SSgA | 0.30\% of First 50.0 Mil, $0.27 \%$ of Next 50.0 Mil, 0.25\% Thereafter | \$31,772,617 | \$95,318 | 0.30\% |
| Private Infrastructure |  | \$22,387,210 |  |  |
| KKR Global II |  | \$8,292,205 |  |  |
| North Haven Infrastructure II |  | \$7,292,424 |  |  |

## Merced County Employees' Retirement Association

Total Fund | As of April 30, 2021

| Name | Fee Schedule |
| :--- | :---: |
| ISQ Global Infrastructure Fund II | Market Value |
| KKR Global Infrastructure Investors III | $\$ 3,845,582$ |
| Ardian Infrastructure Fund $V$ | $\$ 2,285,956$ |
| Private Natural Resources | $\$ 671,043$ |
| EnCap XI | $\$ 12,378,948$ |
| EnCap IV | $\$ 1,582,714$ |
| GSO Energy Opportunities | $\$ 1,312,614$ |
| Taurus Mining | $\$ 2,884,850$ |
| Taurus Mining Annex | $\$ 1,412,284$ |
| BlackRock Global Energy and Power Infrastructure Fund III LP | $\$ 1,424,183$ |
| Tailwater Energy Fund IV, LP | $\$ 1,786,273$ |
| Cash | $\$ 1,976,029$ |
| Cash | $\$ 8,203,492$ |
| Treasury Cash | $\$ 6,613,776$ |

# Performance Update as of March 31, 2021 




Total Fund | As of March 31, 2021

|  | Asset Class Performance Summary |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value <br> (\$) | \% of Portfolio | QTD (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| Total Fund (Net)* | 1,085,971,253 | 100.0 | 2.9 | 19.2 | 32.9 | 10.5 | 10.7 | 8.3 | 8.4 | Dec-94 |
| Total Fund (Gross)* |  |  | 3.0 | 19.6 | 33.4 | 10.8 | 11.0 | 8.7 | 8.5 |  |
| Policy Index |  |  | 4.2 | 20.3 | 29.4 | 10.0 | 10.7 | 8.8 | 6.5 | Dec-94 |
| Total Fund w/o Alternatives (Net) | 762,455,288 | 70.2 | 1.9 | 21.1 | 40.4 | 12.0 | 12.1 | 9.4 | -- | Dec-94 |
| Total Fund w/o Alternatives (Gross) |  |  | 2.0 | 21.5 | 41.0 | 12.4 | 12.4 | 9.1 | -- |  |
| Policy Index w/o AI |  |  | 2.8 | 21.7 | 39.1 | 10.3 | 11.0 | -- | -- | Dec-94 |
| US Equity (Net) | 271,560,272 | 25.0 | 5.5 | 30.0 | 57.3 | 16.0 | 16.4 | 13.5 | 10.7 | Dec-94 |
| US Equity (Gross) |  |  | 5.5 | 30.2 | 57.7 | 16.2 | 16.6 | 13.7 | 10.8 |  |
| Russell 3000 |  |  | 6.3 | 33.2 | 62.5 | 16.5 | 16.5 | 13.6 | 10.7 | Dec-94 |
| International Equity (Net) | 233,341,656 | 21.5 | 1.4 | 31.5 | 63.7 | 13.9 | 14.3 | 7.4 | 6.7 | Dec-98 |
| International Equity (Gross) |  |  | 1.6 | 32.4 | 65.1 | 14.5 | 14.9 | 8.0 | 7.0 |  |
| International Equity Custom |  |  | 3.1 | 30.0 | 51.4 | 7.0 | 10.6 | 6.0 | 5.0 | Dec-98 |
| Developed International Equity (Net) | 132,513,436 | 12.2 | 3.1 | 21.8 | 41.8 | 7.7 | 10.0 | 5.8 | 4.6 | Jan-08 |
| Developed International Equity (Gross) |  |  | 3.3 | 22.5 | 42.8 | 8.1 | 10.4 | 6.3 | 5.1 |  |
| Custom Blended Developed International Equity Benchmark |  |  | 3.9 | 28.3 | 49.4 | 6.6 | 9.2 | 5.7 | 3.6 | Jan-08 |
| Emerging Markets Equity (Net) | 100,828,220 | 9.3 | -1.0 | 42.3 | 93.2 | 21.4 | 21.2 | -- | 10.2 | Apr-12 |
| Emerging Markets Equity (Gross) |  |  | -0.8 | 43.3 | 95.1 | 22.5 | 22.3 | -- | 11.2 |  |
| Custom Blended Emerging Markets Benchmark |  |  | 2.3 | 34.1 | 58.4 | 6.7 | 12.4 | 4.0 | 5.7 | Apr-12 |
| US Fixed Income (Net) | 191,439,727 | 17.6 | -3.4 | -2.1 | 1.0 | 4.2 | 3.6 | 3.8 | 5.2 | Dec-94 |
| US Fixed Income (Gross) |  |  | -3.3 | -2.0 | 1.2 | 4.3 | 3.7 | 4.0 | 5.3 |  |
| BBgBarc US Aggregate TR |  |  | -3.4 | -2.1 | 0.7 | 4.4 | 3.8 | 3.6 | 5.5 | Dec-94 |
| Opportunistic Credit (Net) | 66,113,633 | 6.1 | 2.5 | 12.1 | 22.0 | -- | -- | -- | 6.8 | May-19 |
| Opportunistic Credit (Gross) |  |  | 2.7 | 12.5 | 22.6 | -- | -- | -- | 7.1 |  |
| 50\% Barclays US Aggregate / 25\% Barclays US High Yield / 25\% Credit Suisse Leveraged Loans |  |  | $-1.0$ | 4.4 | 11.0 | -- | -- | -- | 5.3 | May-19 |

The current US Fixed Income benchmark is the Barclays US Agg. Please refer to the benchmark history for the composition of the US Fixed Income benchmark in earlier periods
Data prior to March 2018 provided by prior consultant.

|  | Market Value <br> (\$) | \% of Portfolio | QTD <br> (\%) | Fiscal YTD (\%) | $\begin{array}{r} 1 \mathrm{Yr} \\ (\%) \end{array}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real Estate (Net) | 80,722,355 | 7.4 | 2.1 | 2.4 | 1.7 | 2.8 | 4.5 | 6.8 | -- | Mar-99 |
| Real Estate (Gross) |  |  | 2.1 | 2.4 | 1.7 | 2.8 | 4.6 | 7.5 | 7.9 |  |
| Custom Blended Real Estate Benchmark |  |  | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| CPI $+5 \%$ (Seasonally Adjusted) |  |  | 2.5 | 6.9 | 7.9 | 7.1 | 7.3 | 6.8 | -- | Mar-99 |
| Private Real Estate (Net) | 60,225,243 | 5.5 | 1.1 | 1.0 | 0.2 | 2.3 | 4.1 | 6.6 | -- | Mar-99 |
| Private Real Estate (Gross) |  |  | 1.1 | 1.0 | 0.2 | 2.3 | 4.3 | 7.3 | 7.9 |  |
| Custom Blended Real Estate Benchmark |  |  | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| Private Equity (Net) | 72,629,515 | 6.7 | 12.1 | 30.6 | 26.2 | 15.1 | 13.2 | 11.0 | 9.0 | Jun-05 |
| Private Equity (Gross) |  |  | 12.1 | 30.6 | 26.2 | 15.1 | 13.2 | 11.2 | 9.2 |  |
| Custom Blended Private Equity Benchmark |  |  | 15.2 | 41.8 | 33.5 | 21.8 | 20.2 | -- | -- | Jun-05 |
| Russell $3000+3 \%$ 1-Quarter Lag |  |  | 15.5 | 56.1 | 24.5 | 17.9 | 18.9 | 17.2 | 13.3 | Jun-05 |
| Hedge Fund (Net) | 100,049,534 | 9.2 | 4.8 | 14.7 | 21.4 | 5.2 | 6.7 | -- | 4.7 | Jun-14 |
| Hedge Fund (Gross) |  |  | 5.1 | 15.6 | 22.6 | 5.8 | 7.1 | -- | 5.0 |  |
| Custom Blended Hedge Fund Benchmark |  |  | 1.9 | 14.8 | 23.8 | 5.4 | 5.8 | -- | 4.3 | Jun-14 |
| Real Assets (Net) | 65,057,089 | 6.0 | 3.7 | 12.4 | 13.5 | 8.1 | 7.4 | 8.2 | -- | Mar-99 |
| Real Assets (Gross) |  |  | 3.8 | 12.5 | 13.7 | 8.2 | 7.6 | 8.8 | -- |  |
| Custom Blended Real Assets Benchmark |  |  | 5.4 | 12.4 | -4.1 | 5.4 | 7.4 | -- | -- | Mar-99 |
| CPI $+5 \%$ (Seasonally Adjusted) |  |  | 2.5 | 6.9 | 7.9 | 7.1 | 7.3 | 6.8 | -- | Mar-99 |
| Private Infrastructure (Net) | 22,387,210 | 2.1 | 5.9 | 9.6 | 17.8 | 12.6 | 12.3 | -- | 9.5 | Dec-14 |
| Private Infrastructure (Gross) |  |  | 6.0 | 9.6 | 18.0 | 12.7 | 12.3 | -- | 9.5 |  |
| S\&P Global Infrastructure Net TR USD |  |  | 2.8 | 19.7 | 36.0 | 4.7 | 5.8 | 5.3 | 3.8 | Dec-14 |
| Private Natural Resources (Net) | 12,316,773 | 1.1 | 1.8 | 12.1 | -8.4 | 3.8 | 10.2 | -- | 11.1 | Sep-15 |
| Private Natural Resources (Gross) |  |  | 1.8 | 12.1 | -8.4 | 3.8 | 10.2 | -- | 11.1 |  |
| S\&P Global Natural Resources Index TR USD |  |  | 11.8 | 39.2 | 67.7 | 5.5 | 11.4 | 1.1 | 12.2 | Sep-15 |
| Cash (Net) | 5,057,472 | 0.5 | 0.0 | 0.2 | 0.3 | 0.9 | -- | -- | -- |  |
| Cash (Gross) |  |  | 0.0 | 0.2 | 0.3 | 0.9 | -- | -- | -- |  |

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

Private Markets values are cash flow adjusted from 12/31/2020 NAVs.
Real Assets includes State Street Real Asset NL Fund.

|  | Trailing Net Performance |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value <br> (\$) | \% of Portfolio | \% of <br> Sector | QTD <br> (\%) | Fiscal YTD (\%) | 1 Yr <br> (\%) | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| Total Fund* | 1,085,971,253 | 100.0 | -- | 2.9 | 19.2 | 32.9 | 10.5 | 10.7 | 8.3 | 8.4 | Dec-94 |
| Policy Index |  |  |  | 4.2 | 20.3 | 29.4 | 10.0 | 10.7 | 8.8 | 6.5 | Dec-94 |
| InvMetrics Public DB \$250mm-\$1B Net Median |  |  |  | 3.3 | 20.3 | 35.5 | 9.9 | 10.1 | 8.2 | 8.5 | Dec-94 |
| InvMetrics Public DB \$250mm-\$1B Net Rank |  |  |  | 68 | 68 | 71 | 39 | 37 | 48 | 54 | Dec-94 |
| Total Fund w/o Alternatives | 762,455,288 | 70.2 | 70.2 | 1.9 | 21.1 | 40.4 | 12.0 | 12.1 | 9.4 | -- | Dec-94 |
| Policy Index w/o AI |  |  |  | 2.8 | 21.7 | 39.1 | 10.3 | 11.0 | -- | -- | Dec-94 |
| InvMetrics Public DB \$250mm-\$1B Net Median |  |  |  | 3.3 | 20.3 | 35.5 | 9.9 | 10.1 | 8.2 | 8.5 | Dec-94 |
| InvMetrics Public DB \$250mm-\$1B Net Rank |  |  |  | 90 | 39 | 18 | 6 | 9 | 18 | -- | Dec-94 |
| US Equity | 271,560,272 | 25.0 | 35.6 | 5.5 | 30.0 | 57.3 | 16.0 | 16.4 | 13.5 | 10.7 | Dec-94 |
| Russell 3000 |  |  |  | 6.3 | 33.2 | 62.5 | 16.5 | 16.5 | 13.6 | 10.7 | Dec-94 |
| InvMetrics All DB US Eq Net Median |  |  |  | 7.4 | 34.3 | 63.5 | 16.0 | 16.0 | 12.9 | 10.4 | Dec-94 |
| InvMetrics All DB US Eq Net Rank |  |  |  | 93 | 91 | 90 | 50 | 35 | 23 | 25 | Dec-94 |
| Mellon Dynamic US Equity | 128,120,784 | 11.8 | 47.2 | 5.2 | 26.9 | 51.6 | 17.8 | 18.1 | -- | 18.2 | Dec-12 |
| S\&P 500 |  |  |  | 6.2 | 29.7 | 56.4 | 16.8 | 16.3 | 13.9 | 15.5 | Dec-12 |
| eV US Large Cap Core Equity Net Median |  |  |  | 6.5 | 28.5 | 54.7 | 14.6 | 14.8 | 12.8 | 14.3 | Dec-12 |
| eV US Large Cap Core Equity Net Rank |  |  |  | 69 | 63 | 63 | 12 | 5 | -- | 1 | Dec-12 |
| Mellon Large Cap | 108,057,302 | 10.0 | 39.8 | 6.1 | 32.0 | 60.8 | 17.4 | 16.7 | -- | 16.7 | Mar-16 |
| Russell 1000 |  |  |  | 5.9 | 31.8 | 60.6 | 17.3 | 16.7 | 14.0 | 16.7 | Mar-16 |
| eV US Large Cap Core Equity Net Median |  |  |  | 6.5 | 28.5 | 54.7 | 14.6 | 14.8 | 12.8 | 14.8 | Mar-16 |
| eV US Large Cap Core Equity Net Rank |  |  |  | 56 | 27 | 23 | 17 | 12 | -- | 12 | Mar-16 |
| Champlain Small Cap | 35,382,185 | 3.3 | 13.0 | 4.9 | -- | -- | -- | -- | -- | 30.3 | Nov-20 |
| Russell 2000 |  |  |  | 12.7 | 55.4 | 94.8 | 14.8 | 16.4 | 11.7 | 45.0 | Nov-20 |
| eV US Small Cap Core Equity Net Median |  |  |  | 13.3 | 51.6 | 90.0 | 13.3 | 14.7 | 11.5 | 41.6 | Nov-20 |
| eV US Small Cap Core Equity Net Rank |  |  |  | 99 | -- | -- | -- | -- | -- | 94 | Nov-20 |

[^12]|  | Market Value <br> (\$) | \% of Portfolio | \% of Sector | QTD <br> (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| International Equity | 233,341,656 | 21.5 | 30.6 | 1.4 | 31.5 | 63.7 | 13.9 | 14.3 | 7.4 | 6.7 | Dec-98 |
| International Equity Custom |  |  |  | 3.1 | 30.0 | 51.4 | 7.0 | 10.6 | 6.0 | 5.0 | Dec-98 |
| InvMetrics All DB ex-US Eq Net Median |  |  |  | 3.5 | 30.4 | 55.2 | 6.7 | 10.1 | 5.7 | 5.7 | Dec-98 |
| InvMetrics All DB ex-US Eq Net Rank |  |  |  | 90 | 36 | 8 | 1 | 2 | 7 | 16 | Dec-98 |
| Developed International Equity | 132,513,436 | 12.2 | 56.8 | 3.1 | 21.8 | 41.8 | 7.7 | 10.0 | 5.8 | 4.6 | Jan-08 |
| Custom Blended Developed International Equity Benchmark |  |  |  | 3.9 | 28.3 | 49.4 | 6.6 | 9.2 | 5.7 | 3.6 | Jan-08 |
| GQG International Equity | 53,441,735 | 4.9 | 40.3 | 2.5 | 17.4 | 37.9 | -- | -- | -- | 13.7 | Dec-19 |
| MSCI ACWI ex USA |  |  |  | 3.5 | 28.7 | 49.4 | 6.5 | 9.8 | 4.9 | 14.3 | Dec-19 |
| eV Global Growth Equity Net Median |  |  |  | 1.7 | 30.4 | 64.0 | 18.1 | 18.0 | 12.5 | 29.8 | Dec-19 |
| eV Global Growth Equity Net Rank |  |  |  | 39 | 99 | 99 | -- | -- | -- | 99 | Dec-19 |
| First Eagle International Value Fund | 48,911,110 | 4.5 | 36.9 | 1.3 | 16.7 | 30.3 | -- | -- | -- | 6.5 | Dec-19 |
| MSCI EAFE |  |  |  | 3.5 | 25.8 | 44.6 | 6.0 | 8.8 | 5.5 | 11.2 | Dec-19 |
| MSCI World ex USA |  |  |  | 4.0 | 26.5 | 45.9 | 6.3 | 8.9 | 5.2 | 11.4 | Dec-19 |
| eV Global Value Equity Net Median |  |  |  | 10.2 | 38.8 | 62.7 | 7.8 | 10.2 | 8.0 | 14.9 | Dec-19 |
| eV Global Value Equity Net Rank |  |  |  | 99 | 99 | 99 | -- | -- | -- | 94 | Dec-19 |
| Driehaus International Small Cap Growth | 15,879,543 | 1.5 | 12.0 | 4.4 | 41.6 | 78.7 | -- | -- | -- | 25.6 | May-19 |
| MSCI ACWI ex US Small Cap Growth NR USD |  |  |  | 3.3 | 35.7 | 72.6 | 8.9 | 11.7 | 7.2 | 18.7 | May-19 |
| eV ACWI ex-US Small Cap Equity Net Median |  |  |  | 3.6 | 35.0 | 67.4 | 7.0 | 11.5 | 8.7 | 14.8 | May-19 |
| eV ACWI ex-US Small Cap Equity Net Rank |  |  |  | 44 | 23 | 15 | -- | -- | -- | 7 | May-19 |
| Acadian ACWI ex U.S. Small Cap Equity | 14,281,049 | 1.3 | 10.8 | 10.7 | 40.7 | 73.7 | -- | -- | -- | 19.4 | May-19 |
| MSCI ACWI ex US Small Cap |  |  |  | 5.5 | 38.3 | 69.8 | 6.6 | 10.4 | 6.3 | 15.1 | May-19 |
| eV ACWI ex-US Small Cap Equity Net Median |  |  |  | 3.6 | 35.0 | 67.4 | 7.0 | 11.5 | 8.7 | 14.8 | May-19 |
| eV ACWI ex-US Small Cap Equity Net Rank |  |  |  | 11 | 30 | 22 | -- | -- | -- | 31 | May-19 |

[^13]|  | Market Value <br> (\$) | \% of Portfolio | \% of <br> Sector | QTD <br> (\%) | Fiscal YTD (\%) | 1 Yr <br> (\%) | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Emerging Markets Equity | 100,828,220 | 9.3 | 43.2 | -1.0 | 42.3 | 93.2 | 21.4 | 21.2 | -- | 10.2 | Apr-12 |
| Custom Blended Emerging Markets Benchmark |  |  |  | 2.3 | 34.1 | 58.4 | 6.7 | 12.4 | 4.0 | 5.7 | Apr-12 |
| Artisan Developing World TR | 71,016,029 | 6.5 | 70.4 | -2.3 | 39.3 | 92.8 | -- | -- | -- | 53.5 | Dec-19 |
| MSCI Emerging Markets |  |  |  | 2.3 | 34.1 | 58.4 | 6.5 | 12.1 | 3.7 | 21.8 | Dec-19 |
| eV Emg Mkts Equity Net Median |  |  |  | 3.3 | 36.5 | 64.4 | 6.7 | 12.5 | 4.6 | 22.9 | Dec-19 |
| eV Emg Mkts Equity Net Rank |  |  |  | 98 | 30 | 4 | -- | -- | -- | 1 | Dec-19 |
| RWC | 29,812,190 | 2.7 | 29.6 | 2.7 | 51.8 | 93.0 | -- | -- | -- | 27.3 | Dec-19 |
| MSCI Emerging Markets |  |  |  | 2.3 | 34.1 | 58.4 | 6.5 | 12.1 | 3.7 | 21.8 | Dec-19 |
| eV Emg Mkts Equity Net Median |  |  |  | 3.3 | 36.5 | 64.4 | 6.7 | 12.5 | 4.6 | 22.9 | Dec-19 |
| eV Emg Mkts Equity Net Rank |  |  |  | 58 | 3 | 4 | -- | -- | -- | 29 | Dec-19 |
| US Fixed Income | 191,439,727 | 17.6 | 25.1 | -3.4 | -2.1 | 1.0 | 4.2 | 3.6 | 3.8 | 5.2 | Dec-94 |
| BBgBarc US Aggregate TR |  |  |  | -3.4 | -2.1 | 0.7 | 4.4 | 3.8 | 3.6 | 5.5 | Dec-94 |
| InvMetrics All DB US Fix Inc Net Median |  |  |  | -2.2 | -0.3 | 4.3 | 4.9 | 3.9 | 4.1 | 5.7 | Dec-94 |
| InvMetrics All DB US Fix Inc Net Rank |  |  |  | 73 | 80 | 84 | 84 | 65 | 64 | 80 | Dec-94 |
| Vanguard Total Bond Market Index Fund | 91,146,071 | 8.4 | 47.6 | -3.6 | -2.4 | 0.6 | -- | -- | -- | 4.9 | May-19 |
| BBgBarc US Aggregate TR |  |  |  | -3.4 | -2.1 | 0.7 | 4.7 | 3.1 | 3.4 | 4.9 | May-19 |
| eV US Core Fixed Inc Net Median |  |  |  | -3.2 | -1.2 | 3.1 | 4.9 | 3.5 | 3.7 | 5.3 | May-19 |
| eV US Core Fixed Inc Net Rank |  |  |  | 79 | 86 | 92 | -- | -- | -- | 77 | May-19 |
| Barrow Hanley | 89,697,244 | 8.3 | 46.9 | -3.5 | -1.9 | 2.5 | 5.1 | 3.3 | 3.5 | 3.7 | Mar-10 |
| BBgBarc US Aggregate TR |  |  |  | -3.4 | -2.1 | 0.7 | 4.7 | 3.1 | 3.4 | 3.6 | Mar-10 |
| eV US Core Fixed Inc Net Median |  |  |  | -3.2 | -1.2 | 3.1 | 4.9 | 3.5 | 3.7 | 3.9 | Mar-10 |
| eV US Core Fixed Inc Net Rank |  |  |  | 75 | 73 | 61 | 32 | 54 | 73 | 66 | Mar-10 |
| Vanguard Short-Term Treasury Index Fund | 10,596,412 | 1.0 | 5.5 | -0.1 | 0.1 | 0.3 | 2.7 | -- | -- | 2.7 | Feb-18 |
| BBgBarc US Govt 1-3 Yr TR |  |  |  | -0.1 | 0.1 | 0.4 | 2.8 | 1.7 | 1.3 | 2.8 | Feb-18 |
| BBgBarc US Govt 1-5 Yr TR |  |  |  | -0.6 | -0.4 | 0.0 | 3.3 | 1.9 | 1.7 | 3.3 | Feb-18 |
| eV US Short Duration Fixed Inc Net Median |  |  |  | -0.2 | 0.6 | 3.0 | 3.2 | 2.3 | 1.8 | 3.1 | Feb-18 |
| eV US Short Duration Fixed Inc Net Rank |  |  |  | 32 | 87 | 97 | 88 | -- | -- | 87 | Feb-18 |

Historical returns for the US Fixed Income Composite prior to December 2010 and for Barrow Hanley prior to June 2010 are gross only.

|  | Market Value <br> (\$) | \% of Portfolio | \% of <br> Sector | QTD <br> (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception <br> (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Opportunistic Credit | 66,113,633 | 6.1 | 8.7 | 2.5 | 12.1 | 22.0 | -- | -- | -- | 6.8 | May-19 |
| 50\% Barclays US Aggregate / 25\% Barclays US High Yield / 25\% Credit Suisse Leveraged Loans |  |  |  | -1.0 | 4.4 | 11.0 | -- | -- | -- | 5.3 | May-19 |
| PIMCO Income Fund | 25,331,186 | 2.3 | 38.3 | -0.2 | 7.4 | 14.4 | -- | -- | -- | 5.0 | Apr-19 |
| BBgBarc US Aggregate TR |  |  |  | -3.4 | -2.1 | 0.7 | 4.7 | 3.1 | 3.4 | 4.9 | Apr-19 |
| Multisector Bond MStar MF Median |  |  |  | 0.0 | 7.3 | 16.5 | 5.0 | 5.4 | 4.7 | 5.6 | Apr-19 |
| Multisector Bond MStar MF Rank |  |  |  | 57 | 48 | 66 | -- | -- | -- | 56 | Apr-19 |
| GoldenTree Multi-Sector Credit | 23,213,563 | 2.1 | 35.1 | 2.4 | 13.9 | 27.4 | -- | -- | -- | 7.1 | Jun-19 |
| 50\% BBgBarc US High Yield TR/50\% Credit Suisse Leveraged Loans |  |  |  | 1.4 | 11.2 | 22.3 | 5.5 | 6.7 | 5.5 | 6.0 | Jun-19 |
| Sculptor Credit Opportunities Domestic Partners, LP | 17,568,884 | 1.6 | 26.6 | 6.9 | 17.1 | -- | -- | -- | -- | 17.1 | Jul-20 |
| 50\% BBgBarc US High Yield TR/50\% Credit Suisse Leveraged Loans |  |  |  | 1.4 | 11.2 | 22.3 | 5.5 | 6.7 | 5.5 | 11.2 | Jul-20 |
| Real Estate | 80,722,355 | 7.4 | 7.4 | 2.1 | 2.4 | 1.7 | 2.8 | 4.5 | 6.8 | -- | Mar-99 |
| Custom Blended Real Estate Benchmark |  |  |  | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| CPI $+5 \%$ (Seasonally Adjusted) |  |  |  | 2.5 | 6.9 | 7.9 | 7.1 | 7.3 | 6.8 | -- | Mar-99 |
| InvMetrics All DB Real Estate Pub+Priv Net Median |  |  |  | 1.9 | 3.5 | 2.1 | 4.7 | 5.7 | 8.7 | 8.0 | Mar-99 |
| InvMetrics All DB Real Estate Pub+Priv Net Rank |  |  |  | 42 | 77 | 57 | 88 | 81 | 86 | -- | Mar-99 |
| Vanguard REIT Index | 20,497,112 | 1.9 | 25.4 | 8.7 | -- | -- | -- | -- | -- | 15.6 | Aug-20 |
| Spliced Vanguard REIT Benchmark |  |  |  | 8.7 | 20.4 | 36.7 | 11.1 | 6.2 | 9.0 | 15.7 | Aug-20 |

 received information for, therefore it may not reflect the entire Private Real Estate composite at that given time.
 Historical returns for Invesco IV prior to April 2012 are gross only.

|  | Market Value <br> (\$) | \% of <br> Portfolio | \% of <br> Sector | QTD (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception <br> (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Private Real Estate | 60,225,243 | 5.5 | 74.6 | 1.1 | 1.0 | 0.2 | 2.3 | 4.1 | 6.6 | -- | Mar-99 |
| Custom Blended Real Estate Benchmark |  |  |  | 2.1 | 1.0 | 2.0 | 4.4 | 5.5 | 8.8 | 7.1 | Mar-99 |
| InvMetrics All DB Real Estate Pub+Priv Net Median |  |  |  | 1.9 | 3.5 | 2.1 | 4.7 | 5.7 | 8.7 | 8.0 | Mar-99 |
| InvMetrics All DB Real Estate Pub+Priv Net Rank |  |  |  | 86 | 91 | 87 | 90 | 86 | 88 | -- | Mar-99 |
| UBS Trumbull Property | 34,424,452 | 3.2 | 57.2 | -1.7 | -4.7 | -4.3 | -0.3 | 1.5 | 5.8 | 6.3 | Mar-99 |
| Patron Capital V | 7,768,625 | 0.7 | 12.9 | -0.1 | 11.2 | 3.8 | -0.1 | 7.1 | -- | 6.9 | Jan-16 |
| Greenfield Gap VII | 6,307,175 | 0.6 | 10.5 | 15.1 | 18.0 | 12.6 | 13.9 | 13.8 | -- | 14.0 | Dec-14 |
| Taconic CRE Dislocation Fund II | 4,692,067 | 0.4 | 7.8 | 2.0 | 4.3 | 6.2 | -- | -- | -- | 7.9 | Nov-18 |
| AG Realty Value Fund X, L.P. | 2,523,108 | 0.2 | 4.2 | 7.7 | 14.2 | 11.6 | -- | -- | -- | -3.3 | Jun-19 |
| Carlyle Realty VIII | 1,850,422 | 0.2 | 3.1 | 3.8 | -0.7 | 16.3 | -3.0 | -- | -- | -11.8 | Dec-17 |
| Cerberus Real Estate Debt Fund, L.P. | 1,549,701 | 0.1 | 2.6 | 3.6 | 20.9 | -- | -- | -- | -- | 20.9 | Jul-20 |
| Rockpoint Real Estate Fund VI, L.P. | 783,471 | 0.1 | 1.3 | 6.4 | 3.4 | 0.2 | -- | -- | -- | 0.2 | May-20 |
| Carmel Partners Investment Fund VII | 326,222 | 0.0 | 0.5 | -5.8 | -20.1 | -26.9 | -- | -- | -- | -40.9 | Apr-19 |
| Private Equity | 72,629,515 | 6.7 | 6.7 | 12.1 | 30.6 | 26.2 | 15.1 | 13.2 | 11.0 | 9.0 | Jun-05 |
| Custom Blended Private Equity Benchmark |  |  |  | 15.2 | 41.8 | 33.5 | 21.8 | 20.2 | -- | -- | Jun-05 |
| Russell $3000+3 \% 1$-Quarter Lag |  |  |  | 15.5 | 56.1 | 24.5 | 17.9 | 18.9 | 17.2 | 13.3 | Jun-05 |
| InvMetrics All DB Private Eq Net Median |  |  |  | 6.5 | 23.3 | 19.6 | 12.7 | 12.6 | 10.9 | 10.6 | Jun-05 |
| InvMetrics All DB Private Eq Net Rank |  |  |  | 17 | 25 | 27 | 36 | 44 | 50 | 71 | Jun-05 |
| Adams Street | 7,391,716 | 0.7 | 10.2 | 20.5 | 57.6 | 40.6 | 19.6 | 16.6 | 15.2 | 9.0 | Sep-05 |
| Ocean Avenue II | 7,213,992 | 0.7 | 9.9 | 47.2 | 59.7 | 68.8 | 33.9 | 26.9 | -- | 18.6 | Jun-14 |
| Invesco VI | 6,853,465 | 0.6 | 9.4 | 0.0 | 30.6 | 24.8 | 14.8 | 13.9 | -- | 13.2 | Jun-13 |

Adams Street includes Adams Street 2005, Adams Street 2007, and Adams Street 2011.
Pantheon I includes Pantheon US Fund VI and Pantheon Europe Fund IV.
Pantheon II Includes Pantheon US Fund IX, Pantheon Asia Fund VI, and Pantheon Europe Fund VII. Pantheon Secondary includes Pantheon GLO SEC III B.

|  | Market Value <br> (\$) | \% of Portfolio | \% of Sector | QTD (\%) | Fiscal YTD (\%) | $\begin{array}{r} 1 \mathrm{Yr} \\ (\%) \end{array}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TCV X | 5,425,707 | 0.5 | 7.5 | 29.8 | 80.0 | 76.2 | -- | -- | -- | 26.8 | Apr-19 |
| Davidson Kempner Long-Term Distressed Opportunities Fund IV | 5,049,406 | 0.5 | 7.0 | 2.9 | 17.6 | 2.9 | 8.8 | -- | -- | 8.8 | Apr-18 |
| Summit Partners Growth Equity Fund X-A | 4,863,590 | 0.4 | 6.7 | 4.9 | 16.0 | 36.7 | -- | -- | -- | 13.2 | Mar-20 |
| Pantheon II | 4,097,262 | 0.4 | 5.6 | 11.4 | 42.1 | 35.8 | 19.1 | 16.8 | -- | 13.6 | Dec-11 |
| Cortec Group Fund VII | 4,047,991 | 0.4 | 5.6 | 28.0 | 54.6 | 49.6 | -- | -- | -- | 34.2 | Dec-19 |
| Carrick Capital Partners III | 3,809,554 | 0.4 | 5.2 | 15.7 | 26.6 | 20.1 | -- | -- | -- | 9.1 | Aug-18 |
| GTCR Fund XII | 3,547,324 | 0.3 | 4.9 | 2.7 | 40.1 | 31.9 | -- | -- | -- | 10.3 | Jun-18 |
| Genstar Capital Partners IX | 3,461,101 | 0.3 | 4.8 | 9.8 | 38.3 | 30.2 | -- | -- | -- | 20.9 | Jul-19 |
| Cressey \& Company Fund VI | 3,001,199 | 0.3 | 4.1 | 4.8 | 28.9 | 27.3 | -- | -- | -- | 10.1 | Jan-19 |
| Raven Asset Fund II | 2,609,774 | 0.2 | 3.6 | -0.4 | -18.0 | -17.7 | -4.8 | -4.1 | -- | -4.3 | Aug-14 |
| Spark Capital Growth Fund III | 2,431,339 | 0.2 | 3.3 | -2.0 | -11.2 | -11.2 | -- | -- | -- | -10.4 | Mar-20 |
| Taconic Market Dislocation Fund III L.P. | 2,165,287 | 0.2 | 3.0 | 10.7 | 10.7 | -- | -- | -- | -- | 10.7 | Jul-20 |
| Silver Point Specialty Credit Fund II, L.P. | 2,070,795 | 0.2 | 2.9 | 5.4 | 13.5 | -- | -- | -- | -- | 13.5 | Jul-20 |
| Accel-KKR Growth Capital Partners III | 1,700,667 | 0.2 | 2.3 | 1.4 | 5.9 | 5.9 | -- | -- | -- | -6.8 | Jul-19 |
| Marlin Heritage Europe II, L.P. | 1,159,190 | 0.1 | 1.6 | -3.4 | -- | -- | -- | -- | -- | -3.4 | Oct-20 |
| Spark Capital VI | 913,434 | 0.1 | 1.3 | $-2.7$ | -14.5 | -14.5 | -- | -- | -- | -13.5 | Mar-20 |
| Pantheon Secondary | 270,918 | 0.0 | 0.4 | -3.4 | 11.5 | 1.1 | 0.8 | 1.4 | 1.7 | 2.6 | Jun-07 |
| Pantheon I | 198,506 | 0.0 | 0.3 | 11.8 | 12.1 | 6.7 | -8.2 | -2.5 | 2.0 | 1.0 | Dec-05 |
| Khosla Ventures VII | 138,000 | 0.0 | 0.2 | 0.0 | -- | -- | -- | -- | -- | 0.0 | Jan-21 |
| Accel-KKR Capital Partners VI | 135,496 | 0.0 | 0.2 | -- | -- | -- | -- | -- | -- | -28.5 | Feb-21 |
| Khosla Ventures Seed E | 42,000 | 0.0 | 0.1 | -- | -- | -- | -- | -- | -- | 0.0 | Feb-21 |

Total Fund \| As of March 31, 2021

|  | Market Value <br> (\$) | \% of Portfolio | \% of Sector | QTD <br> (\%) | Fiscal YTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TCV XI | 27,200 | 0.0 | 0.0 | -- | -- | -- | -- | -- | -- | 0.0 | Feb-21 |
| Invesco IV | 4,602 | 0.0 | 0.0 | 0.0 | -19.6 | -42.3 | 7.9 | 12.1 | 11.3 | 9.9 | Jun-05 |
| Hedge Fund | 100,049,534 | 9.2 | 9.2 | 4.8 | 14.7 | 21.4 | 5.2 | 6.7 | -- | 4.7 | Jun-14 |
| Custom Blended Hedge Fund Benchmark |  |  |  | 1.9 | 14.8 | 23.8 | 5.4 | 5.8 | -- | 4.3 | Jun-14 |
| InvMetrics All DB Hedge Funds Net Median |  |  |  | 3.1 | 16.4 | 25.5 | 5.9 | 6.0 | 4.4 | 4.0 | Jun-14 |
| InvMetrics All DB Hedge Funds Net Rank |  |  |  | 28 | 61 | 65 | 59 | 39 | -- | 31 | Jun-14 |
| Silver Point Capital | 15,334,502 | 1.4 | 15.3 | 9.0 | 25.4 | 34.0 | 7.8 | -- | -- | 7.8 | Nov-17 |
| Laurion Capital | 13,880,467 | 1.3 | 13.9 | 18.3 | 27.1 | 35.9 | -- | -- | -- | 21.9 | Aug-18 |
| Taconic Opportunity Fund | 13,547,084 | 1.2 | 13.5 | 4.8 | 12.9 | 18.2 | -- | -- | -- | 5.4 | Dec-18 |
| Wellington-Archipelago | 13,489,819 | 1.2 | 13.5 | 0.7 | 8.9 | 18.4 | 4.6 | -- | -- | 5.5 | Aug-17 |
| Sculptor (OZ) Domestic II | 13,483,844 | 1.2 | 13.5 | 3.3 | 15.1 | 29.2 | 10.5 | 10.9 | -- | 8.1 | Jun-14 |
| Marshall Wace Global Opportunities | 9,619,914 | 0.9 | 9.6 | -7.4 | 5.6 | -- | -- | -- | -- | 6.9 | May-20 |
| KLS Diversified | 8,644,168 | 0.8 | 8.6 | 3.5 | 12.0 | 14.5 | -1.3 | -- | -- | -0.9 | Oct-17 |
| Graham Absolute Return | 8,145,372 | 0.8 | 8.1 | 6.1 | 16.3 | 23.6 | 3.4 | -- | -- | 3.4 | Aug-17 |
| Marshall Wace Eureka | 3,904,363 | 0.4 | 3.9 | 0.5 | 13.5 | 19.2 | 5.8 | -- | -- | 6.6 | Nov-17 |
| Real Assets | 65,057,089 | 6.0 | 6.0 | 3.7 | 12.4 | 13.5 | 8.1 | 7.4 | 8.2 | -- | Mar-99 |
| Custom Blended Real Assets Benchmark |  |  |  | 5.4 | 12.4 | -4.1 | 5.4 | 7.4 | -- | -- | Mar-99 |
| CPI $+5 \%$ (Seasonally Adjusted) |  |  |  | 2.5 | 6.9 | 7.9 | 7.1 | 7.3 | 6.8 | -- | Mar-99 |
| InvMetrics All DB Real Assets/Commodities Net Median |  |  |  | 1.7 | 5.5 | 6.7 | 4.9 | 5.4 | 5.2 | 7.9 | Mar-99 |
| InvMetrics All DB Real Assets/Commodities Net Rank |  |  |  | 26 | 26 | 33 | 8 | 15 | 23 | -- | Mar-99 |
| SSgA | 30,353,106 | 2.8 | 46.7 | 5.3 | 21.5 | 34.1 | 5.3 | -- | -- | 5.2 | Apr-17 |
| Real Asset NL Custom Blended Index |  |  |  | 6.1 | 22.8 | 35.7 | 5.6 | -- | -- | 5.5 | Apr-17 |


|  | Market Value | \% of <br> Portfolio | $\begin{array}{r} \% \text { of } \\ \text { Sector } \end{array}$ | QTD <br> (\%) | Fiscal YTD (\%) | $\begin{aligned} & 1 \mathrm{Yr} \\ & (\%) \end{aligned}$ | 3 Yrs (\%) | 5 Yrs (\%) | 10 Yrs (\%) | Inception (\%) | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Private Infrastructure | 22,387,210 | 2.1 | 34.4 | 5.9 | 9.6 | 17.8 | 12.6 | 12.3 | -- | 9.5 | Dec-14 |
| S\&P Global Infrastructure Net TR USD |  |  |  | 2.8 | 19.7 | 36.0 | 4.7 | 5.8 | 5.3 | 3.8 | Dec-14 |
| KKR Global II | 8,292,205 | 0.8 | 37.0 | 12.4 | 24.2 | 53.9 | 22.5 | 17.2 | -- | 16.1 | Dec-14 |
| North Haven Infrastructure II | 7,292,424 | 0.7 | 32.6 | 1.6 | 0.2 | -1.8 | 7.8 | 10.6 | -- | 6.9 | May-15 |
| ISQ Global Infrastructure Fund II | 3,845,582 | 0.4 | 17.2 | 8.1 | 15.0 | 16.2 | -- | -- | -- | -1.6 | Jul-18 |
| KKR Global Infrastructure Investors III | 2,285,956 | 0.2 | 10.2 | -2.9 | 4.4 | 0.1 | -- | -- | -- | $-7.1$ | Jan-19 |
| Ardian Infrastructure Fund $V$ | 671,043 | 0.1 | 3.0 | 0.0 | -34.7 | -40.2 | -- | -- | -- | -30.7 | Oct-19 |
| Private Natural Resources | 12,316,773 | 1.1 | 18.9 | 1.8 | 12.1 | -8.4 | 3.8 | 10.2 | -- | 11.1 | Sep-15 |
| S\&P Global Natural Resources Index TR USD |  |  |  | 11.8 | 39.2 | 67.7 | 5.5 | 11.4 | 1.1 | 12.2 | Sep-15 |
| GSO Energy Opportunities | 2,964,895 | 0.3 | 24.1 | 7.0 | 35.8 | -11.6 | -0.8 | 9.6 | -- | 8.6 | Nov-15 |
| Tailwater Energy Fund IV, LP | 1,976,029 | 0.2 | 16.0 | -2.0 | 3.1 | -24.7 | -- | -- | -- | -25.6 | Oct-19 |
| BlackRock Global Energy and Power Infrastructure Fund III LP | 1,786,273 | 0.2 | 14.5 | 1.0 | 35.5 | 0.2 | -- | -- | -- | 21.9 | Jul-19 |
| Taurus Mining Annex | 1,581,826 | 0.1 | 12.8 | 0.9 | 8.6 | 15.0 | 21.1 | -- | -- | 24.6 | Jan-17 |
| Taurus Mining | 1,522,121 | 0.1 | 12.4 | -3.7 | -4.3 | -16.8 | 3.8 | 7.3 | -- | 10.0 | Sep-15 |
| EnCap IV | 1,312,614 | 0.1 | 10.7 | 4.8 | 8.7 | -1.1 | 1.0 | -- | -- | 1.0 | Feb-18 |
| EnCap XI | 1,173,014 | 0.1 | 9.5 | 2.1 | -4.5 | -28.3 | -21.2 | -- | -- | -28.3 | Jul-17 |
| Cash | 5,057,472 | 0.5 | 0.5 | 0.0 | 0.2 | 0.3 | 0.9 | -- | -- | -- |  |
| Cash | 4,332,363 | 0.4 | 85.7 | 0.0 | 0.2 | 0.3 | 1.2 | 1.1 | -1.6 | -- | Sep-03 |
| Treasury Cash | 725,108 | 0.1 | 14.3 |  |  |  |  |  |  |  |  |

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

Total Fund \| As of March 31, 2021

 weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

Merced County Employees' Retirement Association
Total Fund | As of March 31, 2021

 weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding



Total Fund | As of March 31, 2021

|  | Anlzd Return | Statistics SU | ary | Beta | Sharpe Ratio | Tracking Error |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5 Years Ending March 31, 2021 |  |  |  |  |
|  |  | Anlzd Standard Deviation | Information Ratio |  |  |  |
| Total Fund | 10.69\% | 7.80\% | 0.00 | 1.06 | 1.23 | 2.10\% |
| Policy Index | 10.69\% | 7.09\% | -- | 1.00 | 1.35 | 0.00\% |
| InvMetrics Public DB \$250mm-\$1B Net Median | 10.06\% | 9.44\% | -0.05 | 1.02 | 0.97 | 1.17\% |

Merced County Employees' Retirement Association
Total Fund | As of March 31, 2021

| Name | Annual Investment Expense Analysis |  | Estimated Fee | Estimated Fee Value |
| :---: | :---: | :---: | :---: | :---: |
|  | As Of March 31, 2021 |  |  |  |
|  | Fee Schedule | Market Value |  |  |
| Total Fund w/o Alternatives |  | \$762,455,288 |  |  |
| US Equity |  | \$271,560,272 |  |  |
| Mellon Dynamic US Equity | 0.30\% of Assets | \$128,120,784 | 0.30\% | \$384,362 |
| Mellon Large Cap | $0.04 \%$ of First 100.0 Mil, 0.02\% Thereafter | \$108,057,302 | 0.04\% | \$41,611 |
| Champlain Small Cap | 1.00\% of Assets | \$35,382,185 | 1.00\% | \$353,822 |
| International Equity |  | \$233,341,656 |  |  |
| Developed International Equity |  | \$132,513,436 |  |  |
| Acadian ACWI ex U.S. Small Cap Equity | 0.99\% of Assets | \$14,281,049 | 0.99\% | \$141,382 |
| Driehaus International Small Cap Growth | 0.90\% of Assets | \$15,879,543 | 0.90\% | \$142,916 |
| GQG International Equity | 0.50\% of Assets | \$53,441,735 | 0.50\% | \$267,209 |
| First Eagle International Value Fund | 0.79\% of Assets | \$48,911,110 | 0.79\% | \$386,398 |
| Emerging Markets Equity |  | \$100,828,220 |  |  |
| Artisan Developing World TR | 1.05\% of Assets | \$71,016,029 | 1.05\% | \$745,668 |
| RWC | 0.87\% of Assets | \$29,812,190 | 0.87\% | \$259,366 |
| US Fixed Income |  | \$191,439,727 |  |  |
| Barrow Hanley | 0.30\% of First 50.0 Mil, $0.20 \%$ of Next 100.0 Mil, $0.15 \%$ Thereafter | \$89,697,244 | 0.26\% | \$229,394 |
| Vanguard Short-Term Treasury Index Fund | 0.05\% of Assets | \$10,596,412 | 0.05\% | \$5,298 |
| Vanguard Total Bond Market Index Fund | 0.04\% of Assets | \$91,146,071 | 0.04\% | \$31,901 |
| Opportunistic Credit |  | \$66,113,633 |  |  |
| PIMCO Income Fund | 0.50\% of Assets | \$25,331,186 | 0.50\% | \$126,656 |
| GoldenTree Multi-Sector Credit | 0.70\% of Assets | \$23,213,563 | 0.70\% | \$162,495 |
| Sculptor Credit Opportunities Domestic Partners, LP | Performance-based 1.00 and 20.00 | \$17,568,884 | 1.00\% | \$175,689 |
| Real Estate |  | \$80,722,355 |  |  |
| Vanguard REIT Index | 0.10\% of Assets | \$20,497,112 | 0.10\% | \$20,497 |
| Private Real Estate |  | \$60,225,243 |  |  |
| Greenfield Gap VII |  | \$6,307,175 |  |  |
| Patron Capital V |  | \$7,768,625 |  |  |
| UBS Trumbull Property |  | \$34,424,452 |  |  |

Merced County Employees' Retirement Association
Total Fund | As of March 31, 2021

| Name | Fee Schedule | Market Value | Estimated Fee | Estimated Fee Value |
| :---: | :---: | :---: | :---: | :---: |
| Carlyle Realty VIII |  | \$1,850,422 |  |  |
| Taconic CRE Dislocation Fund II |  | \$4,692,067 |  |  |
| Carmel Partners Investment Fund VII |  | \$326,222 |  |  |
| AG Realty Value Fund X, L.P. |  | \$2,523,108 |  |  |
| Rockpoint Real Estate Fund VI, L.P. |  | \$783,471 |  |  |
| Cerberus Real Estate Debt Fund, L.P. |  | \$1,549,701 |  |  |
| Invesco IV |  | \$4,602 |  |  |
| Invesco VI |  | \$6,853,465 |  |  |
| Ocean Avenue II |  | \$7,213,992 |  |  |
| Pantheon I |  | \$198,506 |  |  |
| Pantheon II |  | \$4,097,262 |  |  |
| Pantheon Secondary |  | \$270,918 |  |  |
| Raven Asset Fund II |  | \$2,609,774 |  |  |
| Davidson Kempner Long-Term Distressed Opportunities Fund IV |  | \$5,049,406 |  |  |
| GTCR Fund XII |  | \$3,547,324 |  |  |
| Carrick Capital Partners III |  | \$3,809,554 |  |  |
| Cressey \& Company Fund VI |  | \$3,001,199 |  |  |
| TCV X |  | \$5,425,707 |  |  |
| Accel-KKR Growth Capital Partners III |  | \$1,700,667 |  |  |
| Genstar Capital Partners IX |  | \$3,461,101 |  |  |
| Cortec Group Fund VII |  | \$4,047,991 |  |  |
| Spark Capital Growth Fund III |  | \$2,431,339 |  |  |
| Spark Capital VI |  | \$913,434 |  |  |
| Summit Partners Growth Equity Fund X-A |  | \$4,863,590 |  |  |
| Taconic Market Dislocation Fund III L.P. |  | \$2,165,287 |  |  |
| Silver Point Specialty Credit Fund II, L.P. |  | \$2,070,795 |  |  |
| Marlin Heritage Europe II, L.P. |  | \$1,159,190 |  |  |
| Khosla Ventures VII |  | \$138,000 |  |  |
| Accel-KKR Capital Partners VI |  | \$135,496 |  |  |
| Khosla Ventures Seed E |  | \$42,000 |  |  |
| TCV XI |  | \$27,200 |  |  |

Merced County Employees' Retirement Association
Total Fund | As of March 31, 2021

| Name | Fee Schedule | Market Value | Estimated Fee | Estimated Fee Value |
| :---: | :---: | :---: | :---: | :---: |
| Hedge Fund |  | \$100,049,534 |  |  |
| Sculptor (oz) Domestic II | Performance-based 1.50 and 20.00 | \$13,483,844 | 1.50\% | \$202,258 |
| Graham Absolute Return | Performance-based 1.75 and 20.00 | \$8,145,372 | 2.21\% | \$179,740 |
| Wellington-Archipelago | Performance-based 1.00 and 20.00 | \$13,489,819 | 1.03\% | \$139,419 |
| KLS Diversified | Performance-based 2.00 and 20.00 | \$8,644,168 | 2.00\% | \$172,883 |
| Marshall Wace Eureka | Performance-based 2.00 and 20.00 | \$3,904,363 | 2.00\% | \$78,087 |
| Silver Point Capital | Performance-based 1.50 and 20.00 | \$15,334,502 | 1.95\% | \$299,032 |
| Laurion Capital | Performance-based 2.00 and 20.00 | \$13,880,467 | 3.54\% | \$490,789 |
| Taconic Opportunity Fund | Performance-based 1.40 and 20.00 | \$13,547,084 | 1.56\% | \$211,963 |
| Marshall Wace Global Opportunities | Performance-based 2.00 and 20.00 | \$9,619,914 | 2.00\% | \$192,398 |
| Real Assets |  | \$65,057,089 |  |  |
| SSgA | $0.30 \%$ of First 50.0 Mil, $0.27 \%$ of Next 50.0 Mil, $0.25 \%$ Thereafter | \$30,353,106 | 0.30\% | \$91,059 |
| Private Infrastructure |  | \$22,387,210 |  |  |
| KKR Global II |  | \$8,292,205 |  |  |
| North Haven Infrastructure II |  | \$7,292,424 |  |  |
| ISQ Global Infrastructure Fund II |  | \$3,845,582 |  |  |
| KKR Global Infrastructure Investors III |  | \$2,285,956 |  |  |
| Ardian Infrastructure Fund V |  | \$671,043 |  |  |
| Private Natural Resources |  | \$12,316,773 |  |  |
| EnCap XI |  | \$1,173,014 |  |  |
| EnCap IV |  | \$1,312,614 |  |  |
| GSO Energy Opportunities |  | \$2,964,895 |  |  |
| Taurus Mining |  | \$1,522,121 |  |  |
| Taurus Mining Annex |  | \$1,581,826 |  |  |
| BlackRock Global Energy and Power Infrastructure Fund III LP |  | \$1,786,273 |  |  |
| Tailwater Energy Fund IV, LP |  | \$1,976,029 |  |  |
| Cash |  | \$5,057,472 |  |  |
| Cash |  | \$4,332,363 |  |  |
| Treasury Cash |  | \$725,108 |  |  |




## MEKETA

Merced County Employees' Retirement Association
US Equity | As of March 31, 2021


## MEKETA

Merced County Employees' Retirement Association
US Equity | As of March 31, 2021

|  | US Equity Characteristics <br> vs Russell $\mathbf{3 0 0 0}$ <br> Portfolio <br> Q1-21 | Index |
| :--- | ---: | ---: |
|  |  | Q1-21 |


|  | US Equity Sector Distribution <br> vs Russell 3000 <br> Portfolio <br> Q1-21 | Index <br> Q1-21 |
| :--- | ---: | ---: |
|  |  |  |
| Sector Distribution | 2.1 | 2.3 |
| Energy | 2.7 | 2.9 |
| Materials | 9.3 | 9.9 |
| Industrials | 10.7 | 12.3 |
| Consumer Discretionary | 6.4 | 5.6 |
| Consumer Staples | 13.3 | 13.6 |
| Health Care | 10.9 | 11.7 |
| Financials | 23.6 | 25.8 |
| Information Technology | 9.1 | 10.0 |
| Communication Services | 2.1 | 2.6 |
| Utilities | 2.3 | 3.3 |
| Real Estate |  |  |


| Top Holdings |  | Best Performers |  | Worst Performers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| APPLE INC | 4.8\% |  | Return \% |  | Return \% |
| MICROSOFT CORP | 4.4\% | TRIPADVISOR INC | 86.9\% | SAREPTA THERAPEUTICS INC | -56.3\% |
| AMAZON.COM INC | 3.4\% | WILLIAMS-SONOMA INC. | 76.7\% | ACADIA PHARMACEUTICALS INC | -51.7\% |
| FACEBOOK INC | 1.8\% | TERADATA CORP | 71.5\% | BERKELEY LIGHTS INC | -43.8\% |
| ALPHABET INC | 1.6\% | COHERENTINC | 68.6\% | SUMO LOGIC INC | -34.0\% |
| ALPHABET INC | 1.6\% | SIGNATURE BANK | 67.7\% | PULMONX CORP | -33.7\% |
| TESLA INC | 1.3\% | L BRANDS INC | 66.3\% | ADAPTIVE BIOTECHNOLOGIES CORP | -31.9\% |
| BERKSHIRE HATHAWAY INC | 1.2\% | MARATHON OIL CORP | 60.6\% | ALTERYX INC | -31.9\% |
| JPMORGAN CHASE \& CO | 1.1\% | CImarex energy co. | 59.0\% | IOVANCE BIOTHERAPEUTICS INC | -31.8\% |
| JOHNSON \& JOHNSON | 1.0\% | CONTINENTAL RESOURCES INC | 58.7\% | ARRAY TECHNOLOGIES INC | -30.9\% |
|  |  | WESTERN ALLIANCE BANCORPORATION | 58.0\% | TENABLE HOLDINGS INC | -30.8\% |

## MEKETA

Merced County Employees' Retirement Association
Mellon Dynamic US Equity \| As of March 31, 2021

Return Summary


|  | QTD <br> (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mellon Dynamic US Equity | 5.2 | 51.6 | 17.8 | 18.1 | -- |
| S\&P 500 | 6.2 | 56.4 | 16.8 | 16.3 | 13.9 |
| eV US Large Cap Core Equity Net Median | 6.5 | 54.7 | 14.6 | 14.8 | 12.8 |
| eV US Large Cap Core Equity Net Rank | 69 | 63 | 12 | 5 | -- |



Current Allocation


US Equity
86.1 \%


Tracking Error
Information Ratio


Mellon Dynamic US Equity \| As of March 31, 2021


[^14]
## MEKETA

Return Summary


|  | QTD (\%) | 1 Yr <br> (\%) | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mellon Large Cap | 6.1 | 60.8 | 17.4 | 16.7 | -- |
| Russell 1000 | 5.9 | 60.6 | 17.3 | 16.7 | 14.0 |
| eV US Large Cap Core Equity Net Median | 6.5 | 54.7 | 14.6 | 14.8 | 12.8 |
| eV US Large Cap Core Equity Net Rank | 56 | 23 | 17 | 12 | -- |



Merced County Employees' Retirement Association
Mellon Large Cap \| As of March 31, 2021

## MEKETA

Merced County Employees' Retirement Association
Mellon Large Cap | As of March 31, 2021

| Account Information |  | Account Characteristics |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Account Name | Mellon Large Cap |  | Portfolio | Index |
| Account |  |  | Q1-21 | Q1-21 |
| Structure | Commingled Fund | Characteristics |  |  |
| Investment <br> Style | Passive | Weighted Avg. Market Cap. (\$B) | 425.6 | 414.5 |
| Inception Date | 3/31/16 | Median Market Cap | 14.3 | 14.4 |
| Account Type | US Stock Large | (\$B) |  |  |
| Benchmark | Russell 1000 | P/E Ratio | 30.1 | 29.9 |
| Universe | eV US Large Cap Core Equity Net | Yield | 1.4 | 1.4 |
|  |  | EPS Growth - 5 Yrs. | 14.7 | 14.5 |
|  |  | Price to Book | 4.5 | 4.5 |



| Top Holdings |  | Best Performers |  | Worst Performers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| APPLE INC | 5.3\% |  | Return \% |  | Return \% |
| MICROSOFT CORP | 4.8\% | TRIPADVISOR INC | 86.9\% | SAREPTA THERAPEUTICS INC | -56.3\% |
| AMAZON.COM INC | 3.7\% | WILLIAMS-SONOMA INC. | 76.7\% | ACADIA PHARMACEUTICALS INC | -51.7\% |
| FACEBOOK INC | 2.0\% | TERADATA CORP | 71.5\% | BERKELEY LIGHTS INC | -43.8\% |
| ALPHABET INC | 1.8\% | COHERENTINC | 68.6\% | ADAPTIVE BIOTECHNOLOGIES CORP | -31.9\% |
| ALPHABET INC | 1.8\% | SIGNATURE BANK | 67.7\% | ALTERYX INC | -31.9\% |
| TESLA INC | 1.4\% | L BRANDS INC | 66.3\% | IOVANCE BIOTHERAPEUTICS INC | -31.8\% |
| BERKSHIRE HATHAWAY INC | 1.3\% | MARATHON OIL CORP | 60.6\% | ARRAY TECHNOLOGIES INC | -30.9\% |
| JPMORGAN CHASE \& CO | 1.2\% | CIMAREX ENERGY CO. | 59.0\% | BLUEBIRD BIO INC | -30.3\% |
| JOHNSON \& JOHNSON | 1.1\% | CONTINENTAL RESOURCES INC | 58.7\% | JFROG LTD COMMON STOCK | -29.4\% |
|  |  | WESTERN ALLIANCE BANCORPORATION | 58.0\% | QUIDEL CORP | -28.8\% |

## MEKETA

| Account Information |  | Account Characteristics |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Account Name | Champlain Small Cap |  | Portfolio | Index |
| Account |  |  | Q1-21 | Q1-21 |
| Structure | Mutual Fund | Characteristics |  |  |
| Investment Style | Active | Weighted Avg. Market Cap. (\$B) | 3.6 | 3.7 |
| Inception Date | 11/01/20 | Median Market Cap | 30 | 1 |
| Account Type |  | (\$B) |  |  |
| Benchmark | Russell 2000 | P/E Ratio | 36.6 | 23.9 |
| Universe | eV US Small Cap Core Equity Net | Yield | 0.7 | 0.9 |
|  |  | EPS Growth - 5 Yrs. | 3.8 | 10.0 |
|  |  | Price to Book | 3.4 | 2.9 |



| Top Holdings |  |
| :--- | :--- |
| CASH - USD | $7.8 \%$ |
| JOHN BEAN TECHNOLOGIES CORP | $2.9 \%$ |
| CONMED CORP | $2.8 \%$ |
| INTEGRA LIFESCIENCES HOLDINGS CORP | $2.5 \%$ |
| NEW RELIC INC | $2.3 \%$ |
| SIMPLY GOOD FOODS CO (THE) | $2.3 \%$ |
| LANCASTER COLONY CORP | $2.2 \%$ |
| CANTEL MEDICAL CORP | $2.0 \%$ |
| PURE STORAGE INC | $2.0 \%$ |
| HOSTESS BRANDS INC | $2.0 \%$ |

## MEKETA

Return Summary




Merced County Employees' Retirement Association
International Equity | As of March 31, 2021


## MEKETA

## Merced County Employees' Retirement Association

International Equity \| As of March 31, 2021

|  | International Equity Characteristics <br> vs MSCI ACWI ex USA <br> Portfolio <br> Q1-21 | Index |
| :--- | :---: | ---: |
|  |  | Q1-21 |


|  | International Equity Sector Distribution <br> vs MSCI ACWI ex USA <br> Portfolio <br> Q1-21 | Index <br> Q1-21 |
| :--- | ---: | ---: |
|  |  | 4.5 |
| Sector Distribution | 2.0 | 8.2 |
| Energy | 8.4 | 11.8 |
| Materials | 8.5 | 13.6 |
| Industrials | 16.5 | 8.4 |
| Consumer Discretionary | 8.1 | 8.9 |
| Consumer Staples | 10.5 | 18.9 |
| Health Care | 11.4 | 13.0 |
| Financials | 18.0 | 7.0 |
| Information Technology | 8.5 | 3.2 |
| Communication Services | 0.7 | 2.6 |
| Utilities | 2.1 |  |
| Real Estate |  |  |
|  |  |  |


| Top Holdings |  | Best Performers Return\% |  | Worst Performers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SEA LTD | 2.2\% |  |  |  | Return \% |
| VISA INC | 2.0\% | CARDINAL ENERGY LTD | 223.7\% | NEXUS REAL ESTATE INVESTMENT TRUST | -71.9\% |
| TENCENT HOLDINGS LTD | 1.9\% | RAYDIUM SEMICONDUCTOR CORPORATION | 182.1\% | XEBEC ADSORPTION INC | -51.5\% |
| ALIBABA GROUP HOLDING LTD | 1.8\% | PUREUN MUTUAL SAVINGS BANK | 171.0\% | KOGAN.COM LTD | -36.9\% |
| NVIDIA CORPORATION | 1.8\% | PPDAI GROUP INC | 162.5\% | CRI MIDDLEWARE CO LTD | -36.5\% |
| MERCADOLIBRE INC | 1.7\% | HYOSUNG TNC CORP | 162.1\% | GRAVITY CO LTD | -36.4\% |
| ADYEN N.V | 1.7\% | AIRBOSS OF AMERICA CORP | 159.2\% | docebo inc | -33.9\% |
| ASML HOLDING NV | 1.5\% | NUVISTA ENERGY LTD | 155.4\% | GRAN COLOMBIA GOLD CORP | -31.7\% |
| UNITY SOFTWARE INC COM | 1.5\% | LOOKERS | 154.7\% | MEDICAL DATA VISION CO LTD | -29.6\% |
| MEITUAN DIANPING USD0.00001 A B CLASS ISIN KYG596691041 | 1.4\% | JEJU BANK CO LTD | 125.4\% | SECTRA AB | -29.5\% |
|  |  | CREW ENERGY INC | 113.4\% | NHN KCP CORP | -29.4\% |

## MEKETA

## Merced County Employees' Retirement Association

Acadian ACWI ex U.S. Small Cap Equity | As of March 31, 2021


|  | QTD <br> (\%) | 1 Yr (\%) | 3 Yrs (\%) | 5 Yrs (\%) | 10 Yrs (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acadian ACWI ex U.S. Small Cap Equity | 10.7 | 73.7 | -- | -- | -- |
| MSCI ACWI ex US Small Cap | 5.5 | 69.8 | 6.6 | 10.4 | 6.3 |
| eV ACWI ex-US Small Cap Equity Net Median | 3.6 | 67.4 | 7.0 | 11.5 | 8.7 |
| eV ACWI ex-US Small Cap Equity Net Rank | 11 | 22 | -- | -- | -- |




## MEKETA

## Merced County Employees' Retirement Association

Acadian ACWI ex U.S. Small Cap Equity \| As of March 31, 2021

| Account Information |  | Account Characteristics |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Account Name | Acadian ACWI ex U.S. Small Cap Equity |  | Portfolio | Index |
| Account |  |  | Q1-21 | Q1-21 |
| Structure | Commingled Fund | Characteristics |  |  |
| Investment <br> Style | Active | Weighted Avg. Market Cap. (\$B) | 2.5 | 3.2 |
| Inception Date | 5/01/19 | Median Market Cap | 0.5 | 13 |
| Account Type | International | (\$B) |  |  |
| Benchmark | MSCI ACWI ex US Small Cap | P/E Ratio | 15.8 | 21.0 |
| Universe | eV ACWI ex-US Small Cap Equity Net | Yield | 1.9 | 1.9 |
|  |  | EPS Growth - 5 Yrs. | 10.2 | 4.3 |
|  |  | Price to Book | 2.2 | 2.3 |



| Top Holdings |  |
| :--- | ---: |
| BRP INC | $1.1 \%$ |
| ACER INCORPORATED | $1.0 \%$ |
| LINAMAR CORP | $0.9 \%$ |
| INMODE LTD | $0.9 \%$ |
| FANGDA SPECIAL STEEL TECHNOLOGY CO LTD | $0.8 \%$ |
| WONIK IPS CO LTD | $0.8 \%$ |
| AL HASSAN GHAZI IBRAHIM SHAKER CLOSED JSC | $0.8 \%$ |
| SANSTEEL MINGUANG CO LTD FUJIAN | $0.7 \%$ |
| SCREEN HOLDINGS CO LTD | $0.7 \%$ |
| BE SEMICONDUCTOR INDUSTRIES NV | $0.7 \%$ |


| Best Performers |  | Worst Performers |  |
| :---: | :---: | :---: | :---: |
|  | Return \% |  | Return \% |
| CARDINAL ENERGY LTD | 223.7\% | NEXUS REAL ESTATE INVESTMENT TRUST | -71.9\% |
| RAYDIUM SEMICONDUCTOR CORPORATION | 182.1\% | KOGAN.COM LTD | -36.9\% |
| PUREUN MUTUAL SAVINGS BANK | 171.0\% | CRI MIDDLEWARE CO LTD | -36.5\% |
| PPDAI GROUP INC | 162.5\% | GRAVITY CO LTD | -36.4\% |
| HYOSUNG TNC CORP | 162.1\% | GRAN COLOMBIA GOLD CORP | -31.7\% |
| AIRBOSS OF AMERICA CORP | 159.2\% | MEDICAL DATA VISION CO LTD | -29.6\% |
| NUVISTA ENERGY LTD | 155.4\% | SECTRA AB | -29.5\% |
| LOOKERS | 154.7\% | PIALA Inc | -29.2\% |
| JEJU BANK CO LTD | 125.4\% | PROVIDENT FINANCIAL PLC | -28.7\% |
| CREW ENERGY INC | 113.4\% | ABOV SEMICONDUCTOR CO LTD | -28.6\% |

## MEKETA

## Merced County Employees' Retirement Association

Driehaus International Small Cap Growth \| As of March 31, 2021

Return Summary


Driehaus International Small Cap Growth MSCI ACWI ex US Small Cap Growth NR USD

|  | QTD <br> (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs (\%) | 5 Yrs (\%) | 10 Yrs (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Driehaus International Small Cap Growth | 4.4 | 78.7 | -- | -- | -- |
| MSCI ACWI ex US Small Cap Growth NR USD | 3.3 | 72.6 | 8.9 | 11.7 | 7.2 |
| eV ACWI ex-US Small Cap Equity Net Median | 3.6 | 67.4 | 7.0 | 11.5 | 8.7 |
| eV ACWI ex-US Small Cap Equity Net Rank | 44 | 15 | -- | -- | -- |





Merced County Employees' Retirement Association

Driehaus International Small Cap Growth \| As of March 31, 2021

| Account Information |  | Account Characteristics |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Account Name | Driehaus International Small Cap Growth |  | Portfolio | Index |
| Account |  |  | Q1-21 | Q1-21 |
| Structure | Commingled Fund | Characteristics |  |  |
| Investment Style | Active | Weighted Avg. Market Cap. (\$B) | 3.5 | 3.2 |
| Inception Date | 5/01/19 | Median Market Cap | 2.6 | 13 |
| Account Type | International | (\$B) | 2.6 |  |
| Benchmark | MSCI ACWI ex US Small Cap Growth NR USD | P/E Ratio | 29.2 | 21.0 |
| Universe | eV ACWI ex-US Small Cap Equity Net | Yield | 1.1 | 1.9 |
|  |  | EPS Growth - 5 Yrs. | 7.7 | 4.3 |
|  |  | Price to Book | 3.4 | 2.3 |



| Top Holdings |  | Best Performers Return\% |  | Worst Performers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NORTHERN INSTITUTIONAL U.S. GOVERNMENT SELECT PORTFOLIO | 5.3\% |  |  |  | Return \% |
| OUTOTEC OYJ | 2.9\% | RESTAURANT GROUP PLC | 94.7\% | XEBEC ADSORPTION INC | -51.5\% |
| ZOOPLUS AG | 2.7\% | KINDRED GROUP PLC | 79.6\% | DOCEBO inc | -33.9\% |
| OCINV | 2.1\% | SGL CARBON SE | 61.2\% | NHN KCP CORP | -29.4\% |
| BEFESA S.A | 1.6\% | RACCOON HOLDINGS INC | 47.7\% | PROVIDENT FINANCIAL PLC | -28.7\% |
| COMPAGNIE FRANCAISE D'ASSURANCE POUR LE |  | IBU-tec advanced materials AG | 46.2\% | BHG GROUP AB | -23.4\% |
| COMMERCE EXTERIEUR SA COFACE | 1.6\% | ACCELL GROUP | 46.1\% | MEGAPORT LTD | -23.2\% |
| WEIR GROUP PLC | 1.5\% | EMBRAER SA | 45.4\% | CYRELA BRAZIL REALTY SA | -23.2\% |
| KINDRED GROUP PLC | 1.5\% | HALFORDS GROUP PLC | 43.6\% | ASCENDIS PHARMA AS | -22.7\% |
| HALFORDS GROUP PLC | 1.5\% | 888 HOLDINGS | 42.7\% | BIGTINCAN HOLDINGS LTD | -22.4\% |
| ELECTROCOMP. | 1.4\% | BE SEMICONDUCTOR INDUSTRIES NV | 38.3\% | METHANEX CORP | -19.6\% |

## MEKETA

Merced County Employees' Retirement Association
GQG International Equity | As of March 31, 2021


## MEKETA

Merced County Employees' Retirement Association
GQG International Equity | As of March 31, 2021

|  | Account Information |
| :--- | ---: |
| Account Name | GQG International Equity |
| Account | Commingled Fund |
| Structure | Active |
| Investment <br> Style | 12/01/19 |
| Inception Date | International |
| Account Type MSCI ACWI ex USA |  |
| Benchmark <br> Universe |  |



## MEKETA

## Merced County Employees' Retirement Association

First Eagle International Value Fund \| As of March 31, 2021


- First Eagle International Value Fund
- MSCI EAFE

|  | QTD <br> $(\%)$ | 1 Yr <br> $(\%)$ | 3 Yrs <br> $(\%)$ | 5 Yrs <br> $(\%)$ | 10 Yrs <br> $(\%)$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| First Eagle International Value Fund | 1.3 | 30.3 | -- | -- | -- |
| MSCI EAFE | 3.5 | 44.6 | -- | -- | -- |
| eV Global Value Equity Net Median | 10.2 | 62.7 | 7.8 | 10.2 | 8.0 |
| eV Global Value Equity Net Rank | 99 | 99 | -- | -- | -- |



## MEKETA

## Merced County Employees' Retirement Association

First Eagle International Value Fund \| As of March 31, 2021

|  | Account Information |  |
| :--- | ---: | ---: |
| Account Name | First Eagle International Value Fund |  |
| Account | Commingled Fund |  |
| Structure | Active |  |
| Investment | 12/01/19 |  |
| Style | International |  |
| Inception Date | MSCI EAFE |  |
| Account Type |  |  |
| Benchmark  <br> Universe  |  |  |



## MEKETA

## Merced County Employees' Retirement Association

Artisan Developing World TR | As of March 31, 2021


|  | QTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs (\%) | 10 Yrs (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Artisan Developing World TR | -2.3 | 92.8 | -- | -- | -- |
| MSCI Emerging Markets | 2.3 | 58.4 | -- | -- | -- |
| eV Emg Mkts Equity Net Median | 3.3 | 64.4 | 6.7 | 12.5 | 4.6 |
| eV Emg Mkts Equity Net Rank | 98 | 4 | -- | -- | -- |



## MEKETA

## Merced County Employees' Retirement Association

Artisan Developing World TR \| As of March 31, 2021

|  | Account Information |
| :--- | ---: |
| Account Name | Artisan Developing World TR |
| Account | Commingled Fund |
| Structure | Active |
| Investment | 12/01/19 |
| Style | International Emerging Stocks |
| Inception Date | MSCI Emerging Markets |
| Account Type | eV Emg Mkts Equity Net |
| Benchmark |  |
| Universe |  |



| Top Holdings |  |
| :--- | :--- |
| SEA LTD | $6.7 \%$ |
| MERCADOLIBRE INC | $5.3 \%$ |
| VISA INC | $5.2 \%$ |
| ALIBABA GROUP HOLDING LTD | $5.2 \%$ |
| NVIDIA CORPORATION | $4.6 \%$ |
| UNITY SOFTWARE INC COM | $4.5 \%$ |
| MEITUAN DIANPING USD0.00001 A B CLASS ISIN | $4.4 \%$ |
| KYG596691041 | $4.4 \%$ |
| WUXI BIOLOGICS (CAYMAN) INC | $4.3 \%$ |
| UBER TECHNOLOGIES INC | $4.2 \%$ |


| Best Performers |  | Worst Performers |  |
| :---: | :---: | :---: | :---: |
|  | Return \% |  | Return \% |
| AIRBNB INC | 28.0\% | STONECO LTD | -27.0\% |
| ASML HOLDING NV | 26.6\% | TAL EDUCATION GROUP | -24.7\% |
| BILIBILI INC | 24.9\% | AIER EYE HOSPITAL GROUP CO LTD | -21.2\% |
| SEA LTD | 12.1\% | Foshan Haitian Flavouring and Food Co Ltd | -20.6\% |
| ESTEE LAUDER COS INC (THE) | 9.5\% | HUNDSUN TECH ORD A | -20.2\% |
| TENCENT HOLDINGS LTD | 7.9\% | FARFETCH LTD | -16.9\% |
| H D F C BANK LTD | 7.5\% | MERCADOLIBRE INC | -12.1\% |
| UBER TECHNOLOGIES INC | 6.9\% | YANDEX NV | -7.9\% |
| ZHANGZHOU PIENTZEHUANG PHARMACEUTICAL CO LTD | 6.9\% | KE Holdings Inc SHENZHEN MINDRAY BIO-MEDICAL ELECTRONICS CO | -7.4\% |
| LVMH MOET HENNESSY LOUIS VUITTON SE | 6.7\% |  | -6.7\% |

## MEKETA

Merced County Employees' Retirement Association
RWC \| As of March 31, 2021



|  | Account Information |
| :--- | ---: |
| Account Name | RWC |
| Account | Commingled Fund |
| Structure | Active |
| Investment | 12/01/19 |
| Style | International Emerging Stocks |
| Inception Date | MSCI Emerging Markets |
| Account Type | eV Emg Mkts Equity Net |
| Benchmark |  |
| Universe |  |


| Top Holdings |  |
| :--- | ---: |
| TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD |  |
| FIRST QUANTUM MINERALS LTD | $5.0 \%$ |
| SAMSUNG ELECTRONICS CO LTD | $4.9 \%$ |
| COUNTRY GARDEN SERVICES HOLDINGS COMPANY | $3.5 \%$ |
| LIMITED | $3.3 \%$ |
| SK HYNIX INC | $3.1 \%$ |
| GALAXY ENTERTAINMENT GROUP LTD | $3.0 \%$ |
| RELIANCE INDUSTRIES LTD | $3.0 \%$ |
| PING AN INSURANCE GROUP | $2.9 \%$ |
| BANCO BRADESCO SA BRAD | $2.7 \%$ |
| CEMEX SAB DE CV | $2.6 \%$ |



## MEKETA

Merced County Employees' Retirement Association
US Fixed Income \| As of March 31, 2021

Return Summary


|  | QTD <br> (\%) | $1 \mathrm{Yr}$ (\%) | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| US Fixed Income | -3.4 | 1.0 | 4.2 | 3.6 | 3.8 |
| BBgBarc US Aggregate TR | -3.4 | 0.7 | 4.4 | 3.8 | 3.6 |
| InvMetrics AII DB US Fix Inc Net Median | -2.2 | 4.3 | 4.9 | 3.9 | 4.1 |
| InvMetrics All DB US Fix Inc Net Rank | 73 | 84 | 84 | 65 | 64 |



Current Allocation


Anzld. Std. Deviation



## MEKETA

## Merced County Employees' Retirement Association

US Fixed Income \| As of March 31, 2021


| US Fixed Income Fixed Income Sector Allocation vs. BBgBarc US Aggregate TR |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Portfolio | Index | Portfolio | Index |
|  | Q1-21 | Q1-21 | Q4-20 | Q4-20 |
| US Sector Allocation |  |  |  |  |
| UST/Agency | 39.94 | 38.83 | 36.30 | 38.62 |
| Corporate | 30.02 | 26.79 | 33.30 | 27.51 |
| MBS | 25.35 | 29.61 | 25.72 | 29.02 |
| ABS | 1.25 | 0.38 | 1.13 | 0.40 |
| Foreign | 1.91 | 3.48 | 2.24 | 3.73 |
| Muni | -- | 0.71 | -- | 0.73 |
| Other | 1.06 | -- | 0.46 | -- |
| Cash | 0.47 | -- | 0.86 | -- |

## MEKETA

Return Summary

$\square$ Barrow Hanley BBgBarc US Aggregate TR

|  | QTD <br> $(\%)$ | 1 Yr <br> $(\%)$ | 3 Yrs <br> $(\%)$ | 5 Yrs <br> $(\%)$ | 10 Yrs <br> $(\%)$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Barrow Hanley | -3.5 | 2.5 | 5.1 | 3.3 | 3.5 |
| $\quad$ BBgBarc US Aggregate TR | -3.4 | 0.7 | 4.7 | 3.1 | 3.4 |
| $\quad$ eV US Core Fixed Inc Net Median | -3.2 | 3.1 | 4.9 | 3.5 | 3.7 |
| $\quad$ eV US Core Fixed Inc Net Rank | 75 | 61 | 32 | 54 | 73 |



Merced County Employees' Retirement Association
Barrow Hanley | As of March 31, 2021


## MEKETA

Merced County Employees' Retirement Association
Barrow Hanley | As of March 31, 2021

|  | Account Information |
| :--- | ---: |
| Account Name | Barrow Hanley |
| Account Structure | Separate Account |
| Investment Style | Active |
| Inception Date | 3/31/10 |
| Account Type | US Fixed Income Core |
| Benchmark | BBgBarc US Aggregate TR |
| Universe | eV US Core Fixed Inc Net |



| Fixed Income Characteristics |  |  |
| :--- | ---: | ---: |
|  | Portfolio | Index |
|  | Q1-21 | Q1-21 |
| Fixed Income Characteristics |  |  |
| Yield to Maturity | 1.65 | 1.50 |
| Average Duration | 6.23 | 6.36 |
| Average Quality | AA | AA |
| Weighted Average Maturity | 7.53 | 13.52 |

US Sector Allocation


## Merced County Employees' Retirement Association

## Vanguard Short-Term Treasury Index Fund \| As of March 31, 2021



| Maturities as of March 31, 2021 |  | Fixed Income Sectors as of March 31, 2021 |  | Credit Quality as of March 31, 2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 to 3 Years | 96.48\% | GOVERNMENT | 100.00\% | AAA | 99.99\% |
| 3 to 5 Years | 3.26\% | MUNICIPAL | 0.00\% | AA | 0.00\% |
| 5 to 7 Years | 0.00\% | CORPORATE | 0.00\% | A | 0.00\% |
| 7 to 10 Years | 0.00\% | SECURITIZED | 0.00\% | BBB | 0.00\% |
| 10 to 15 Years | 0.00\% | CASH \& EQUIVALENTS | 0.00\% | BB | 0.00\% |
| 15 to 20 Years | 0.00\% | DERIVATIVE | 0.00\% | B | 0.00\% |
| 20 to 30 Years | 0.00\% |  |  | Below B | 0.00\% |
| Greater than 30 Years | 0.00\% |  |  | Not Rated | 0.01\% |

## MEKETA

## Merced County Employees' Retirement Association

Vanguard Short-Term Treasury Index Fund | As of March 31, 2021


## MEKETA

## Merced County Employees' Retirement Association

Vanguard Total Bond Market Index Fund | As of March 31, 2021

Return Summary


|  | QTD <br> (\%) | 1 Yr <br> (\%) | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Vanguard Total Bond Market Index Fund | -3.6 | 0.6 | -- | -- | -- |
| BBgBarc US Aggregate TR | -3.4 | 0.7 | 4.7 | 3.1 | 3.4 |
| eV US Core Fixed Inc Net Median | -3.2 | 3.1 | 4.9 | 3.5 | 3.7 |
| eV US Core Fixed Inc Net Rank | 79 | 92 | -- | -- | -- |

- Vanguard Total Bond Market $\triangle$ BBgBarc US Aggregate TR Index Fund

Anzld. Std. Deviation


Tracking Error


Information Ratio


## MEKETA

|  | Account Information |
| :--- | ---: | ---: |
| Account Name | Vanguard Total Bond Market Index Fund |
| Account Structure | Mutual Fund |
| Investment Style | Passive |
| Inception Date | $5 / 01 / 19$ |
| Account Type US Fixed Income <br> Benchmark BBgBarc US Aggregate TR <br> Universe eV US Core Fixed Inc Net |  |



## Merced County Employees' Retirement Association

Vanguard Total Bond Market Index Fund \| As of March 31, 2021

| Fixed Income Characteristics |  |  |
| :--- | ---: | ---: |
|  | Portfolio | Index |
|  | Q1-21 | Q1-21 |
| Fixed Income Characteristics |  |  |
| Yield to Maturity | 1.57 | 1.50 |
| Average Duration | 6.63 | 6.36 |
| Average Quality | AA | AA |
| Weighted Average Maturity | 8.50 | 13.52 |



## MEKETA

## Merced County Employees' Retirement Association

PIMCO Income Fund \| As of March 31, 2021


## MEKETA

## Merced County Employees' Retirement Association

PIMCO Income Fund \| As of March 31, 2021

| Account Information |  | Fund Characteristics as of December 31, 2020 |  | Credit Quality as of March 31, 2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Account Name | PIMCO Income Fund | Sharpe Ratio (3 Year) |  | AAA | 0.00\% |
| Account | Mutual Fund | Average Duration | 2.11 | AA | 0.00\% |
| Structure | Mutual Fund | Effective Duration | 2.11 | A | 0.00\% |
| Investment | Active | Modified Duration | 2.11 | BBB | 0.00\% |
| Style | Active | Average Coupon | 3.29\% | BB | 0.00\% |
| Inception Date | 4/30/19 | Average Effective Maturity | 3.78 | B | 0.00\% |
| Account Type | Client Directed Opportunistic |  |  | Below B | 0.00\% |
| Benchmark | BBgBarc US Aggregate TR |  |  | Not Rated | 0.00\% |
| Universe | Multisector Bond MStar MF |  |  |  |  |

## MEKETA

Hedge Fund \| As of March 31, 2021


|  | QTD (\%) | $\begin{gathered} 1 \mathrm{Yr} \\ (\%) \end{gathered}$ | 3 Yrs <br> (\%) | 5 Yrs <br> (\%) | $10 \mathrm{Yrs}$ <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hedge Fund | 4.8 | 21.4 | 5.2 | 6.7 | -- |
| Custom Blended Hedge Fund Benchmark | 1.9 | 23.8 | 5.4 | 5.8 | -- |
| InvMetrics All DB Hedge Funds Net Median | 3.1 | 25.5 | 5.9 | 6.0 | 4.4 |
| InvMetrics All DB Hedge Funds Net Rank | 28 | 65 | 59 | 39 | -- |




## MEKETA

Private Equity | As of March 31, 2021


| Private Equity | Custom Blended Private Equity Benchmark |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | QTD (\%) | $\begin{array}{r} 1 \mathrm{Yr} \\ (\%) \end{array}$ | 3 Yrs (\%) | 5 Yrs <br> (\%) | 10 Yrs <br> (\%) |
| Private Equity | 12.1 | 26.2 | 15.1 | 13.2 | 11.0 |
| Custom Blended Private Equity Benchmark | 15.2 | 33.5 | 21.8 | 20.2 | -- |
| InvMetrics All DB Private Eq Net Median | 6.5 | 19.6 | 12.7 | 12.6 | 10.9 |
| InvMetrics All DB Private Eq Net Rank | 17 | 27 | 36 | 44 | 50 |



## MEKETA

Merced County Employees' Retirement Association
Real Assets | As of March 31, 2021

Return Summary


Real Assets Custom Blended Real Assets Benchmark

|  | QTD <br> $(\%)$ | 1 Yr <br> $(\%)$ | 3 Yrs <br> $(\%)$ | 5 Yrs <br> $(\%)$ | 10 Yrs |
| :--- | :---: | :---: | :---: | ---: | ---: |
| $(\%)$ |  |  |  |  |  |

## MEKETA

Merced County Employees' Retirement Association
Private Real Estate \| As of March 31, 2021


## Educational Session on Inflation

## Merced County Employees' Retirement Association

## Educational Session on Inflation

Introduction
At the April Board meeting, the Board requested a high level educational presentation on inflation expectations and the current market environment to be presented to the full Board. In this document, we review current inflation expectations and considerations, as well as high-level asset class specific analyses.

## Inflation Considerations / Expectations

- Short-Term (next two years): likely increase in expectations and volatility
- Base effects from dropping of last year's data point
- Supply/demand imbalances (social distancing policies easing, unemployment improving, consumer balance sheets are in decent shape)
- Economic recovery likely faster than after a financial crisis
- Fiscal (stimulus, infrastructure) and monetary policy both accommodative
- FOMC change to average inflation targeting and employment policies
- Realized inflation is likely to be volatile over the next few quarters
- Longer-Term
- Secular forces (demographics, technology, globalization, etc.) should eventually drive inflation back down to $2 \%$ (and likely sub-2\%)
- Consumer inflation expectations are sticky, even at full employment
- Fighting higher inflation is easier for the Fed

Fiscal Stimulus Could Cause Short-Term Inflation Pressures ${ }^{1}$


- Federal outlays (fiscal support) as a percent of GDP (red line) have spiked to record levels

[^15]
## Longer-Dated US Interest Rates Have Been Rising ${ }^{1}$

- Monetary policy support through a backstopping of markets (liquidity programs, QE, guidance etc.)
- Fiscal support through fiscal "stimulus" and investment programs
- Gradual reopening of the global economy
- Developments with the vaccine (Q4), and the recent improvement in deployment (YTD)

Longer-Dated Treasury Yields


[^16]Merced County Employees' Retirement Association
Educational Session on Inflation

Increases in Inflation Expectations Have Been the Principal Driver of Yields ${ }^{1}$
Inflation Expectations


- Inflation "breakeven" = [Nominal 10-Year Treasury Yield] - [Treasury Inflation Security 10-Year Yield]

[^17]Rising Inflation Expectations Global; not Just in the US


- Similar to the US, record fiscal and monetary support is driving inflation expectations higher ${ }^{1}$
- Commodity prices are also driving inflationary concerns; supply disruptions and heightened demand

[^18]Commodity Prices are Materially Higher


- Ongoing supply disruptions, and heighted demand from the opening global economy, are driving commodity prices to record levels for some assets

Inflation Data Will be Volatile


- April CPI data posted the largest monthly increase since the mid-1980s
- In addition to base effects, as supply and demand imbalances recover, prices could change meaningfully from period to period


## Price Pressures are Wide Spread

- Price increases seen across most sectors; transportation, travel, and leisure related items most notably ${ }^{1}$


[^19]
## Merced County Employees' Retirement Association

Educational Session on Inflation

## Scenario Testing

In the following pages, we test the different asset classes in the Merced CERA portfolio for historical inflationary periods and hypothetical scenarios.

- It is important to note that the returns shown are not returns that would have or could be earned given the scenarios. Rather, the impact of inflation on these asset classes should be considered 'directionally'.
- A model is only as good as its inputs. For asset classes like hedge funds that include a wide variety of strategies, performance could diverge meaningfully from the model depending on the inputs used.

Merced County Employees' Retirement Association
Educational Session on Inflation

## Merced CERA Portfolio Historical Scenarios Testing




Merced County Employees' Retirement Association
Educational Session on Inflation


- From a backwards-looking perspective, the inflation hedges in the Merced CERA's portfolio were positive in each scenario considered, albeit not always at the same time and to varying degrees.

Merced County Employees' Retirement Association
Educational Session on Inflation

## Merced CERA Portfolio Testing with Hypothetical Inflationary Scenarios

10-year Treasury Bond rates rise 100 bps


10-year Treasury Bond rates rise 200 bps


## 10-year Treasury Bond rates rise 300 bps



- Lower levels of inflation are not likely to be impactful to the Merced CERA portfolio, as losses in Fixed Income would be offset by gains in other asset classes.
- Elevated levels of inflation (unexpected) would be impactful to most asset classes. However equities could rise with inflation, up to a point.


## Summary

- Unexpected inflation is a bigger driver of market shocks, as asset prices adjust for expected inflation.
- Inflation matters because it reduces the purchasing power of benefits paid to Merced CERA's beneficiaries. Inflation also negatively impacts returns from some fixed income assets by reducing the purchasing power of coupon payments, and depressing values of bonds discounted at the higher rates.
- The Merced CERA portfolio is diversified to include Real Assets and Real Estate that are expected to serve as inflation hedges.
- Real Assets; 5\% policy target
- Commodities
- Natural Resources
- Infrastructure
- Real Estate; 8\% policy target


# Disclaimer, Glossary, and Notes 

## MEKETA

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").
SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS as of the date of this report and are subject to change at any time. all investments involve risk. there can be no GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL sOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM", "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)
Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately $3 \%$ for each $1 \%$ decrease in its yield to maturity. Conversely, the price will decrease $3 \%$ for each $1 \%$ increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.
Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.
Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate + Beta*(market return-Risk Free Rate)].

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest $65 \%$ of the broad domestic equity market as large capitalization, the next $25 \%$ of the market as medium capitalization, and the smallest $10 \%$ of stocks as small capitalization.
Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.
Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates $\mathrm{P} / \mathrm{B}$ as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

## MEKETA

Price-Earnings ( $\mathrm{P} / \mathrm{E}$ ) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative $\mathrm{P} / \mathrm{E}$ ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates $\mathrm{P} / \mathrm{E}$ as the current price divided by the $\mathrm{I} / \mathrm{B} / \mathrm{E} / \mathrm{S}$ consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard \& Poor's. The rating may be determined by such factors as (1) the likelihood of fuffillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, $\mathrm{AA}, \mathrm{A}, \mathrm{BBB}$ ) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.
Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and $95 \%$ of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

## MEKETA

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a $5 \%$ bond pays $\$ 5$ a year interest on each $\$ 100$ par value. To figure its current yield, divide $\$ 5$ by $\$ 95$-the market price of the bond-and you get $5.26 \%$. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay $\$ 100$ for the bond that can be bought now for $\$ 95$. In other words, the bond is selling at a discount of $5 \%$ below par value. To figure yield to maturity, a simple and approximate method is to divide $5 \%$ by the five years to maturity, which equals $1 \%$ pro rata yearly. Add that $1 \%$ to the $5.26 \%$ current yield, and the yield to maturity is roughly $6.26 \%$.

$$
\frac{5 \% \text { (discount) }}{5 \text { (yrs. to maturity) }}=\begin{aligned}
& 1 \% \text { pro rata, plus } \\
& 5.26 \% \text { (current yield) }
\end{aligned} \quad=\quad 6.26 \% \text { (yield to maturity) }
$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

The Russell Indices, TM, SM are trademarks/service marks of the Frank Russell Company.
Throughout this report, numbers may not sum due to rounding.
Returns for periods greater than one year are annualized throughout this report.
Values shown are in millions of dollars, unless noted otherwise.

# Merced County Employees' Retirement Association (MercedCERA) RETIREMENT BOARD AGENDA ITEM 

## DATE:

TO:

FROM: Kristie Santos, Plan Administrator

SUBJECT: | Presentation on Information Regarding Retirement System |
| :--- |
| Independence |

ITEM NUMBER: 3

ITEM TYPE: Information

## DISCUSSION:

At the March 11, 2021 MercedCERA Board Meeting, the Board authorized the Plan Administrator to work with Merced County to create an Investment Officer classification. During the meeting, the Board was presented a classification from a neighboring county, which consisted of a 'three deep' level analyst structure (Investment Officer I/II/III) with pay ranging from (rounded) $\$ 65,000$ to $\$ 140,000$. The Board approved this classification to complete investment tasks that are currently not being completed due to lack of a dedicated resource or are being completed by the Plan Administrator (tasks such as Side Letter and Limited Partner Agreement negotiations). It was estimated that this classification may take up to 12 months to create and potentially several additional months to fill.

Shortly after the March $11^{\text {th }}$ meeting, Martha Sanchez, Fiscal Manager over Benefits and Administration for MercedCERA, the Assistant County Executive Officer (AEO), Marci Barrera, Human Resources Director, Sommer Moniz and the Plan Administrator met to discuss the creation of this classification. It was a very productive meeting. During that discussion, the AEO provided information on the established structure that all county positions must adhere to (pay ranges and levels of authority). To achieve the pay range as desired by MercedCERA, Merced County suggested to classify the Investment Officer in a 'B Level' manager range, which in turn gives the Investment Officer authority over the organization when the Plan Administrator is unavailable or out of the office (a 'second in command or assistant director'). During this discussion, the AEO referenced p. 19 of the analysis document that the MercedCERA Board received on March $11^{\text {th }}$ from the Plan Administrator stating that the retirement system can go independent from the County, if they so choose, giving the Retirement Board authority over the investment position. At the time, the Plan Administrator had had no prior discussions on this topic with the Board. Shortly after, the County Human Resources professional presented a draft Investment Officer classification per the discussion with the AEO. As previously mentioned, the Investment Officer would be a 'B Level' manager with the authority to act as a 'second in command or assistant director' for MercedCERA. The classification information presented was taken directly from the Investment Officer III level which was presented to the Board at the March $11^{\text {th }}$ meeting.

## Merced County Employees' Retirement Association (MercedCERA) RETIREMENT BOARD AGENDA ITEM

When the Plan Administrator briefed the Chair and Vice Chair on the progress of creating the Investment Officer classification, including the discussion(s) with Merced County, it became clear that MercedCERA, did not have a clear understanding of what exactly it meant to separate or go independent from the County, nor what the process entailed. Initially, going independent from the County was not something that the Plan Administrator had envisioned for MercedCERA because of a lack of knowledge on the process. Due to an acknowledgement that "we don't know, what we don't know", this agenda item is being brought to the MercedCERA Board in an open session, to provide information to the public and to Trustees.

MercedCERA currently has no Assistant Plan Administrator. Currently, when the Plan Administrator is unavailable or out of the office, a predetermined schedule assigns each of the Fiscal Managers as the Plan Administrator's 'back up'. After consideration of the proposed Investment Officer classification from Merced County, the Plan Administrator determined that it is not recommended for the MercedCERA organization to have an Investment Officer acting as an Assistant Plan Administrator. Because all pensions systems are very complex in both aspects of investments and benefits, it is not ideal to have an investment specialist oversee and make decisions for the system outside of the investment arena. For this reason, the Plan Administrator is not recommending the Investment Officer act as a 'second in command or assistant director' for MercedCERA. There are individuals in the government/private pension sector that have both investment expertise and effective leadership skills. However, those combined skills (investments, effective leadership with pension system knowledge) usually bring top market pay (CaIPERS Managing Investment Officer earned \$630,470 in 2020, *CCCERA's Managing Investment Officer earned $\$ 300,000$ in 2019, *VCERA's Managing Investment Officer earned $\$ 240,000$ in 2019). Other entities have contracted for an **Outsourced Chief Investment Officer (OCIO) which is an outsourced tactical asset management business that provides asset oversight for its clients; however, it is a very expensive option with costs estimated for a system such as MercedCERA to be $\$ 800,000$ to $\$ 1,000,000$ per year. For this reason, the Plan Administrator is not recommending having the investment officer act in this additional role. The analysis presented to the Board on March 11, 2021 identifies the lack of investment expertise and in-house knowledge as being the biggest issue for the organization, which requires immediate attention. While an Assistant Plan Administrator may be needed in the future, the Plan Administrator identified the Investment Officer as being a higher immediate priority for the organization.
*Source is the CALAPRS Annual Salary Survey for 2019
**Source is the Meketa Group Marketing Department for a similarly sized fund like MercedCERA

## Why it may be important for the MercedCERA Board to have control over key positions:

MercedCERA is considered a small retirement system in which 5,000+ members (active, deferred and retired) depend on for lifelong retirement benefits. Administering benefits and investing the Trust's assets are key to ensuring the long-term health of the system. Leadership positions with knowledge of pension administration and sound judgement will be vital as the MercedCERA's assets grow and membership continues to increase. Recruitment in the future may be challenging if the MercedCERA Board does not have the ability to set market salaries and recruit from other cities and regions. The Merced area is an attractive area to live and raise a family and is growing (listed as the top 5

## Merced County Employees' Retirement Association (MercedCERA) RETIREMENT BOARD AGENDA ITEM

growing cities in California). Bringing and keeping key talent at MercedCERA will be something the Board will likely be addressing in the next $3+$ years.

## The current process as required by the CERL:

A retirement system has a legislative path to go independent from a County through provisions in the County Employees' Retirement Law of 1937 (CERL). The first step as outlined in the attached presentation is for the Retirement System through the Legislative process, to be considered a 'special district'. Once that piece of Legislation is amended to designate the retirement system as a 'special district', the Retirement Board would subsequently choose which positions would become employees of the Retirement System or stay employees of the County. This is referred to as choosing a 'model'. This is an important step because the Retirement Board would have full authority over the positions that were employees of the Retirement System. Today, although the Retirement Board has the right to appoint a Plan Administrator, all MercedCERA employees are considered county employees and fall under the oversight of the County.

If a Board of Retirement chooses to move forward as independent from the County, for ease it is recommended that a Board choose a staffing model and amend the current legislative statute to include their Retirement System. The current models include:

- Chief Executive Officer, Chief Investment Officer and Legal Counsel become employees of the Retirement System and all other employees remain County employees (recently adopted by VCERA)
- All management classifications in key roles become employees of the Retirement System (SBCERA and OCERS)
- All employees (represented and non-represented) become employees of the Retirement System (adopted by CCCERA).

Currently MercedCERA, through an Administrative Services Agreement, pays for services provided by Merced County. These services include, but are not limited to, information technology, human resources, legal counsel and all employee benefits (i.e., healthcare). If the Board is considering independence from the County, it would be recommended that a contractual relationship remain in place and that these services continue to be provided by the County. However, it would not preclude the Board of Retirement in the future from moving away from having these services provided by an entity other than the County. This agenda item should not be construed as an all-inclusive list of what would need to be accomplished or addressed for a retirement system to go independent. The County has pointed out that there many more details that would need to be addressed.

MercedCERA enjoys a very positive relationship with Merced County and has been able to work within the County's structure of classifications. Retirement Systems, in general, have a level of statutory independence as a Fiduciary Board and Organization which oversees the County's retirement fund valued at over \$1 Billion dollars (Article XVI, §17 of the Constitution of the State of California vests the Retirement Board with "plenary authority and fiduciary responsibility for the investment of moneys and the administration of the system"). Because of this, it's not uncommon for systems and/or counties to embark on memorializing the independence through legislation. However,

## Merced County Employees' Retirement Association (MercedCERA) RETIREMENT BOARD AGENDA ITEM

most efforts to gain independence from their county have been the result of tumultuous relations over extended periods. The Plan Administrator does not feel this is the case between MercedCERA and Merced County.

Currently, there has been no commitment by either the MercedCERA Board or the County on moving forward. Again, this agenda item is not meant to be a detailed or all-inclusive list of what would need to be discussed or agreed upon between the County and/or MercedCERA. This agenda item is being presented only to give an overview of necessary actions required by the CERL.

# Information on Retirement System Independence 

## Introduction

- Several CERL systems operate at varying degrees of independence from their establishing counties.
- This presentation will outline those different operating options a nd the goveming sections of the County Employees' Retirement Law of 1937 (CERL).
- Legislation, in the form of amendments to the CERL sections, is the first required step.
- Once legislation is passed, retirement boards and counties must pass resolutions on staffing models.
- Most retirement systems contract back with the county on services such as information technology support, human resources, workers compensation, health insurance and so forth.


## Summary of Process

Amend current legislation to add retirement system as a "district" and choose model of independence

Resolutions on 'finer points' of who becomes employee of retirement system or remains county employee

Formalize relationship with county on services such as HR, $\Pi$, health benefits, workers comp

## Closer Look at Legislation

- First step would be passing legislation amending Section 31468;
- The legislation would amend section 31468 to define MercedCERA a "District".
- The CERL retirement systems c urently defined as Distric ts in section 31468 are the systems established under the CERL in Orange, San Bemardino, Contra Costa, and Ventura Counties.


## Look at Legislation

- Once section code 31468 is a mended to define a retirement system as a "district":
- Retirement system must decide which 'model' they would like defines which positions/classific ations are employees of the county or retirement system.
- There are several existing models in the CERL- range from only top level exec utives, to all employees.
- It is advised forease to choose an existing model and seek legislation that would a mend the a pplicable CERL section to include MercedCERA in that model.


## OCERS \& SBC ERA MODEL

- Section 31522.5;
- The OCERS and SBCERA model:
- Namesspecific positions to be employees of the retirement system (Administra tor, Assista nt Administrator, Chief Investment Officer, subordinate administrators, senior ma nagers next in line of a uthority to subordinate administrators and legal counsel).
- All other employees are county employees (may or may not be represented).
- Section 31522.7 Perta ins to SBC ERA
- Includes other positions such as supervisors a nd employees with special retirement knowledge, investment reporting compliance staff, investment a c counting staff, pension benefit tax reporting, pension benefit fina ncial a c counting, pension law and legal counsel.


## VCERA Model

- Section 31522.10 a pplies to VCERA (most recent system to go independent):
- Namesspecific positions such asCEO (Administrator), Chief Financial Officer, Chief Operations Officer, and General
Counsel to all be employees of the retirement system
- Otheremployeesare considered county employees


## CCCERA Model

- Section 31522.9 Applies to CCCERA:
- All management and represented/unrepresented employees are employees of the retirement system
- Subject to Meyers-Milias-Brown Act
- CCCERA bargains on behalf of its employees
- Depends on county for very little services because of their size
- Healthc are is obtained through CaIPERS
- Most expansive model in terms of independence


## Resolutions

- Resolutions on the "finer points'; which employees rema in county employees and which become employees of the retirement system
- Could include items such assalary scale and benefits for new retirement system employees; vacation, sick leave and management leave
- Many systems bring positions over with simila r structures as county for ease
- All retirement system employees would ma inta in their retirement benefits


## Contracts

- Some retirement systems contract back with their county for services; such as payroll, health benefits, HR services, ITsupport, workers compensation, etc.
- MercedCERA already pays for these services and would potentially continue doing so under a more formalized contract
- Any potential contract would have to be approved by the county's Board of Supervisors and the Retirement System Board
- Many larger independent retirement systems have in-house staff for some of these services, most sma ller systems contract back with the county


## Some Final Thoughts...

- Classifications defined by the adopted "model" are under control of the retirement board
- Depending on the model adopted, non-specified positionscan stay county employees
- Retirement systems are not trying to fit their needs into existing county structures or practices
- Doesn't necessarily mean it will cost more money to the system or to the county (or any employer)


## Some Final Thoughts...

- Independence usually occurs when the retirement system and county are at odds with each other, which can complicate the process
- There needs to be a defined agreement in place (contract) if a system contracts back with a county
- Retirement board has fiduciary control over the system and gives flexibility in rec ruiting, hiring and keeping key positions
- Alleviates possible issues between county and retirement system over retirement system staffing needs that may not fit into their civil service practicesand processes


## Questions and Comments

Next steps could be for the Board of Retirement to give the Plan
Administratordirection to meet with county, legal counsel and others that may support and sponsor a legislative change, if desired.

MERCEDCERA
Merced County Employees' Retirement Association


[^0]:    ${ }^{1}$ Excludes Public Managers that do not have a full quarter of performance, Private Markets and Hedge Fund Managers.

[^1]:    ${ }^{1}$ Source: eVestment. Ranks are greyed out for periods before Merced CERA was invested.

[^2]:    ${ }^{1}$ Source: Investment Metrics and Bloomberg. Data is as of April 30, 2021

[^3]:    ${ }^{1}$ Source: Bloomberg. Data is as of April 30, 2021.

[^4]:    ${ }^{1}$ Source: Bloomberg. Data is as of April 30, 2021.

[^5]:    ${ }^{1}$ Source: Bloomberg. Data is as of April 30, 2021.

[^6]:    ${ }^{1}$ Source: FRED Economic Data. Investment grade represents ICE BofA BBB US Corporate Index OAS. High Yield represents ICE BofA US High Yield Index OAS. Data is as of April $30,2021$.

[^7]:    ${ }^{1}$ Source: Bloomberg, and IMF; Euro Area and China figures annualized by Meketa. Projections via April 2021 IMF World Economic Outlook and represent annual numbers.

[^8]:    ${ }^{1}$ Source: Bloomberg. Data is as of April 30, 2021. Bars represent recessions as observed by the National Bureau of Economic Research.

[^9]:    Cash range displayed for illustrative purposes only

[^10]:    *One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

[^11]:    Historical returns for the US Equity Composite prior to January 2012 and for the International Equity Composite prior to December 2010 are gross only.

[^12]:    Historical returns for the US Equity Composite prior to January 2012 and for the International Equity Composite prior to December 2010 are gross only.

[^13]:    Developed International Equity and Emerging Markets Equity composites were only reported as one composite prior to March 2018.

[^14]:    Current Allocations do not depict asset class weights based on long/short positions

[^15]:    ${ }^{1}$ Data provided by Federal Reserve FRED.

[^16]:    ${ }^{1}$ Data provided by Bloomberg; updated through May 19, 2021

[^17]:    ${ }^{1}$ Data provided by Bloomberg, updated through May 19, 2021

[^18]:    ${ }^{1}$ Data provided by Bloomberg

[^19]:    ${ }^{1}$ Source: BLS, April 2021

