

#### AGENDA INVESTMENT COMMITTEE MEETING OF THE EL CAMINO HOSPITAL BOARD Monday, November 12, 2018 – 5:30 pm

El Camino Hospital | Conference Room A (ground floor) 2500 Grant Road, Mountain View, CA 94040

**PURPOSE:** To develop and recommend to the El Camino Hospital Board of Directors the organization's investment policies, maintain current knowledge of the management and investment of the invested funds of the hospital and its pension plan(s), provide guidance to management in its investment management role, and provide oversight of the allocation of the investment assets.

|    | AGENDA ITEM   | PRESENTED BY  |                   | ESTIMATED<br>TIMES             |
|----|---|---|-------------------|--------------------------------|
| 1. | CALL TO ORDER / ROLL CALL   | Jeffrey Davis, MD Chair   |                   | 5:30 – 5:32 pm                 |
| 2. | POTENTIAL CONFLICT OF INTEREST<br>DISCLOSURES   | Jeffrey Davis, MD Chair   |                   | 5:32 - 5:33                    |
| 3. | <b>PUBLIC COMMUNICATION</b> a. Oral CommentsThis opportunity is provided for persons in theaudience to make a brief statement, not to exceed 3minutes on issues or concerns not covered by theagenda.b. Written Correspondence  | Jeffrey Davis, MD Chair   | public<br>comment | information<br>5:33 – 5:36     |
| 4. | <ul> <li>CONSENT CALENDAR <ul> <li>Any Committee Member or member of the public may remove an item for discussion before a motion is made.</li> <li>Approval <ul> <li>Minutes of the Open Session of the Investment Committee Meeting – August 13, 2018</li> </ul> </li> <li>Information <ul> <li>CFO Report Out – Finance Committee Open Session Materials</li> <li>Article of Interest</li> <li>Updated FY19 Pacing Plan</li> </ul> </li> </ul></li></ul> | Jeffrey Davis, MD Chair<br>Iftikhar Hussain, CFO                      | public<br>comment | motion required<br>5:36 – 5:40 |
| 5. | REPORT ON BOARD ACTIONS<br><u>ATTACHMENT 5</u>  | Jeffrey Davis, MD Chair   |                   | information<br>5:40 – 5:45     |
| 6. | <ul> <li><b>ROTATING TOPICS</b></li> <li>a. Capital Markets Review &amp; Portfolio Performance</li> <li>b. Tactical Asset Allocation Positioning &amp; Market<br/>Outlook</li> <li><u>ATTACHMENT 6</u></li> </ul>   | Antonio DiCosola &<br>Chris Kuhlman,<br>Pavilion Advisory Group       |                   | information<br>5:45 – 6:45     |
| 7. | INVESTMENT POLICY REVIEW<br>ATTACHMENT 7  | Antonio DiCosola, Pavilion<br>Advisory Group<br>Iftikhar Hussain, CFO |                   | information<br>6:45 – 7:00     |
| 8. | ADJOURN TO CLOSED SESSION   | Jeffrey Davis, MD Chair   |                   | motion required<br>7:00 – 7:01 |
| 9. | POTENTIAL CONFLICT OF INTEREST<br>DISCLOSURES   | Jeffrey Davis, MD Chair   |                   | 7:01 – 7:02                    |

A copy of the agenda for the Regular Meeting will be posted and distributed at least seventy-two (72) hours prior to the meeting. In observance of the Americans with Disabilities Act, please notify us at (650) 988-7504 prior to the meeting so that we may provide the agenda in alternative formats or make disability-related modifications and accommodations.

|     | AGENDA ITEM  | PRESENTED BY            | ESTIMATED<br>TIMES             |
|-----|--|-------------------------|--------------------------------|
| 10. | <ul> <li>CONSENT CALENDAR</li> <li>Any Committee Member may remove an item for discussion before a motion is made.</li> <li>Approval</li> <li>Gov't Code Section 54957.2.</li> <li>a. Minutes of the Closed Session of the Investment Committee Meeting August 13, 2018</li> </ul> | Jeffrey Davis, MD Chair | motion required<br>7:02 – 7:05 |
| 11. | ADJOURN TO OPEN SESSION  | Jeffrey Davis, MD Chair | motion required<br>7:05 -7:06  |
| 12. | <b>RECONVENE OPEN SESSION / REPORT OUT</b>   | Jeffrey Davis, MD Chair | 7:06 - 7:07                    |
|     | To report any required disclosures regarding permissible actions taken during Closed Session.  |                         |                                |
| 13. | ADJOURNMENT  | Jeffrey Davis, MD Chair | motion required<br>7:07        |

#### **Important Dates**:

- FY 2019 Investment Committee Meetings
  January 28, 2019 Joint meeting of Financial/Investment Committee
  - February 25, 2019
  - April 24, 2019 Board & Committee Educational Session •
  - May 13, 2019



#### Minutes of the Open Session of the Investment Committee of the Board of Directors Monday, August 13, 2018 El Camino Hospital, 2500 Grant Road, Mountain View, California Conference Room A

Members Present

Members Absent Nicola Boone Members Excused

John Conover Jeffrey Davis, Chair Gary Kalbach Brooks Nelson

A quorum was present at the El Camino Hospital Investment Committee on Monday, August 13, 2018 meeting.

| Ag | enda Item  | Comments/Discussion   | Approvals/Action  |
|----|--|---|---|
| 1. | CALL TO ORDER/<br>ROLL CALL                      | The open session meeting of the Investment Committee of El Camino<br>Hospital (the "Committee") was called to order at 5:30pm by Chair<br>Mr. Jeff Davis. Ms. Boone was absent. All other Committee<br>members were present.  | None  |
| 2. | POTENTIAL CONFLICT<br>OF INTEREST<br>DISCLOSURES | Chair Davis asked if any Committee member or anyone in the<br>audience believes that a Committee member may have a conflict of<br>interest on any of the items on the agenda. No conflict of interest was<br>reported.  | None  |
| 3. | PUBLIC<br>COMMUNICATION                          | Chair Davis asked if there was any public communication to present.<br>None were noted.   | None  |
| 4. | CONSENT CALENDAR<br>ITEMS                        | Chair Davis asked if any Committee member wished to remove any<br>items from the consent calendar for discussion. None were noted.<br><u>Motion:</u> To approve the consent calendar Open Minutes of the May<br>14, 2018 Investment Committee Meeting.<br><u>Movant:</u> Kalbach<br><u>Second:</u> Nelson<br><u>Ayes:</u> Conover, Davis, Kalbach, Nelson<br><u>Abstentions:</u> None<br><u>Absent:</u> Boone<br><u>Excused:</u> None | The Open Minutes of the<br>May 14, 2018 Investment<br>Committee Meeting were<br>approved. |
| 5. | REPORT ON BOARD<br>ACTIONS                       | Chair Davis briefly reviewed the Report on Board Actions as further<br>detailed in the packet. He stated our Capital FY 19 operating and<br>capital budget was approved by ECH Board. Lastly, El Camino<br>Hospital increased the Community Benefit spending.   |   |

| Agenda Item   |  |
|---|--|
| Agenda Item<br>6. ROTATING TOPICS:<br>CAPITAL MARKETS<br>REVIEW &<br>PORTFOLIO<br>PERFORMANCE.<br>TACTICAL ASSET<br>ALLOCATION &<br>INVESTMENT PACING<br>PLAN |  |

| Agenda Item | Comments/Discussion  | Approvals/Action |
|-------------|--|------------------|
|             | <ul> <li>3. Cash Balance Plan:<br/>Mr. Kuhlman further reported that the Cash Balance Plan<br/>returned +2.0% for the quarter, outperforming its benchmark<br/>by 100 bps. Over the trailing one year period, the Plan<br/>returned +8.9%, outpacing the benchmark by approximately<br/>180 bps. Relative outperformance during the quarter was<br/>driven by favorable manager results, particularly within the<br/>Domestic and International Equity Composites, which<br/>outperformed their benchmarks by 220 and 110<br/>bps, respectively. Notable outperformers included large cap<br/>managers Touchstone Sands Large Cap Growth (+10.4%) and<br/>Barrow Hanley Large Cap Value (+5.1%), which<br/>outperformed their benchmarks by 460 and 390 bps,<br/>respectively. Small cap growth manager, Conestoga<br/>(+10.0%), outperformed its benchmark by 280 bps. Within<br/>the Alternatives composite, hedge fund-of-funds manager<br/>Pointer Offshore outpaced the HFRI Fund of Funds<br/>Composite by 200 bps.</li> <li>4. Hedge Funds:<br/>The Surplus Cash Direct Hedge Fund Portfolio returned<br/>+0.7% during the second quarter, outperforming the HFRI<br/>Fund of Funds Composite Index by 0.3%. Each of the<br/>Portfolio's four strategies delivered positive absolute returns.<br/>Relative Value (+2.0%) and Credit (+1.8%) delivered strong<br/>gains while Macro (+0.2%) and Equity (+0.1%) made a small<br/>contribution. The Macro and Relative Value composites<br/>outperformed their reference indices by +0.3%, and +1.1%<br/>while Credit and Equity underperformed their reference<br/>indices by -0.9% and -0.8%, respectively.</li> </ul> |                  |
|             | Chair Davis asked how much of recent economic growth and market<br>performance could be attributed to tax cuts. Mr. DiCosola explained it<br>certainly has helped drive earnings growth, while Mr. Kuhlman stated<br>the onetime benefit from repatriation of cash has strengthened the US<br>dollar.  |                  |
|             | Chair Davis noted that the recent growth of the hospital's excess cash<br>and investment portfolio has become a political issue. Mr. Hussain<br>stated there are two factors: we're growing and beating our targets<br>because volume is growing and physician/patients want to be within<br>our community. Mr. Kalbach added Dan Woods, CEO and himself<br>was interviewed by the Town Cryer on the extraordinary profits for<br>2018. We stated it was a great year; however we're investing, to<br>increase and maintain quality with the excess funds by investing in<br>buildings and community programs. It should be a great article to<br>explain our political issue on the hospital performance.   |                  |
|             | Pavilion recommended the Surplus Cash Direct Hedge Fund Portfolio<br>make a new investment of \$10 million in the Carlson Black Diamond<br>Arbitrage Fund. Carlson's event driven team has worked together for<br>10+ years over many market cycles. Throughout the Fund's long track<br>record, it has exhibited low beta to traditional equity and credit markets<br>and notably has not experienced a calendar year with negative<br>performance, to date. Pavilion believes the Fund is a good candidate<br>for investors looking for a merger arbitrage/special situations fund with<br>very low market correlation run by a seasoned investment team and   |                  |

| Agenda Item   | Comments/Discussion   | Approvals/Action |
|---|---|------------------|
|   | <ul><li>where the firm's principal and employees have significant (10%) capital invested alongside external investors.</li><li>Pavilion Advisory asked the Committee for feedback and a brief discussion ensued. There was a general consensus with the recommendation.</li></ul>   |                  |
|   | <ul> <li>Mr. Kuhlman presented an updated pacing analysis for the Surplus Cash and Cash Balance Plan real estate allocations. The Surplus Cash real estate allocation is currently at 2.8%, which is below the 5% target. The Surplus Cash has historically committed roughly \$10 million to \$15 million per fund, but this has not been done on a consistent basis from year to year. Pavilion recommended making a \$20 million commitment in 2018 in order to maintain a 5% allocation. Pavilion recommended this commitment be allocated to Angelo Gordon Reality Value Fund X, L.P., a private fund which will make value-add and opportunistic real estate investments primarily in the United States and will be diversified by property type.</li> <li>Pavilion Advisory asked the Committee for feedback and a brief discussion ensued regarding the illiquid nature of the recommended investment. There was a general consensus with the recommendation.</li> <li>The Cash Balance Plan real estate allocation is currently above its target allocation. The pacing analysis determined that no allocation is necessary in 2018 to maintain the target. Going forward, Pavilion and El Camino will review the pacing strategy for both portfolios annually.</li> </ul> |                  |
| 7. EDUCATIONAL GOAL:<br>INVESTING STRATEGY<br>IN VOLATILE MARKETS | <ul> <li>Pavilion Advisory Group briefly reviewed the materials in the packet on Investing in Volatile Markets. The presentation included Pavilion's Market Outlook and Asset Class Considerations, noting that markets are shifting and volatility is expected to increase going forward. The presentation also reviewed Surplus Cash Portfolio allocation and positioning, noting that the portfolio is highly liquid and well diversified. Overall, Pavilion believes the portfolio is positioned to withstand periods of market duress.</li> <li>Mr. Nelson asked if Pavilion has completed any research on ETF liquidity. Mr. Kuhlman stated he was unsure, but will check to see if Pavilion had released a white paper or done any work on the subject.</li> <li>Mr. Nelson is interested in receiving the white paper if it exists.</li> </ul>  | information      |

| Agenda Item                                    | Comments/Discussion  | Approvals/Action   |
|--|--|--|
| 8. ADJOURN TO CLOSE<br>SESSION                 | Motion:       To adjourn to close session at 7:07 pm.         Movant:       Kalbach         Second:       Nelson         Ayes:       Conover, Davis, Kalbach, Nelson         Abstentions:       None         Excused:       None         Recused:       None   | A motion to adjourn to<br>the Investment<br>Committee meeting<br>at 7:07 pm was<br>approved. |
| 9. AGENDA ITEM 12<br>RECONVENE OPEN<br>SESSION | Agenda Item 10 was conducted in closed session.Chair Davis reported that the Closed Minutes of the May 14, 2018were approved. Ms. Boone was absent. All other Committee memberswere present.Chair Davis requested to the Committee & Pavilion Advisory Group,<br>to change the February Investment Committee meeting date. The<br>Committee (Conover, Davis, Kalbach and Nelson), and Pavilion<br>Advisory Group unanimously agreed to move the meeting, to February<br>25th 2019. Nicola Boone was not present. |  |
| 10. AGENDA ITEM 13<br>ADJOURMENT               | Motion:       To adjourn the Investment Committee meeting at         7:10 pm.       Movant:         Movant:       Nelson         Second:       Conover         Aves:       Conover, Davis, Kalbach, Nelson         Abstentions:       None         Excused:       None         Recused:       None   | A motion to adjourn to<br>the Investment<br>Committee meeting<br>at 7:10 pm was<br>approved. |

Attest as to the approval of the Foregoing minutes by the Investment Committee of El Camino Hospital:

Jeffery Davis, MD, Chair ECH Investment Committee of the Board of Directors

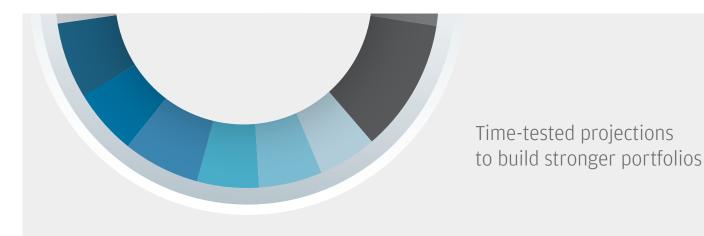
| Item:         |                     | Finance Committee Report  |
|---------------|---------------------|---|
|               |                     | El Camino Hospital Investment Committee (IC)                                    |
|               |                     | November 12, 2018   |
| Responsible p | arty:               | Iftikhar Hussain, CFO   |
| Action reques | ted:                | For Information   |
|               |                     | ee meets 7 times per year. The Committee last met on<br>at on November 26, 2018 |
| Summary and   | session objectives: |   |
| To update the | Investment Committ  | ee on the work of the Finance Committee.  |
| a.            | Reviewed FY 19 Peri | od 2 financial report. Operating margin is \$3.2 million al                     |
|               | of budget due equal | ly to higher revenues and lower expenses. Revenue cycl                          |
|               | •                   | outstanding performance with cash collection and days                           |
|               | •                   | outstanding performance with easil concetion and days                           |
|               | AR ahead of target. |   |
| b.            | Reviewed Heart and  | l Vascular Institute service line report  |
| Proposed Boa  | rd motion, if any:  |   |
| a.            | Recommended Boar    | d approval for Radiology equipment replacement                                  |
| b.            | Recommended Boar    | d approval for NICU and Neuro-Interventional panel                              |
|               | contracts           |   |
|               |                     |   |
|               |                     |   |
| LIST OF ATTAC | CHMENTS:            |   |



#### **PORTFOLIO INSIGHTS**

## 2019 Long-Term Capital Market Assumptions

23<sup>rd</sup> Annual Edition | Executive summary



#### IN BRIEF

This executive summary gives readers a broad overview of our 2019 Long-Term Capital Market Assumptions (LTCMAs) and provides a context for how some of the structural factors affecting economies today are likely to drive asset returns over a 10- to 15-year investment horizon. The key takeaways from this year's LTCMAs:

- Our 2019 estimate for real global GDP growth of 2.5% is unchanged from last year, and despite a few country-level adjustments, the secular growth outlook is stable and risks are balanced. Asset returns at equilibrium look reasonable by historical standards, but cyclical headwinds constrain our return forecasts today and still present a challenge.
- Cyclical risks are building, many economies are operating above trend with little slack, and asset valuations are elevated. While long-term investors should consider returns over the whole cycle, the starting point matters greatly to the long-term outlook. Traditional investment frameworks reflect market risk quite well but may not capture factors like illiquidity risk, which can profoundly affect asset returns late in the cycle.
- Bond return forecasts improve this year, notably in the U.S., where policy normalization has created a favorable entry point. Global equity returns are unchanged, but there is some regional divergence, which may offer

opportunities for investors. Alternatives are a relative bright spot, as fee reduction and improved alpha trends lend support.

- Expected returns for a U.S. 60/40 portfolio are slightly better, and the stock-bond frontier rotated further in a clockwise direction due to higher expected bond returns. In other regions, the frontier is little changed. This reflects both the late-cycle environment in the U.S. and the regional divergence in economic cycles. Ex-ante Sharpe ratios for U.S. Treasuries now meaningfully exceed those of U.S. stocks for the first time in a decade.
- Our message this year is to manage outside the mean. This implies looking for insight beyond our traditional mean-variance tools to help us navigate the end of this cycle. In the longer term, it suggests that while meanreversion is a powerful force, it isn't infallible and we must be mindful which of today's dislocations may be tomorrow's new equilibria.



#### INTRODUCTION

For investors, 2019 could prove to be a symbolic, possibly even seminal year. Should the U.S. expansion persist to the middle of 2019, it will set a new record for the length of a U.S. cycle. Still well short of Australia's 27-year (and counting) expansion, but a notable record nonetheless. That is true especially when we consider some of the paradoxes that characterize this cycle. Developed market (DM) policy rates are rising yet remain below prior cycle troughs, just as G7 unemployment rates are at 40-year lows. This S&P 500 bull market is the longest on record, with trough-to-peak gains almost twice the bull market average of the last 50 years; but at the same time, global equities have delivered gains about 6% shy of prior bull market averages. And just as technology is eroding geographic boundaries and functional barriers, trade protectionism may be forcing globalization into retreat, at least in the short term.

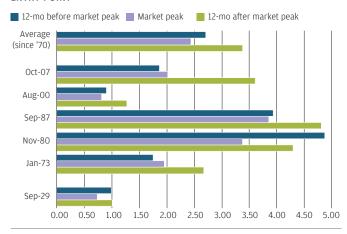
Of course, the simple chronological age of this expansion has triggered intense speculation about when the current cycle may end. Most of us will not succeed in perfectly timing the end of the cycle, and arguably the effort to do so may be something of a fool's errand. Nevertheless, understanding the complexion of late cycle and preparing for a bear market phase, whenever that may arise, is a vital exercise. Longerterm investors might be forgiven for thinking that the vagaries of the cycle are less relevant to them — but for all our focus on structural themes and equilibrium returns, we must all enter and exit the market at prevailing prices, and those will profoundly affect performance even over the longest horizons (Exhibit 1).

In making economic decisions, we instinctively weigh the possibilities to form a central case that is essentially an average, or mean, of possible future outcomes. But considering the end of the cycle implicitly means anticipating a discontinuity and an environment that will, for a time at least, be far away from any mean outcome. Much of our financial tool kit is anchored in average outcomes and mean-reversion, and therefore might not tell us the whole story at key turning points in cycles.

This isn't to say we should discard these trusted tools or abandon any instance of mean-reversion, and indeed our Long-Term Capital Market Assumptions work is grounded in such techniques. Instead, to gain better insight throughout the cycle we should complement those frameworks and better scrutinize assumptions of mean-reversion. After all, as this cycle has shown, economies and markets can stay far away from equilibrium for a long time, and those equilibria themselves are far from static.

Navigating late cycle demands that investors think and manage outside the mean, and evaluate how turning points in the cycle might lead to non-linear outcomes in even diversified portfolios. Scrutiny of when mean-reversion holds, and when it does not, also resonates with the broader thematic work we've undertaken. Exploring some of the apparent disequilibria we face – and recognizing where they might signal structural shifts in the fabric of our economies – is a thread that runs through all four of our thematic papers this year.

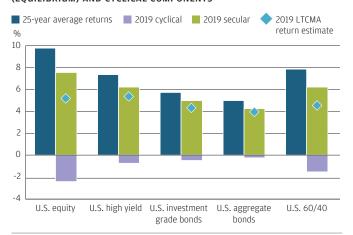
Entry point affects performance even over long time horizons EXHIBIT 1: VALUE OF \$1 INVESTED IN S&P 500 AFTER 10 YEARS GIVEN ENTRY POINT



Source: Bloomberg, J.P. Morgan Asset Management; data as of September 30, 2018.

We remain secular optimists despite increased cyclical headwinds; returns for a U.S. 60/40 stock-bond portfolio rise slightly due to better bond returns

#### EXHIBIT 2: HISTORICAL 25-YEAR AVERAGE RETURNS FOR KEY ASSETS AND THIS YEAR'S ESTIMATES, SPLIT INTO THEIR SECULAR (EQUILIBRIUM) AND CYCLICAL COMPONENTS



Source: Bloomberg, Datastream, J.P. Morgan Asset Management Multi-Asset Solutions; data as of September 30, 2018.

Last year, we described ourselves as secular optimists but cyclical realists. Our secular optimism is undiminished even as cyclical headwinds have increased this year – leading us to contemplate how to manage our portfolios as the storm clouds gather (**Exhibit 2**). We also note that some of the factors that might hasten the end of this cycle could also have gradual but profound effects on the economic and investment landscape over the long term. Indeed, the very nature of the cycle itself may well be changing, and with it the causes of – and remedies for – recessions. Debt levels and the size of central bank balance sheets create new challenges for policy and could ultimately compromise central bank independence; at the same time, the structure of the capital markets is evolving, generating new sources of return, and risk, for investors.

Overall, our long-term forecasts of economic growth and equilibrium interest rates change only modestly from last year. We see little upside pressure on price inflation and expect that over future cycles inflation will frequently fall short of central bank targets. This leads to a modest cut in our U.S. inflation expectations. Returns for a simple U.S. 60/40 stock-bond portfolio have risen slightly from 5.25% to 5.50% but, as a further sign that we are late in the cycle, this is entirely driven by higher returns from bonds. Most notably, our estimated Sharpe ratio for U.S. Treasuries is now meaningfully higher than that for U.S. stocks for the first time in a decade. As we will explore, Sharpe ratios don't tell the whole story, especially for assets with a left-tail risk<sup>1</sup> and especially when the cycle is mature, but they are a telling feature of today's investing environment.

## MACROECONOMIC THEMES - MANAGING OUTSIDE THE MEAN

Our 10- to 15-year forecast for developed market real GDP growth is unchanged from last year at 1.50%, and we trim our emerging market (EM) estimate from 4.50% to 4.25% – although forecasts for the major EM economies<sup>2</sup> are unchanged. Overall, our global real GDP forecast of 2.50% is unchanged year-over-year and the relative levels of growth across countries and regions are similarly little changed (**Exhibit 3**). As was the case last year, our secular outlook is quite stable, with risks broadly balanced between the well-understood drag from demographics and the potential upside from a technology-led pickup in productivity. However, the cyclical risks have increased over the last 12 months – and not only from the simple aging of this cycle.

|                   | 2019 as  | sumptions      | 2018 as  | sumptions      | Change (per | centage points) |
|-------------------|----------|----------------|----------|----------------|-------------|-----------------|
|                   | Real GDP | Core inflation | Real GDP | Core inflation | Real GDP    | Core inflation  |
| DEVELOPED MARKETS | 1.50     | 1.75           | 1.50     | 1.75           | 0.00        | 0.00            |
| U.S.              | 1.75     | 2.00           | 1.75     | 2.25           | 0.00        | -0.25           |
| Eurozone          | 1.50     | 1.50           | 1.50     | 1.50           | 0.00        | 0.00            |
| UK                | 1.25     | 2.00           | 1.25     | 2.00           | 0.00        | 0.00            |
| Japan             | 0.50     | 1.00           | 0.50     | 1.00           | 0.00        | 0.00            |
| Australia         | 2.00     | 2.50           | 2.00     | 2.25           | 0.00        | 0.25            |
| Canada            | 1.50     | 1.75           | 1.50     | 1.75           | 0.00        | 0.00            |
| Sweden            | 1.75     | 1.75           | 1.75     | 1.75           | 0.00        | 0.00            |
| Switzerland       | 1.25     | 0.50           | 1.25     | 0.75           | 0.00        | -0.25           |
| EMERGING MARKETS* | 4.25     | 3.50           | 4.50     | 3.50           | -0.25       | 0.00            |
| China             | 5.00     | 2.75           | 5.00     | 2.75           | 0.00        | 0.00            |
| India             | 7.00     | 5.00           | 7.00     | 5.00           | 0.00        | 0.00            |
| Brazil            | 3.00     | 4.75           | 3.00     | 5.00           | 0.00        | -0.25           |
| Russia            | 1.25     | 5.50           | 1.50     | 5.50           | -0.25       | 0.00            |
| GLOBAL            | 2.50     | 2.25           | 2.50     | 2.50           | 0.00        | -0.25           |

Our 2019 global growth assumptions are subdued but mostly stable EXHIBIT 3: MACROECONOMIC ASSUMPTIONS (%)

Source: J.P. Morgan Asset Management; estimates as of September 30, 2017 and September 30, 2018.

\* Emerging markets aggregate derived from nine country sample.

<sup>&</sup>lt;sup>1</sup> We define left-tail risk as being the risk of more severe downside price action than upside price action; such assets can suffer more severe repricing during periods of stress than may be implied by a simple normal distribution.

<sup>&</sup>lt;sup>2</sup> China, India and Brazil real GDP forecasts are unchanged this year; Russia real GDP growth forecasts are cut by 25 basis points.

The U.S.-China<sup>3</sup> trade dispute increasingly appears to be as much about ideology as tariff disparity and could well define the path of globalization far beyond the current cycle. U.S. policy normalization is inexorably tightening global financial conditions and may yet hasten the turn of the cycle, perhaps before other central banks even get going (**Exhibit 4**), risking a semi-permanent divergence in policy across the world economy. Corporate leverage itself might not trigger a downturn but could be an accelerant, and in the longer run high indebtedness across an economy complicates the transmission of monetary policy. But rather like trying to time a downturn, attempting to identify precise catalysts can be a futile exercise. Instead, recognizing where risks reside and considering how they might evolve and affect our secular framework is a key area of focus for our LTCMA thematic papers this year.

Our first paper explores this trend directly. It looks at the anatomy of past recessions and considers what the nature of future recessions – and recoveries – might be. Our LTCMA framework is designed to be "cycle neutral" by virtue of its long horizon, but it is not "cycle agnostic" in any sense. Put another way, we don't seek to time cycles within our framework, but our return forecasts are sensitive to the starting point. Arguably, the global economy today is more stable, which likely means longer and shallower cycles in the future as imbalances take longer to build up.

But just as downside risks are muted by a shorter inventory cycle, improved bank capitalization and steadier government spending patterns, the tools to stimulate an ailing economy are also blunted and forces that drove V-shaped recoveries in the past are fading. This likely means shallower recoveries and ever more inventive monetary policy. In short, it is likely that over the next decade policy rates are more often loose, with respect to the neutral rate of interest, than tight. Rates may remain below equilibrium for longer periods than in the past, as protracted periods of loose policy will probably be needed to stabilize future expansions.

Shallower and longer cycles that rely on prolonged stimulus will likely subdue interest rates, and this has major implications for debt dynamics. In our second paper, we explore government indebtedness – what might reduce it and whether governments either need to or want to reduce their debt levels. With rates likely to remain low and frequently below their neutral rate, there may be little incentive for governments to address debt levels over our 10- to 15-year forecast horizon. While this simply postpones the issue, it also means that anchoring our forward expectations to past averages for either sustainable debt levels or policy rates may prove incorrect. Perhaps, more profoundly, it also raises the question of whether the dual forces of rising government debt levels, and the growing exposure of central bank balance sheets to that debt, means we've passed the high water mark of central bank independence.

<sup>3</sup> Other trade disputes – e.g., NAFTA and with the European Union – we expect to be resolved through tariff negotiation, but the dispute with China at the time of writing appears less likely to be readily resolved.

Hiking cycles are often more globally synchronized; the U.S. yield curve is flatter today than the typical levels at which other regions would start their hiking cycles

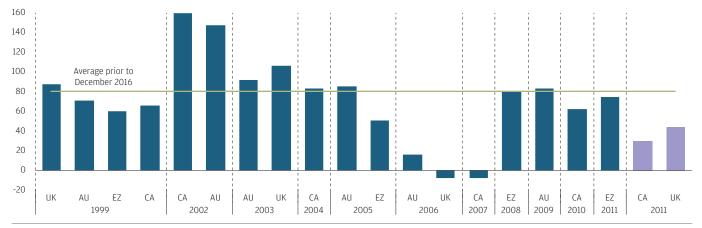


EXHIBIT 4: U.S. 3-MONTH TO 2-YEAR BOND CURVE AT THE START OF MAJOR CENTRAL BANKS' HIKING CYCLE (BPS)

Source: Bloomberg, J.P. Morgan Asset Management; data as of October 2018.

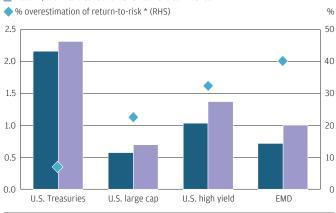
Our third paper starts by looking at how the secular decline in interest rates has helped to catalyze an evolution of public equity markets from a venue primarily for raising investment capital to a venue used increasingly for cash distribution and balance sheet management. At the same time, private markets have grown in scale and scope to offer development capital to firms of all sizes. Today's large and accessible private asset markets offer potentially superior returns, subject to illiquidity risk and appropriate manager due diligence. Even as private assets have moved into the mainstream for investors, illiquidity risk – in both private and some public assets – can be a secondary consideration for many investors.

Common investment tools like Sharpe ratios take little direct account of liquidity, especially in periods of market stress, but other tools, such as CVaR (conditional value at risk) or Sortino<sup>4</sup> ratios, can be illuminating (**Exhibit 5**). And as late cycle plays out, ensuring proper compensation for illiquidity risk as well as market risk is crucial. Over the long term, public equity returns are likely to be dominated by income – leaving private asset markets to fill a return gap for investors and a funding gap for corporates. Ultimately, this demands new portfolio construction tools that account for the wider spectrum of risks that investors will need to assume to drive returns in the future.

Metrics that account for the distribution of risks as well as the average level of risks are valuable in late cycle

#### EXHIBIT 5: RETURN-TO-RISK RATIOS FOCUSED ON LEFT-TAIL RISK

- Return / Historical CVaR at 95% confidence
- Return / Normal distribution CVaR at 95% confidence



Source: J.P. Morgan Asset Management Multi-Asset Solutions; data as of September 2018.

\* Percentage difference between return-to-CVaR based on normal assumption and return-to-CVaR based on historical experience. Both CVaR measures are computed at 95% confidence level. See Volatility assumptions section for details.

amount of tail risk in a portfolio, with a focus on less profitable outcomes, useful in unlikely scenarios. Sortino ratio improves the Sharpe ratio by isolating downside

volatility from total volatility by dividing excess return by downside deviation.

95% confidence level. See Volatility assumptions section for details.

The practicalities of managing a portfolio over the cycle is the focus of our final paper. Based on historical precedent, and a little humility, it is fair to say that most of us can neither predict the cause nor the timing of a downturn. However, we can make a reasonable assessment of the events that would wreak the greatest havoc in our particular portfolios. A shock caused by an excessive rise in interest rates may well have less impact on a liability-driven portfolio than on a longonly bond mutual fund, while a slump in corporate confidence and earnings might hit U.S. retail investors harder than their European peers, who generally own fewer stocks. If managing outside the mean is central to navigating the end of this cycle and locking in the more compelling secular returns that we anticipate, then identifying the non-linear exposures in specific portfolios is perhaps the best place to begin.

A common theme in our work this year is anticipation of discontinuity in the short term and accommodation of disequilibria in the long term. And yet we remain, at heart, quite optimistic. Our return numbers at equilibrium<sup>5</sup> are a little below the averages of the last 50 years, but after accounting for prevailing cyclical headwinds they are healthy enough. To be sure, investors may need to look for ways to complement existing investment frameworks. Managing outside the mean doesn't imply ignoring average return expectations and normalized risk-return profiles, but builds upon the traditional investing tool kit to better reflect tail risks and factors such as illiquidity. Nor does managing outside the mean suggest that we ignore equilibrium anchors, but it does imply that we should anticipate that some factors can stray from fair value for prolonged periods – especially given the unprecedented patterns of demographics, policy and market structure that look set to define the long-term investing environment.

<sup>&</sup>lt;sup>5</sup> "At equilibrium" return numbers represent our forecasts assuming valuations, margins, credit spreads and interest rates to be at our fair value estimates rather than at prevailing market levels.

Selected LTCMA returns - Cyclical risks are building, weighing on returns and risk premia for equity and riskier credit



Source: J.P. Morgan Asset Management; estimates as of September 30, 2017 and September 30, 2018.

#### MAJOR ASSET CLASS ASSUMPTIONS

Our stable long-term economic outlook this year translates into a fairly stable outlook for returns at equilibrium, with much of the variation in our asset return forecasts explained by market moves over the course of 2018 (**Exhibits 6** and **7**). At a global aggregate level, equity return expectations are little changed from last year, while our forecast for global government bond returns is slightly higher. There are meaningful regional differentials, mainly reflecting U.S. leadership in equity markets over 2018 and the more advanced state of policy normalization in U.S. rates.

Ex-ante Sharpe ratios for U.S. Treasuries now stand above those for U.S. equities, which is consistent with an economy late in its cycle. What is perhaps an important nuance is that the U.S. Treasury Sharpe ratio is boosted more by low interest rate volatility than by elevated returns. This may be an overhang of the loose monetary policy we have experienced over this cycle. In most other regions, however, equity Sharpe ratios are still higher than those for bonds, largely because policy normalization has yet to begin in many economies. The puzzle that investors face in judging the long-term global outlook in 2019 may be in deciding the extent to which patterns in the U.S. market will dominate risk appetite around the world – and in turn how much the U.S. will set the tempo for the entire global economic cycle.

#### FIXED INCOME - Flatter curves, lower yields

U.S. policy normalization has continued at a slow and steady pace. At the time of writing, U.S. cash rates and 10-year yields are close to our estimates of long-term equilibrium. We expect cash rates to rise further in this cycle but see less upside risk to long-end yields, likely leading to a flat or inverted yield curve at the end of this cycle, albeit at low absolute levels of rates. We see lower rates and flatter curves as a secular condition over the next 10 to 15-years, a view that reflects our dovish inflation outlook and anticipation of extended periods of stimulus as future business cycles elongate.

With U.S. rate normalization well advanced while other regions have yet to begin, there is a risk that this economic cycle might end before the hiking cycle outside the U.S. gets underway – raising the prospect of structural divergence in policy around the globe that transcends the current cycle. Cuts to equilibrium rate assumptions plus normalization<sup>6</sup> in some regions mean that our return expectations for global government bonds are slightly higher than last year. Credit and EM debt still offer the best return possibilities across fixed income over our forecast horizon. However, we would caution that their optically strong Sharpe ratios and contained volatility estimates probably do not capture the illiquidity risk that can manifest itself in stressed markets.

<sup>&</sup>lt;sup>6</sup> Policy normalization in the U.S. has resulted in a more favorable starting point for U.S. bonds; for regions yet to begin normalizing rates (e.g., Europe), there is still a meaningful normalization penalty weighing on bond returns.

#### EQUITY - Turning a corner, returns hold steady

Our equity return forecasts for 2019 are largely a reflection of the variation in regional fortunes over the last year. Our forecast for U.S. equities, which led the pack in 2018, is down 25 basis points (bps) to 5.25%, and the U.S. equity risk premium (ERP) is now below long-term averages. By contrast, our forecast for EM equities, 2018's laggard, is up 50bps to 8.50%. This modestly widens the wedge between DM and EM equity return forecasts to 2.75% in USD terms and 3.00% in local FX. The underlying return drivers for DM and EM equities diverge further still in our 2019 forecasts, with as much as four-fifths of forecast returns in DM equity coming from dividends and buybacks, compared with less than one-third in EM equity.

One factor that unites both DM and EM equity is that stock markets in general are a lightning rod for de-risking when the economic cycle turns. So while investors must judge both how much risk to carry in late cycle and how far the cycle could run, we would reiterate that the equilibrium return assumptions for global equities are stable and reasonably attractive. Crucially, the cyclical elements that constrain returns today in some markets result in very different optimized portfolio allocations at prevailing return forecasts and at our expected equilibrium returns (Exhibit 8). What count for cyclical headwinds today - high valuations and wide margins - will become cyclical tailwinds after this cycle has troughed. A crucial consideration for any long-term investor in 2019 will be the trade-off between how much to continue to attempt to extract returns from risk assets in this cycle and how much "dry powder" to try and keep for the next one.

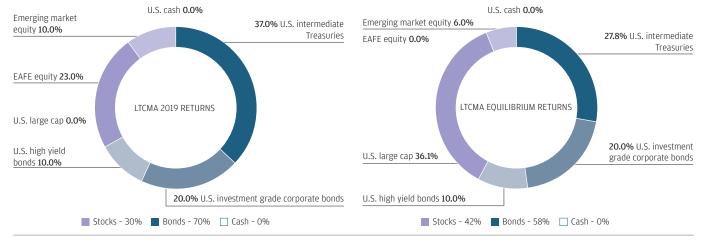
#### ALTERNATIVE ASSETS - Alpha gets you halfway

Alternative assets are a relative, and in some cases an absolute, bright spot in our 2019 assumptions. Improving alpha expectations in private equity result in an upgrade to our outlook this year. Elsewhere, return expectations across most other alternatives classes are little changed from last year, as the tailwind from lower fees roughly balances the headwind from lower public market returns. Given the paucity of returns in traditional asset classes, we expect that capital will continue to flood into alternative assets in search of enhanced returns – but probably pushing up valuations and eventually weighing on future returns. This prompts us to repeat our refrain that manager selection is the primary determinant of return across alternatives. Compensation for illiquidity and a modest boost to our alpha assumptions may get investors part of the way to their return aspirations in alternatives, but there really is no substitute for manager due diligence – especially given where we are in the economic cycle.

#### FOREIGN EXCHANGE - All roads lead to the dollar

Our forecasts for the major currencies this year are little changed, with our fair value estimate of EURUSD at 1.32 and USDJPY at 92, which illustrates the relative stability in our long-term economic outlook this year. The U.S. dollar remains well above fair value, but as price action over the last 12 months demonstrates, long-term valuation anchors have only limited influence on currencies' short-term trading patterns. Nevertheless, we expect that the dollar will weaken against most major crosses over our forecast horizon, boosting returns from international diversification for USD-based

An optimized liquid asset portfolio using our prevailing 10- to 15-year return assumptions looks very different from an optimized portfolio using equilibrium return estimates



#### EXHIBIT 8: LIQUID PORTFOLIO (EX-ALTS) WITH 2019 LTCMA RETURNS VS. EQUILIBRIUM RESULTS

Note: Stylized liquid asset portfolio mean-variance optimized for moderate risk tolerance using 1. LTCMA 2019 returns and 2. Equilibrium returns; max allocation constraints of 20% IG, 10% HY, 55% U.S. equity, 35% EAFE equity, 10% emerging market equity.

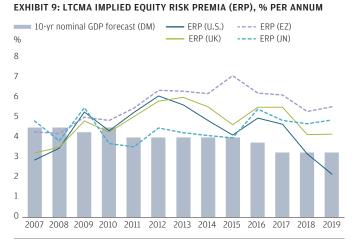
Source: J.P. Morgan Asset Management Multi-Asset Solutions; estimates as of September 30, 2018.

investors but having a rather more nuanced effect for nondollar based investors. The Chinese renminbi will likely gain greater stature as an international reserve currency over the next decade. But despite concerns over U.S. deficits and debt dynamics that will only increase as time passes, we see little challenge to the dollar as the world's reserve currency over our forecast horizon. As a result, the trajectory of the greenback will continue to set the tone in currency markets.

#### IMPLICATIONS FOR INVESTORS

A couple of years ago, our secular growth forecasts were still falling but equity risk premia were elevated. Today our growth estimates are stable, but equity risk premia, notably in the U.S., are lower (**Exhibit 9**). The result is a progressive flattening of the U.S. stock-bond frontier, last year driven mostly by lower equity return expectations but this year largely driven by better bond returns. In other regions, where policy normalization has yet to begin, stock-bond frontiers are steeper even though returns for a 60/40 stock-bond portfolio are lower in absolute terms.

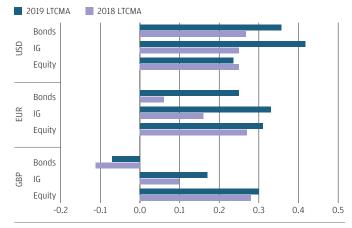
Estimates for equity risk premia are falling, especially in the U.S., even though GDP growth forecasts are stable



Source: J.P. Morgan Asset Management Multi-Asset Solutions; estimates as of September 2018.

The pattern also holds in regional Sharpe ratios: U.S. bond Sharpe ratios are ahead of those for U.S. stocks, but in Europe the reverse is true (**Exhibit 10**). The relative shape of stockbond frontiers and rank order of Sharpe ratios in various currencies reflect the regional differences in stages of the business cycle and policy normalization rather well. But they won't tell us when a downturn may hit, where it will start and how it could spread, or what the distribution of returns might be in stressed markets. For the first time since the crisis, U.S. bond Sharpe ratios are well ahead of those for U.S. stocks, but in Europe the reverse is true

#### EXHIBIT 10: SELECTED SHARPE RATIOS FOR G3 CURRENCIES



Source: J.P. Morgan Asset Management; estimates as of September 30, 2017 and September 30, 2018.

Looking ahead, a recession is virtually inevitable over the next decade and likely to occur sooner rather than later in our 10-to 15-year horizon. Many investors fixate on the precise catalysts and shape of the next downturn – and specifically on avoiding it. Yet market timing is notoriously tricky. We believe that focusing on staying in the game through a contraction and evaluating the possible contour of the next cycle is the more effective approach over the long run.

For any investor – even those with a longer-term horizon – navigating late cycle means recognizing what a traditional mean-variance-based framework can tell us and what it cannot. A relatively flat U.S. stock-bond frontier (Exhibits 11A and 11B) tells us that de-risking is becoming more attractive, but it doesn't tell us whether policy rates outside the U.S. will normalize before the cycle rolls over. Relatively high Sharpe ratios in U.S. high yield and EM debt tell us that credit is attractive over a whole cycle, but don't tell us whether there will be the liquidity to cut positions in a weak market. And average long-term return forecasts for eurozone stocks that are three-quarters of a point above those for U.S. stocks don't tell us whether the skew of actual returns might be to the left in Europe but to the right in the U.S.

Managing outside the mean late in the cycle entails not only optimizing to market risks evident in our traditional frameworks, but also recognizing the risks they don't capture and, most importantly, ensuring those are compensated.

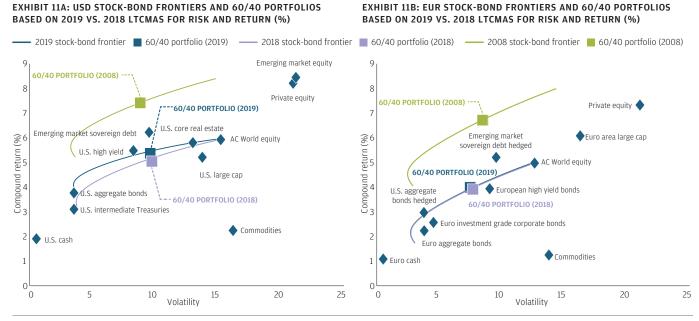
Turning to the long-term investing environment, we believe that identifying which elements of the current cycle might evolve into structural hallmarks of the next one is an important exercise; in particular, where they may lead apparently cyclical dislocations to become permanent or cause accepted equilibria to reset. After all, mean-reversion is a powerful force, but it is not infallible. Differentiating among those dislocations that may be persistent, rather than merely stubborn, is critical in understanding the secular economic and investment environment.

We imagine that it is in policy rates where persistent dislocations are most likely to arise, as flatter cycles less sensitive to stimulus hold policy rates below equilibrium for long periods. This could in turn stoke asset prices, driving future rounds of asset inflation without associated price inflation. The new technology trends we wrote about last year<sup>7</sup> only serve to contain price and wage inflation further, even as they boost real growth and productivity. To the extent that such an environment reinforces economic inequality, the temptation for governments to borrow to fund fiscal stimulus is a good reason to think that national debt levels are unlikely

<sup>7</sup> "The impact of technology on long-term potential economic growth," 2018 Long-Term Capital Market Assumptions, J.P. Morgan Asset Management, 2017. to mean-revert anytime soon. In our view, policy rates, government balance sheets, market structure patterns and inflation trends all represent structural shifts in the investing environment that a simple mean-reversion framework is unlikely to capture.

To help meet these challenges, investors will be well served by focusing on more active investment around secular themes such as technology, and the growth in alternative assets, as well as ensuring all elements of risk – not merely market risk – are appropriately rewarded. For larger, more constrained or more risk-averse investors, the ability to de-risk efficiently as expected bond returns rise in some markets helps with staying in the game in late cycle, and in positioning for the next one. And for investors with deeper pockets or limited mark-to-market pressure, attractive Sharpe ratios on some less liquid assets create the potential to enhance returns over the long run, albeit with some nearer-term volatility. In any case, navigating late cycle doesn't mean avoiding risk, but it does mean knowing the risks you're taking.

Compared with last year, expected returns on a U.S. 60/40 portfolio are slightly better and improved bond returns have rotated the stock-bond frontier clockwise; by contrast, in Europe returns and frontiers are unchanged, reflecting that Europe has lagged the U.S. in policy normalization



Source: J.P. Morgan Asset Management Multi-Asset Solutions; estimates as of September 30, 2017 and September 30, 2018.

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#### INVESTMENT COMMITTEE PACING PLAN

#### Revised 10/4/2018

|  | FY 2019: Q1   |                        |
|--|---|------------------------|
| JULY – NO MEETING  | AUGUST 13, 2018 Meeting   | SEPTEMBER – NO MEETING |
|  | <ul> <li>Capital Markets Review and Portfolio<br/>Performance</li> <li>Tactical Asset Allocation Positioning and Market<br/>Outlook</li> <li>Educational Goal – Investment strategy in<br/>volatile markets</li> <li>CFO Report Out – Open Session Finance<br/>Committee Materials</li> </ul>   | N/A                    |
|  | FY 2019: Q2   |                        |
| OCTOBER – NO MEETING   | NOVEMBER 12, 2018 Meeting   | DECEMBER – NO MEETING  |
| October 24, 2018 – Board and Committee<br>Educational Session                    | <ul> <li>Capital Markets Review and Portfolio<br/>Performance</li> <li>Tactical Asset Allocation Positioning and<br/>Market Outlook</li> <li>Investment Policy Review</li> <li>CFO Report Out – Open Session Finance<br/>Committee Materials</li> </ul>   | N/A                    |
|  | FY 2019: Q3   |                        |
| JANUARY 28, 2019<br>Joint Finance Committee and Investment<br>Committee meeting. | <ul> <li>FEBRUARY - 25, 2019 Meeting</li> <li>Capital Markets Review and Portfolio<br/>Performance</li> <li>Tactical Asset Allocation Positioning and<br/>Market Outlook</li> <li>Asset Allocation Review and ERM Framework</li> <li>CFO Report Out – Open Session Finance<br/>Committee Materials</li> </ul>   | MARCH – NO MEETING     |
|  | <ul> <li>Proposed FY 2020 Goals/Pacing Plan/Meeting<br/>Dates</li> </ul>  |                        |
| APRIL – NO MEETING   | FY 2019: Q4<br>MAY 13, 2019 Meeting   | JUNE – NO MEETING      |
| April 24, 2019 – Board and Committee<br>Educational Session                      | <ul> <li>MAY 13, 2019 Meeting</li> <li>Capital Markets Review and Portfolio<br/>Performance</li> <li>Tactical Asset Allocation Positioning and<br/>Market Outlook</li> <li>CFO Report Out – Open Session Finance<br/>Committee Materials</li> <li>403(b) Investment Performance</li> <li>Committee Goal</li> <li>Review status of FY19 Goals</li> </ul> | N/A                    |

### ECH BOARD COMMITTEE MEETING AGENDA ITEM COVER SHEET

| Item:  | Report on ECH and ECHD Board Actions  |  |
|--|---|--|
|  | Investment Committee  |  |
|  | November 12, 2018   |  |
| Responsible party:   | Cindy Murphy, Director of Governance Services   |  |
| Action requested:  | For Information   |  |
| Background:  |   |  |
| In FY16, we added this item to each Board Committee agenda to keep Committee membrinformed about Board actions via a verbal report by the Committee Chair. This written report by the Committee and/or Board |   |  |
|  |   |  |
| is intended to supplement a members who also serve or  | a verbal report by the Chair of the Committee and/or Board<br>n the Committee.  |  |
| is intended to supplement a members who also serve or  | a verbal report by the Chair of the Committee and/or Board  |  |
| is intended to supplement a members who also serve or  | a verbal report by the Chair of the Committee and/or Board<br>n the Committee.  |  |
| is intended to supplement a<br>members who also serve or<br>Other Board Advisory Com   | a verbal report by the Chair of the Committee and/or Board<br>In the Committee.<br>mittees that reviewed the issue and recommendation, if any:  |  |
| is intended to supplement a<br>members who also serve or<br>Other Board Advisory Com<br>None.  | a verbal report by the Chair of the Committee and/or Board<br>in the Committee.<br>mittees that reviewed the issue and recommendation, if any:<br>ctives:   |  |
| is intended to supplement a<br>members who also serve or<br>Other Board Advisory Com<br>None.<br>Summary and session obje  | a verbal report by the Chair of the Committee and/or Board<br>in the Committee.<br>mittees that reviewed the issue and recommendation, if any:<br>ctives:<br>bout recent Board actions.                 |  |
| is intended to supplement a<br>members who also serve or<br>Other Board Advisory Com<br>None.<br>Summary and session obje<br>To inform the Committee a<br>Suggested discussion quest                         | a verbal report by the Chair of the Committee and/or Board<br>in the Committee.<br>mittees that reviewed the issue and recommendation, if any:<br>ctives:<br>bout recent Board actions.                 |  |
| is intended to supplement a<br>members who also serve or<br>Other Board Advisory Com<br>None.<br>Summary and session obje<br>To inform the Committee a<br>Suggested discussion quest                         | a verbal report by the Chair of the Committee and/or Board<br>in the Committee.<br>mittees that reviewed the issue and recommendation, if any:<br>ctives:<br>bout recent Board actions.<br>tions: None. |  |



#### ECH Board Actions\*

- 1. August 15, 2018
  - a. Resolution 2018-08 Recognizing the Sepsis Team for Joint Commission Gold Seal of Approval Award
  - b. FY18 Year End Financials
  - c. FY19 Base Salary for Chief Medical Officer Mark Adams, MD
  - d. FY19 CEO Salary Range and Base Salary
  - e. Second Amendment to Executive (CEO) Employment Agreement extending Mortgage Assistance benefit for additional 12 months
  - f. Approval of ReBranding Using New Brand Architecture (El Camino Health)
- 2. September 12, 2018 Approved FY18 Organizational Goal Score
- 3. October 10, 2018
  - a. Approved FY19 Period 2 Financials
  - b. Approved FY18 Financial Audit
  - c. Approved FY18 Annual 430(b) Retirement Plan and Cash Balance Retirement Plan Audits
  - d. Approved Appointment of Robin Driscoll to the El Camino Hospital Foundation Board of Directors
  - e. Approved Revised Executive Benefit Plan Policy (Life Insurance and Eligibility Date Provisions)
  - f. Approved Purchase of Los Gatos Imaging Equipment (O-Arm)
  - g. Approved NICU Medical Director and Neuro-Interventional Call Panel Contracts
  - h. Appointed Director Julie Kliger as Quality, Patient Care and Patient Experience Committee Chair
  - i. Approved FY18 CEO Incentive Plan Payment

#### ECHD Board Actions\*

- 4. September 12, 2018 Approved Re-Branding Using New Brand Architecture (El Camino Health)
- 5. October 16, 2018
  - a. Approved Resolution 2018-11 recognizing Community Benefit Partner Bay Area Women's Sports Initiative
  - b. Approved Resolution 2018-12Adopting Calendar year 2019 Meeting Dates
  - c. Approved Resolution 2018-13 Amending the ECHD Conflict of Interest Code
  - d. Approved FY18 ECH and ECHD Consolidated Year-End Financials
  - e. Approved the FY18 Community Benefit Report
  - f. Approved the FY18 Year-End Stand Alone Financials
  - g. Approved the FY19 Financials YTD

\*This list is not meant to be exhaustive, but includes agenda items the Board voted on that are most likely to be of interest to or pertinent to the work of El Camino Hospital's Board Advisory Committees.

- h. Approved the FY19 Financial Audit
- i. Approved a Revision to the El Camino Hospital Bylaws providing that a vacancy in the Board of Directors shall be deemed to exist when a Director, who was appointed or elected as a Director while serving as a Director of the sole Member is no longer a director of the sole Member.

\*This list is not meant to be exhaustive, but includes agenda items the Board voted on that are most likely to be of interest to or pertinent to the work of El Camino Hospital's Board Advisory Committees.

# Executive Summary

El Camino Hospital

3rd Quarter 2018

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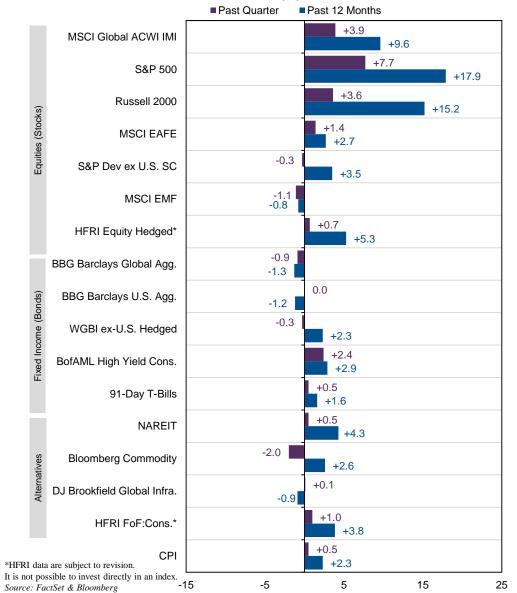




Summary

As of September 30, 2018

#### Performance: Past Quarter and Year (%)



<sup>1.</sup> Source: Bloomberg and FactSet

#### The signal and the noise

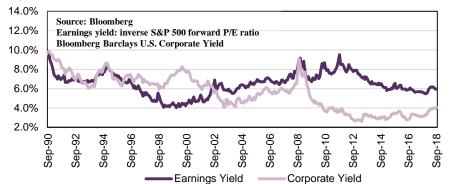
- Global economic growth, though slowing, continued expanding at an above-trend pace
  providing support for risk assets. Risks around trade policies served to restrain markets,
  however. U.S. GDP growth is expected to be close to 3% in the third quarter, supported by
  robust consumer spending. Strength in corporate earnings is expected to persist with growth
  of +19% projected in the third quarter.<sup>1</sup> While international economic growth has slowed
  since the start of the year, recent data are more constructive and suggest a leveling to slight
  increase in growth.
- Trade tensions swayed between conflict and resolution during the quarter. The U.S. added tariffs on \$200 billion of Chinese goods with discussions expected to resume soon. Negotiations with Canada and Mexico on a trilateral trade deal moved toward conclusion by the end of September. Additionally, the U.S. and South Korea signed an updated trade agreement. Both produced only minor changes to prior accords, generating limited disruption to global supply chains and implying a path to resolution with Europe, Japan and possibly China.
- Political risk remained an issue over the quarter. Uncertainty surrounding Italy's budget as well as a bridge collapse weighed on markets. Similarly, the U.K.'s BREXIT saga moved in fits and starts but generally maintained a conciliatory tone. Resolution is expected, but monitoring is warranted.
- Turmoil lingered in emerging economies. Some blame has been attributed to an appreciating dollar and the threat of a funding crisis. While this may be playing a role, the most significant factors appear to be uncertainty over trade policies and country specific vulnerabilities in Turkey, Argentina and to a lesser extent South Africa and Brazil.
- Global monetary policy proceeded along a gradual normalization path through changes in rates and forward guidance, largely meeting expectations. The Federal Reserve's ("Fed") preferred measure of inflation reached 2% on a year-over-year basis in May, and policymakers are confident that inflation will remain contained making minor changes to forward guidance while raising rates 25 basis points in September. This was the third increase for the year with one more rate increase expected by year-end.
- For the seventh consecutive quarter, the U.S. yield curve flattened, with rates ending the quarter near or at year-to-date highs. Strong fundamentals and slight tail risk reductions led to spread tightening across most sectors, with the exception of emerging markets where country specific problems and trade risks were an issue.
- Emerging market equities trailed developed markets throughout the quarter. Increasing political and trade tensions weakened international developed markets in August, but growth helped generate positive returns for the quarter. U.S. markets outperformed international, as strong fundamentals outweighed uncertainty and tail risks.
- While energy prices rose (+4.4% QTD), commodities overall declined, as trade uncertainty hurt agricultural and industrial metals prices. Higher energy prices benefited income instruments like MLPs, which climbed +7.0% during the quarter.



### Capital Markets Review Asset Class Outlook

As of September 30, 2018

#### Equities remain attractive to credit



3-month Ted-Spread normalizes



Real yields rise, inflation expectations steady



#### Equities

Global growth remained at or above trend during the past quarter, albeit at a slightly slower pace and less evenly across countries. The U.S. led growth, with forecasters anticipating real annual GDP growth close to 3% in the second half of 2018, providing continued support for earnings. The FactSet consensus estimate for full-year 2018 S&P 500 earnings growth is 20%. Economic growth is expected to slow modestly in 2019, as the effects of the fiscal stimulus fade and monetary accommodation declines. S&P 500 earnings estimates for full-year 2019 remain strong at just over 10%. As the first chart to the left suggests, current S&P 500 earnings yields continue to appear attractive relative to corporate bond yields. Other developed markets present less favorable conditions, as growth in some regions is slow, with heightened uncertainty as a result of BREXIT negotiations and the Italian budget problems. While emerging markets have struggled, risks remain relatively concentrated in countries such as Turkey and Argentina. The resolution to trade conflicts with Canada, Mexico, and South Korea should lend stability in these markets. Additionally, the modest concessions in these new agreements will hopefully provide negotiators with a road map to a resolution with China. We continue to recommend investing in markets with the strongest economic and earnings growth while avoiding the ongoing risks in developed markets where growth may be slowing.

#### **Fixed Income**

Strong growth has allowed the Fed to continue normalizing policy, raising rates another 25 basis points in September. Rate increases combined with ongoing economic strength and hawkish commentary from Fed Chair Powell pushed 10-year Treasury rates above 3.15% in October, an increase of 30 basis points in just over a month. Despite the rise in yields, corporate spreads remained low, reflecting strong corporate cash-flows, low debt service costs, and extremely low default rates (currently 2.0% versus 30-year average of 3.8%). Current economic data suggests conditions likely will remain intact over the near-term; however, some signals have raised concerns. Earlier this year, a common measure of funding market liquidity, the Ted-Spread, spiked to a little over 60 basis points from just 30 basis points at the beginning of the year. The spread has recovered to normal levels, as a host of temporary technical factors have been resolved. Concern also grew over the flattening U.S. yield curve, often viewed as a signal of slowing growth. This trend also appears to have reversed itself, as the curve steepened 10 basis points in September and further in October. The bottom line is that financial conditions remain accommodative and do not yet present a risk to growth. The recent rise in yields improves the ability of longer duration investments to provide ballast to portfolios in the event of a material market downturn.

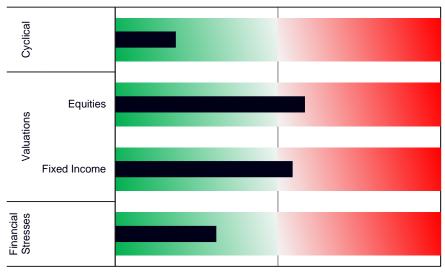
#### **Real Assets**

Nominal interest rates rose during the quarter due to an increase in real yields, which reflects improving growth prospects. While expectations for real growth improved, inflation expectations held steady near the Fed's 2% target. Inflation continues to be constrained by trends in technology and innovation, globalization, demographics, and changing consumption patterns. With inflation expected to remain low, equities provide any necessary inflation protection. Inflation hedging assets with diversifying income streams such as global infrastructure are preferable to higher volatility commodities.

#### **Key Market Risks**

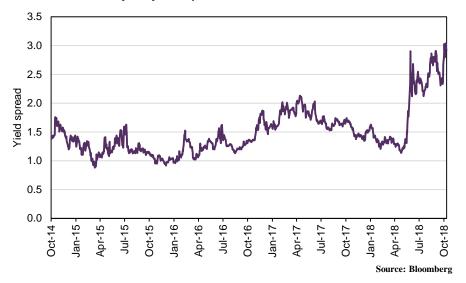
As of September 30, 2018

#### **Current Risk Levels**

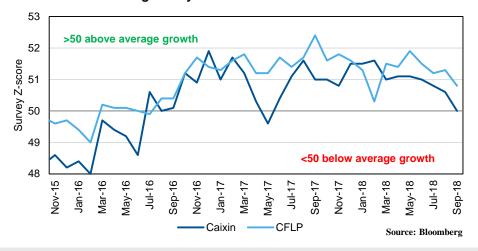


Source: Bloomberg, FactSet, Recession Alert, & Pavilion Analysis

#### Italian German 10-year yield spread



#### China manufacturing surveys



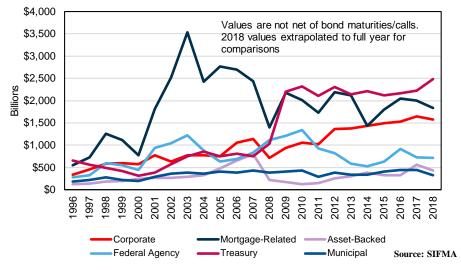
#### Although cyclical risks are low, policy risks remain on center stage

- At some point, financial conditions will tighten: Financial conditions in the U.S. and across other developed markets remain accommodative, but these conditions are unsustainable indefinitely. Higher U.S. yields have reduced the economy's ability to absorb shocks such as energy price spikes, a global trade slowdown, or credit market deterioration. Tightening is expected to be gradual and not restrictive, but higher rates leave a lower margin of safety with external risk monitoring becoming increasingly important.
- Europe in general, Italy specifically, faces challenges: European challenges do not seem to stop. While the Greek debt crisis appears to have been resolved, Italy is facing challenges. The new Italian government is at odds with European leaders and in potential violation of the European Stability Pact by seeking to provide economic stimulus, which would increase its deficit. This threatens the amount of Italian debt the European Central bank ("ECB") can purchase as part of the quantitative easing program. Italian bond yields rose, driving up Italian debt costs and increasing the risks for banks holding Italian debt, particularly Italian banks. Although progress is being made, the inability to negotiate a soft BREXIT plan further complicates the investment environment. In our view, European risk assets continue to deserve a higher risk premium.
- China: Trade tensions are not alone in creating problems for China. Slowing growth as well as a hardware hacking scandal have created a very difficult environment. The chart above depicts manufacturing output in China, as measured by two different surveys of purchasing managers. The challenge will be to maintain these indices above the 50 mark. China's currency has depreciated an amount almost equivalent to the level of tariffs that have been implemented, benefiting trade. Additionally, the central bank has provided stimulus by reducing reserve requirements, which should boost credit creation. Chinese economic data deserves close observation over the coming quarters to determine whether these measures will be sufficient to maintain growth.

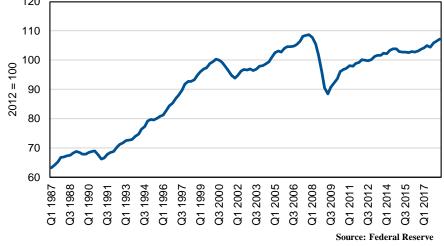
#### Economy

As of September 30, 2018

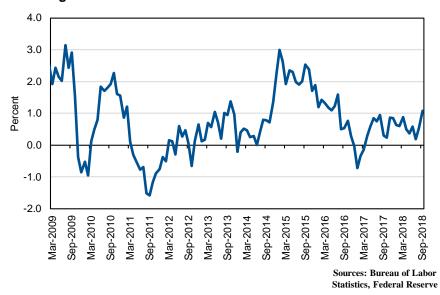
#### **Bond Issuances**



## U.S. Manufacturing Output



Real Wage Growth

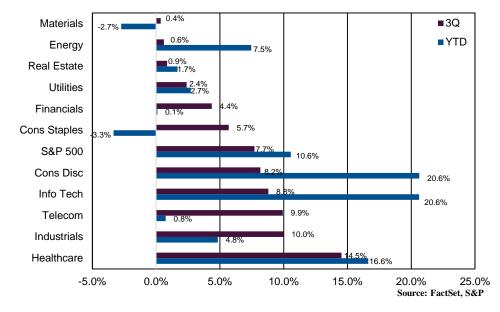


#### U.S. economy resilient, global economy less certain

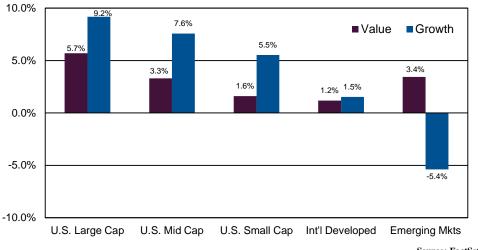
- Trade continued at the forefront of policy decisions during the quarter. NAFTA was reconfigured into the USMCA, with changes to tariff thresholds, wage minimums, and subsidization. A trade dispute mechanism was retained, helping bring Canada to the final deal. Tariffs on Chinese goods were expanded further and contributed to unease across many sectors, especially agriculture, manufacturing, and technology. Emerging market economies bore the brunt of trade fear repercussions, as unsettled trade policies limited the ability of corporations to effectively plan long-term and manage short-term commodity price fluctuations.
- The unemployment rate fell to 3.7% in September, making it more difficult to fill positions absent wage incentives. Wages are slowly ascending, though new positions have lower wages than those paid to retiring workers, weighing on wage increases. Inflation at quarter end was 2.3%, and has yet to exhibit a consistent tendency to rise. While the Federal Reserve has maintained its policy of gradually increasing borrowing rates, investors are becoming wary of the process of policy normalization
- Corporate profits and consumer confidence continued to advance, despite certain sectors having been hurt by trade and tariff uncertainties. Although U.S. third quarter GDP is forecast to grow between a 3% and 4% annualized rate, the IMF cut its growth forecast slightly for 2018 and 2019 reflecting an anticipated slowdown in the U.S. and other developed markets, most notably the E.U. Bond issuance remained strong, especially for Treasuries, while mortgage related issuances fell.

Equities

As of September 30, 2018

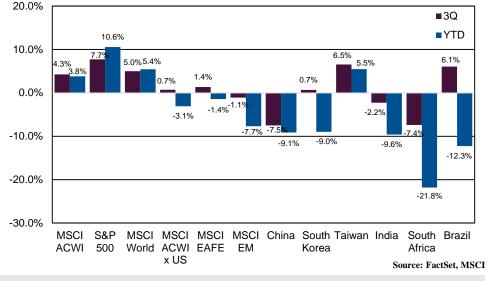


#### Third Quarter and YTD S&P 500 Sector Returns



Growth Outperformed Value in the U.S. During the Third Quarter

Source: FactSet



#### Third Quarter and YTD World Equity Market Returns

#### U.S. growth continues to do well while emerging markets struggle

- The S&P 500 Index returned +7.7% during the third quarter, bringing the YTD return to +10.6%. All sectors exhibited positive returns during the quarter with Healthcare the strongest performer. Year-to-date, Consumer Discretionary and Information Technology have been the best performing sectors, followed by Healthcare, while Materials and Consumer Staples are the only sectors with negative returns for the year-to-date period.
- The U.S. equity market experienced the strongest performance during the third quarter. International developed markets were marginally positive while emerging market equities continued to be challenged during the third quarter, returning -1.1%. Year-to-date, U.S. equity returns far surpassed the -1.4% and -7.7% returns of international developed and emerging market equities, respectively. Currency losses of nearly 5% had a significant impact on emerging market returns YTD. The local currency return to emerging market equities was -2.9% YTD. China and South Africa were particularly weak during the quarter while Taiwan and Brazil were stronger markets. The U.S.-China trade war rhetoric continues to weigh on the Chinese equity market while the U.S. stock market remains at or near highs.
- Growth continued to outperform the Value during the third quarter within the U.S. International developed equities saw a very slim performance differential between styles. Within emerging markets, Value significantly outperformed Growth (nearly 9%), in a reversal of the past several year's trend. The emerging markets Growth style also was the only segment to exhibit negative returns during the third quarter.



#### **Fixed Income**

As of September 30, 2018

#### Duration – Adjusted Excess Returns to Treasuries (bps)

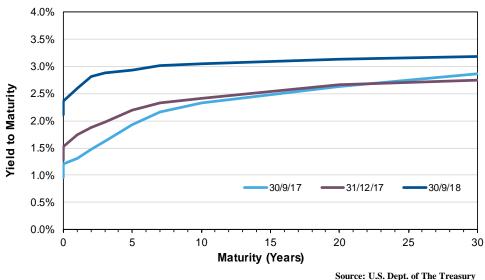
|            | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 1Q18 | 2Q18 | 3Q18 |
|------------|------|------|------|------|------|------|------|------|------|------|
| Aggregate  | -114 | 226  | 93   | 10   | -53  | 138  | 121  | -31  | -23  | 53   |
| Agency     | -25  | 166  | 1    | 10   | -133 | 121  | 148  | 6    | -15  | 44   |
| MBS        | -106 | 91   | 98   | 40   | -5   | -11  | 52   | -39  | 15   | 17   |
| ABS        | 52   | 246  | 24   | 53   | 44   | 95   | 92   | -19  | 17   | 30   |
| CMBS       | 47   | 841  | 97   | 108  | -28  | 236  | 158  | -7   | 0    | 76   |
| Credit     | -322 | 693  | 226  | -18  | -169 | 442  | 335  | -68  | -91  | 168  |
| High Yield | -240 | 1394 | 923  | -112 | -577 | 1573 | 610  | -17  | 96   | 246  |
| EMD (USD)  | -537 | 1503 | -32  | -120 | 3    | 880  | 627  | -26  | -242 | 211  |

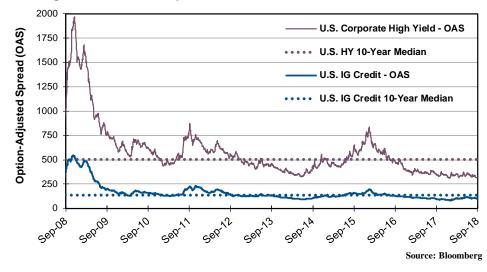
Best Period Second Best Period Worst Period

od 📃 Second Worst Period

Source: Bloomberg

#### U.S. Treasury Yield Curve Change





#### **Trailing Ten-Year Credit Spreads**

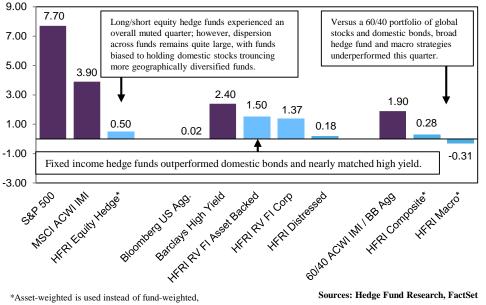
#### Rates higher amid solid economic growth

- The Fed raised rates 0.25% at the September Federal Open Market Committee ("FOMC") meeting, setting the Federal Funds Rate target at 2.00% to 2.25%. Strong economic data led to higher yields across the entire maturity spectrum even with significant uncertainty surrounding trade. Despite higher Treasury rates, most spread sectors were able to generate positive returns on the quarter. While U.S. Treasuries (-0.59%) posted a negative total return, TIPS (-1.05%) posted the lowest quarterly return within fixed income as inflation expectations remained subdued.
- Investment-grade corporate spreads tightened 17 basis points ("bps") in the quarter, to +106 bps, as an uptick in institutional demand and steady retail inflows absorbed robust issuance. Lower quality, shorter duration credit outperformed as high yield (+2.40%) outpaced investment grade (+0.97 %) corporates. and was the top performing sector overall on the quarter.
- Within structured products, CMBS (+0.46%) was the top performer as the sector continued to benefit from favorable supply/demand technicals. Non-Agency CMBS tightened 13 bps on the quarter to +73 bps, making it one of only two investment grade sectors to tighten on a year-to-date basis.
- Emerging markets debt (USD) posted its first positive quarterly return on the year (+1.79%). The asset class rallied towards the end of the quarter as Turkey's central bank hiked rates to defend its currency and emerging market contagion fears abated.

### Capital Markets Review Alternative Investments

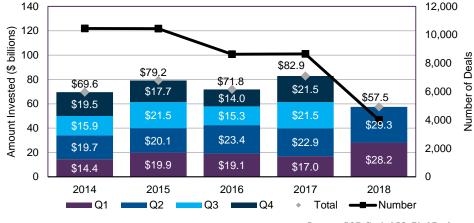
As of September 30, 2018

#### Hedge Funds vs Long-Only: Total Returns 2018 Q3 (%)

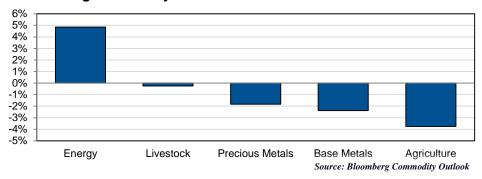


\*Asset-weighted is used instead of fund-weighted, as it is available and more indicative of the universe. Sources: Hedge Fund Research, FactSet

U.S. Venture Capital Deal Flow - All



Sources: S&P Capital IQ, PitchBook <sup>1</sup> Through June 30, 2018



#### Bloomberg Commodity Index Attribution – 2018 YTD

#### Global alternatives rise with risk assets

- Hedge Funds: Hedge fund strategies generally experienced muted performance during the quarter. Domestic growth stocks helped equity-focused strategies, although long European and EM equity exposures proved to be headwinds to performance. Within long/short equity, funds struggled to generate alpha during the quarter, and total alpha for the year continues to lag the previous year. Net exposures across equity long/short funds have generally decreased as funds added to their short positioning. Fixed income fund performance was driven largely by structured credit and certain relative value arbitrage strategies, while both macro discretionary and systematic strategies generated flat to negative returns on average during the quarter. Mergers & acquisitions activity slightly slowed down during the quarter and the notable break of a large merger deal between NXP and Qualcomm was a headwind to the performance of many event-driven funds.
- **Real Assets:** Year-to-date, the energy sector, driven by crude oil, is up +17.6% versus other commodities such as metals, which are down -11.4%. We have seen growing oil demand and tighter supplies push the price of oil to nearly 4-year highs. That said, there continues to be a significant disparity between crude oil strength and broader commodities, which may not be sustainable.
- Private Capital Markets: U.S. Venture Capital Deal Flow: The U.S. venture capital market deal flow for the second quarter of 2018 was the strongest second quarter, on a deal value basis, in the past four years and was the strongest, on a deal count basis, in the past two years. The first half of 2018 saw a total of 94 financings completed, of at least \$100 million, and 42 unicorn financings (defined as any company with an enterprise value over \$1 billion), which is on pace to beat 2017's total unicorn financings of 72. The increase in the size of financings could largely be due to the fact that companies are entering the venture capital lifecycle much later, with the median age of angel/seed, series A, Series B, Series C and Series D+ investments rising to new heights of 3.1, 3.9, 5.2, 6.8 and 8.2 years, respectively.

### Index Returns

As of September 30, 2018

(Percentage Return)

|   | Quarter | Year<br>To<br>Date | 1<br>Year | 2<br>Years | 3<br>Years | 5<br>Years | 7<br>Years | 10<br>Years |
|---|---------|--------------------|-----------|------------|------------|------------|------------|-------------|
| Domestic Equity Indices                       | quartor | Dato               | 1001      |            | - Fourte   | rouro      | louio      | roure       |
| Dow Jones Wilshire 5000                       | 7.3     | 10.5               | 17.6      | 18.2       | 17.3       | 13.6       | 16.9       | 12.0        |
| S&P 500                                       | 7.7     | 10.6               | 17.9      | 18.3       | 17.3       | 13.9       | 16.9       | 12.0        |
| Russell 1000 Index                            | 7.4     | 10.5               | 17.8      | 18.2       | 17.1       | 13.7       | 16.9       | 12.1        |
| Russell 1000 Growth Index                     | 9.2     | 17.1               | 26.3      | 24.1       | 20.6       | 16.6       | 18.7       | 14.3        |
| ussell 1000 Value Index                       | 5.7     | 3.9                | 9.5       | 12.3       | 13.6       | 10.7       | 15.0       | 9.8         |
| Lussell Midcap Index                          | 5.0     | 7.5                | 14.0      | 14.6       | 14.5       | 11.7       | 16.1       | 12.3        |
| ussell Midcap Growth Index                    | 7.6     | 13.4               | 21.1      | 19.4       | 16.6       | 13.0       | 16.9       | 13.5        |
| ussell Midcap Value Index                     | 3.3     | 3.1                | 8.8       | 11.1       | 13.1       | 10.7       | 15.5       | 11.3        |
| ussell 2000 Index                             | 3.6     | 11.5               | 15.2      | 18.0       | 17.1       | 11.1       | 16.4       | 11.1        |
| ussell 2000 Growth Index                      | 5.5     | 15.8               | 21.1      | 21.0       | 18.0       | 12.1       | 17.5       | 12.7        |
| ussell 2000 Value Index                       | 1.6     | 7.1                | 9.3       | 14.8       | 16.1       | 9.9        | 15.3       | 9.5         |
| nternational Equity Indices                   |         |                    |           |            |            |            |            |             |
| ISCI EAFE                                     | 1.4     | -1.4               | 2.7       | 10.6       | 9.2        | 4.4        | 8.3        | 5.4         |
| SCI EAFE Growth Index                         | 1.5     | 0.6                | 5.8       | 10.7       | 10.3       | 5.6        | 9.3        | 6.2         |
| SCI EAFE Value Index                          | 1.2     | -3.5               | -0.4      | 10.5       | 8.1        | 3.1        | 7.3        | 4.5         |
| ISCI EAFE Small Cap                           | -0.9    | -2.2               | 3.7       | 12.4       | 12.4       | 8.0        | 11.5       | 9.7         |
| ISCI AC World Index                           | 4.3     | 3.8                | 9.8       | 14.1       | 13.4       | 8.7        | 11.6       | 8.2         |
| ISCI AC World ex US                           | 0.7     | -3.1               | 1.8       | 10.3       | 10.0       | 4.1        | 7.2        | 5.2         |
| ISCI Emerging Markets Index                   | -1.1    | -7.7               | -0.8      | 10.2       | 12.4       | 3.6        | 5.0        | 5.4         |
| ixed Income Indices                           |         |                    |           |            |            |            |            |             |
| lmbg. Barc. U.S. Aggregate                    | 0.0     | -1.6               | -1.2      | -0.6       | 1.3        | 2.2        | 2.0        | 3.8         |
| Imbg. Barc. Intermed. U.S. Government/Credit  | 0.2     | -0.8               | -1.0      | -0.4       | 0.9        | 1.5        | 1.6        | 3.2         |
| Imbg. Barc. U.S. Long Government/Credit       | -0.5    | -5.4               | -2.7      | -1.8       | 3.4        | 5.2        | 3.9        | 7.1         |
| lmbg. Barc. U.S. Corp: High Yield             | 2.4     | 2.6                | 3.0       | 5.9        | 8.1        | 5.5        | 7.6        | 9.5         |
| CE BofAML 3 Month U.S. T-Bill                 | 0.5     | 1.3                | 1.6       | 1.1        | 0.8        | 0.5        | 0.4        | 0.3         |
| Imbg. Barc. U.S. TIPS                         | -0.8    | -0.8               | 0.4       | -0.2       | 2.0        | 1.4        | 1.3        | 3.3         |
| ISE Non-U.S. World Government Bond            | -2.2    | -3.1               | -1.6      | -2.4       | 2.4        | -0.2       | -0.5       | 2.0         |
| M EMBI Global Diversified (external currency) | 2.3     | -3.0               | -1.9      | 1.3        | 6.0        | 5.4        | 5.9        | 7.5         |
| M GBI-EM Global Diversified (local currency)  | -1.8    | -8.1               | -7.4      | -0.3       | 5.2        | -1.7       | 0.0        | 2.7         |
| eal Asset Indices                             |         |                    |           |            |            |            |            |             |
| loomberg Commodity Index Total Return         | -2.0    | -2.0               | 2.6       | 1.1        | -0.1       | -7.2       | -6.5       | -6.2        |
| ow Jones Wilshire REIT                        | 3.2     | 4.8                | 6.6       | 3.3        | 8.0        | 9.8        | 12.1       | 7.6         |

Returns for periods greater than one year are annualized.





## **Portfolio Review**



## **El Camino Hospital Investment Committee Scorecard** September 30, 2018

| Key Performance Indicator                 | Status | El Camino | Benchmark                 | El Camino | Benchmark  | El Camino | Benchmark              | FY19<br>Year-end<br>Budget | Expectation<br>Per Asset<br>Allocation |
|---|--------|-----------|---------------------------|-----------|------------|-----------|------------------------|----------------------------|--|
| Investment Performance                    |        | 3Q        | 2018                      | Fiscal Ye | ar-to-date |           | e Inception<br>alized) |                            | 2018                                   |
| Surplus cash balance*                     |        | \$994.7   |                           |           |            |           |                        | \$886.6                    |  |
| Surplus cash return                       |        | 2.3%      | 2.0%                      | 2.3%      | 2.0%       | 5.8%      | 5.5%                   | 3.2%                       | 5.3%                                   |
| Cash balance plan balance (millions)      |        | \$274.7   |                           |           |            |           |                        | \$276.9                    |  |
| Cash balance plan return                  |        | 2.8%      | 2.5%                      | 2.8%      | 2.5%       | 8.3%      | 7.4%                   | 6.0%                       | 5.7%                                   |
| 403(b) plan balance (millions)            |        | \$481.7   |                           |           |            |           |                        |                            |  |
| Risk vs. Return                           |        | 3-y       | rear                      |           |            |           | e Inception<br>alized) |                            | 2018                                   |
| Surplus cash Sharpe ratio                 |        | 1.59      | 1.52                      |           |            | 1.34      | 1.27                   |                            | 0.43                                   |
| Net of fee return                         |        | 7.5%      | 7.1%                      |           |            | 5.8%      | 5.5%                   |                            | 5.3%                                   |
| Standard deviation                        |        | 4.1%      | 4.0%                      |           |            | 4.0%      | 4.0%                   |                            | 6.7%                                   |
| Cash balance Sharpe ratio                 |        | 1.64      | 1.55                      |           |            | 1.45      | 1.34                   |                            | 0.40                                   |
| Net of fee return                         |        | 9.4%      | 8.5%                      |           |            | 8.3%      | 7.4%                   |                            | 5.7%                                   |
| Standard deviation                        |        | 5.1%      | 4.8%                      |           |            | 5.3%      | 5.1%                   |                            | 8.1%                                   |
| Asset Allocation                          |        | 3Q        | 2018                      |           |            |           |                        |                            |  |
| Surplus cash absolute variances to target |        | 6.2%      | < 10%                     |           |            |           |                        |                            |  |
| Cash balance absolute variances to target |        | 6.2%      | < 10%                     |           |            |           |                        |                            |  |
| Manager Compliance                        |        | 3Q        | 2018                      |           |            |           |                        |                            |  |
| Surplus cash manager flags                |        | 20        | <24 Green<br><30 Yellow   |           |            |           |                        |                            |  |
| Cash balance plan manager flags           |        | 23        | < 27 Green<br>< 34 Yellow |           | -          |           | -                      |                            |  |



\*Excludes debt reserve funds (~\$160 mm), District assets (~\$31 mm), and balance sheet cash not in investable portfolio (~\$94 mm). Includes Foundation (~\$28 mm) and Concern (~\$13 mm) assets. Budget adds back in current Foundation and Concern assets.

## **Total Surplus Cash Assets**

As of September 30, 2018

|   | Allocatio               | n     |                   |                     |                   |                      | Performan         | ice(%)            |                   |                    |                     |
|---|-------------------------|-------|-------------------|---------------------|-------------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------------|
|   | Market<br>Value<br>(\$) | %     | Quarter           | Year<br>To<br>Date  | Fiscal<br>YTD     | 1<br>Year            | 3<br>Years        | 5<br>Years        | 10<br>Years       | Since<br>Inception | Inception<br>Period |
| Total Surplus Cash (1)  | 1,185,317,416           | 100.0 | 2.0               | 3.3                 | 2.0               | 5.4                  | 6.4               | 4.9               | 6.0               | 5.3                | 5y 11m              |
| <b>Total Surplus Cash ex District / Debt Reserves (1)</b><br>Surplus Cash Total Benchmark           | 994,655,561             | 83.9  | <b>2.3</b> 2.0    | <b>3.8</b><br>2.2   | <b>2.3</b> 2.0    | <b>6.5</b><br>4.9    | <b>7.6</b><br>7.1 | <b>5.6</b><br>5.4 | <b>6.3</b><br>5.7 | <b>5.8</b><br>5.5  | 5y 11m              |
| <b>Total Surplus Cash ex District / CONCERN / Debt Reserves (1)</b><br>Surplus Cash Total Benchmark | 981,569,028             | 82.8  | <b>2.3</b> 2.0    | <b>3.8</b><br>2.2   | <b>2.3</b> 2.0    | <b>6.6</b><br>4.9    | <b>7.7</b><br>7.1 | <b>5.7</b><br>5.4 | <b>6.2</b><br>5.7 | <b>5.9</b><br>5.5  | 5y 11m              |
| Total CONCERN<br>CONCERN Total Benchmark  | 13,086,533              | 1.1   | <b>0.1</b><br>0.0 | <b>-1.2</b><br>-1.6 | <b>0.1</b><br>0.0 | - <b>0.8</b><br>-1.2 | -                 | -                 | -                 | <b>1.4</b><br>1.2  | 2y 8m               |
| Met West Total Return Bond Plan - CONCERN<br>Blmbg. Barc. U.S. Aggregate                            | 12,999,873              | 1.1   | 0.1<br>0.0        | -1.2<br>-1.6        | 0.1<br>0.0        | -0.8<br>-1.2         | 1.4<br>1.3        | 2.3<br>2.2        | - 3.8             | 1.4<br>1.2         | 2y 8m               |
| Cash Account - CONCERN<br>90 Day U.S. Treasury Bill   | 86,660                  | 0.0   | 0.3<br>0.5        | 0.7<br>1.3          | 0.3<br>0.5        | 0.9<br>1.6           | 0.8               | -<br>0.5          | 0.3               | 0.6<br>0.9         | 2y 8m               |
| <b>District - Barrow Hanley</b><br>Blmbg. Barc. 1-3 Govt  | 31,161,780              | 2.6   | <b>0.2</b> 0.2    | <b>0.2</b> 0.3      | <b>0.2</b> 0.2    | <b>0.0</b><br>0.0    | <b>0.5</b><br>0.4 | <b>0.5</b><br>0.6 | <b>1.4</b><br>1.2 | <b>0.5</b><br>0.6  | 5y 11m              |
| <b>Total Debt Reserves</b><br>90 Day U.S. Treasury Bill   | 159,500,075             | 13.5  | <b>0.5</b> 0.5    | <b>1.5</b><br>1.3   | <b>0.5</b><br>0.5 | <b>1.8</b><br>1.6    | <b>1.1</b><br>0.8 | -<br>0.5          | 0.3               | <b>1.0</b><br>0.7  | 3y 5m               |
| Ponder Debt Reserves - 2015<br>90 Day U.S. Treasury Bill  | 9,067,562               | 0.8   | 0.5<br>0.5        | 1.3<br>1.3          | 0.5<br>0.5        | 1.7<br>1.6           | 1.0<br>0.8        | 0.5               | 0.3               | 0.9<br>0.7         | 3y 5m               |
| Ponder Debt Reserves - 2017<br>90 Day U.S. Treasury Bill  | 147,663,555             | 12.5  | 0.5<br>0.5        | 1.5<br>1.3          | 0.5<br>0.5        | 1.8<br>1.6           | - 0.8             | 0.5               | 0.3               | 1.5<br>1.3         | 1y 7m               |
| Capitalized Interest 2017<br>90 Day U.S. Treasury Bill  | 2,768,958               | 0.2   | 0.4<br>0.5        | 1.3<br>1.3          | 0.4<br>0.5        | 1.6<br>1.6           | 0.8               | 0.5               | 0.3               | 1.4<br>1.3         | 1y 7m               |

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.

(1) Includes Foundation assets.

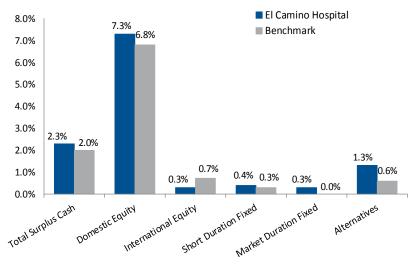


# Surplus Cash Executive Summary

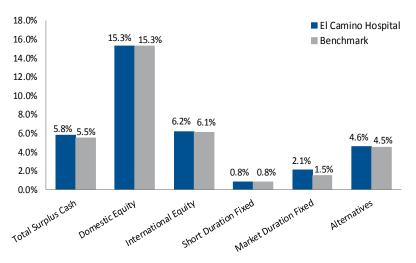
Dashboard

As of September 30, 2018

#### Performance: Most Recent Quarter



#### Performance: Since Inception<sup>1</sup>



#### **Asset Allocation**

| Manager               | Total<br>Assets<br>(\$, mil.) | Percent<br>of Total | Target<br>Allocation | Variance<br>to Target | Target<br>Range | Within<br>Policy<br>Range |
|-----------------------|-------------------------------|---------------------|----------------------|-----------------------|-----------------|---------------------------|
| Domestic Equity       | \$271.2                       | 27.3%               | 25.0%                | + 2.3%                | 20-30%          | Yes                       |
| International Equity  | \$145.4                       | 14.6%               | 15.0%                | - 0.4%                | 10-20%          | Yes                       |
| Short-Duration Fixed  | \$107.5                       | 10.8%               | 10.0%                | + 0.8%                | 8-12%           | Yes                       |
| Market-Duration Fixed | \$296.7                       | 29.8%               | 30.0%                | - 0.2%                | 25-35%          | Yes                       |
| Alternatives          | \$173.9                       | 17.5%               | 20.0%                | - 2.5%                | 17-23%          | Yes                       |
| Total (X District)    | \$994.7                       | 100.0%              |                      |                       |                 |                           |

#### Portfolio Updates

#### Manager News/Issues

- The Surplus Cash Portfolio returned +2.3% for the quarter, outperforming its benchmark by 30 bps. Over the trailing one year period, the Portfolio returned +6.4%, outpacing the benchmark by approximately 150 bps.
- Relative outperformance during the quarter was driven by favorable manager results, particularly within the Domestic Equity and Alternatives Composites, which outperformed their benchmarks by 50 and 70 bps, respectively.
- Notable outperformers included small cap growth manager Conestoga (+10.5%) and international growth manager Walter Scott (+3.0%), which outperformed their benchmarks by 500 and 230 bps, respectively.

#### Third Quarter Funding News/Issues

- During the quarter, the Hospital added \$25.0 mm to the portfolio as follows: \$2.0 million to Wellington Small Cap Value, \$7.0 to Harding Loevner Emerging Equity, \$5.0 million to Dodge & Cox Fixed Income, \$4.0 million to MetWest Fixed Income, \$2.0 million to Barrow Hanley Short Duration, and \$5 million along with an existing \$5.0 million in the Direct Hedge Fund cash account to fund Carlson Black Diamond Arbitrage Fund.
- FirTree (\$42,194), Walton Street Real Estate VII (\$0.3 mm), and Oaktree Real Estate VI (\$1.2 mm) made distributions, while Walton Street Real Estate VIII called \$1.3 mm in capital and required a management fee of \$21,925.
- \$4.0 million was invested in Moore Macro Fund on July 1.
- A \$20 million commitment to the AG Realty Value Fund X was made after quarter-end.

<sup>1</sup> Reflects the date Pavilion's recommended portfolio was implemented (November 1, 2012).

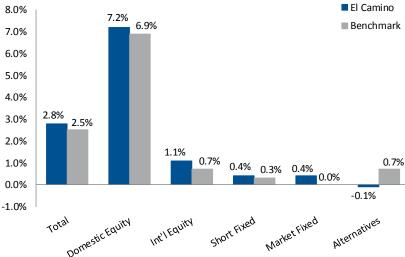


# **Cash Balance Plan Executive Summary**

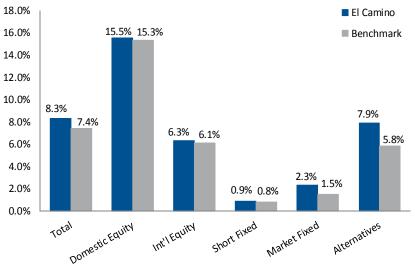
#### Dashboard

As of September 30, 2018

#### Performance: Most Recent Quarter



#### Performance: Since Inception<sup>1</sup>



#### **Asset Allocation**

| Manager               | Total<br>Assets<br>(\$, mil.) | Percent<br>of Total | Target<br>Allocation | Variance<br>to Target | Target<br>Range | Within<br>Policy<br>Range |
|-----------------------|-------------------------------|---------------------|----------------------|-----------------------|-----------------|---------------------------|
| Domestic Equity       | \$ 92.7                       | 33.8%               | 32.0%                | + 1.8%                | 27-37%          | Yes                       |
| International Equity  | \$ 48.6                       | 17.7%               | 18.0%                | - 0.3%                | 15-21%          | Yes                       |
| Short-Duration Fixed  | \$ 17.4                       | 6.3%                | 5.0%                 | + 1.3%                | 0-8%            | Yes                       |
| Market-Duration Fixed | \$ 68.5                       | 24.9%               | 25.0%                | - 0.1%                | 20-30%          | Yes                       |
| Alternatives          | \$ 47.5                       | 17.3%               | 20.0%                | - 2.7%                | 17-23%          | Yes                       |
| Total                 | \$274.7                       | 100.0%              |                      |                       |                 |                           |

#### Portfolio Updates

#### Manager News/Issues

- The Cash Balance Plan returned +2.8% for the quarter, outperforming its benchmark by 30 bps. Over the trailing one year period, the Plan returned +8.6%, outpacing the benchmark by approximately 230 bps.
- Relative outperformance during the quarter was driven by both favorable manager results and asset allocation positioning. Manager results within the domestic small cap equity and international equity composites were the primary contributers to outperformance, as the domestic small cap equity and international equity and international equity composites outperformed their benchmarks by 360 and 40 bps, respectively
- Notable outperformers included small cap growth manager Conestoga (+10.5%) and international growth manager Walter Scott (+3.0%), which outperformed their benchmarks by 500 and 230 bps, respectively.

#### Third Quarter Funding News/Issues

- Oaktree Real Estate VI distributed \$0.7 million.
- Walton Street Real Estate Fund VII distributed \$0.2 million.
- Walton Street Real Estate Fund VIII called \$1.0 million in capital, and required a \$16,865 management fee.
- In September, a \$3.2 million employer contribution took place along with transactions to rebalance the portfolio: sold \$3.7 million from Touchstone Sands, sold \$1 million from Vanguard S&P 500 Index, sold \$1.4 million from Conestoga, purchased \$1.2 million of Dodge & Cox Income Fund, purchased \$1.5 million of MetWest, added \$2.1 million to Barrow Short-Term Fixed, purchased \$2.0 million of Lighthouse Global Long/Short, and purchased \$2.5 million of Pointer Offshore III.

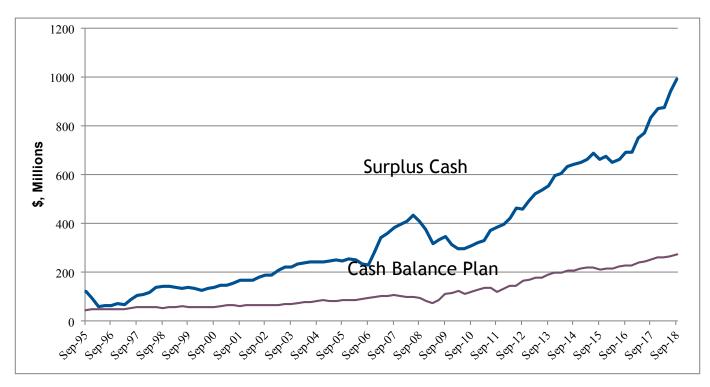
<sup>1</sup> Reflects the date Pavilion's recommended portfolio was implemented (November 1, 2012).



#### Market Value Reconciliation

As of September 30, 2018

|                            |         |          | Surplus Cash |         |             |         | Ca      | sh Balance Pl | an      |             |
|----------------------------|---------|----------|--------------|---------|-------------|---------|---------|---------------|---------|-------------|
| \$ in Millions             | 2014    | 2015     | 2016         | 2017    | YTD<br>2018 | 2014    | 2015    | 2016          | 2017    | YTD<br>2018 |
| Beginning Market Value     | \$596.3 | \$651.6  | \$677.5      | \$694.7 | \$872.3     | \$198.3 | \$213.7 | \$216.8       | \$228.1 | \$259.3     |
| Net Cash Flow              | \$27.4  | \$27.0   | (\$17.5)     | \$89.0  | \$83.4      | \$3.8   | \$3.8   | \$0.4         | (\$0.8) | \$0.4       |
| Income                     | \$12.3  | \$12.6   | \$12.4       | \$14.2  | \$11.5      | \$3.4   | \$3.4   | \$3.4         | \$3.6   | \$2.6       |
| Realized Gain/(Loss)       | \$10.4  | \$4.4    | \$7.1        | \$9.6   | \$7.6       | \$4.7   | \$4.7   | \$4.5         | \$2.2   | \$9.2       |
| Unrealized Gain/(Loss)     | \$5.3   | (\$18.0) | \$15.1       | \$64.8  | \$19.9      | \$3.4   | \$2.6   | \$3.0         | \$26.2  | \$3.2       |
| Capital App/(Dep)          | \$27.9  | (\$1.0)  | \$34.6       | \$88.6  | \$38.9      | \$11.5  | \$10.7  | \$10.9        | \$32.0  | \$14.9      |
| End of Period Market Value | \$651.6 | \$677.5  | \$694.7      | \$872.3 | \$994.7     | \$213.7 | \$228.2 | \$228.1       | \$259.3 | \$274.7     |
| Return Net of Fees         | 4.4%    | -0.2%    | 5.2%         | 11.8%   | 3.7%        | 5.6%    | 1.1%    | 4.9%          | 14.5%   | 5.4%        |



<sup>1</sup>Beginning 8/1/2012, Surplus Cash market values represent the Surplus Cash portfolio excluding District assets, with \$13.9 million of District assets shown as a cash outflow in the third quarter of 2012.



## Performance Summary

#### Compliance Checklist

As of September 30, 2018

|   |                           |   |                  | Short-Term     |                  |                  | Longer-Term    |                  |
|---|---------------------------|---|------------------|----------------|------------------|------------------|----------------|------------------|
| Fund Name   | Qualitative<br>Compliance | Performance<br>Compliance   | 3 Year<br>Return | 3 Year<br>Rank | 3 Year<br>Sharpe | 5 Year<br>Return | 5 Year<br>Rank | 5 Year<br>Sharpe |
| Sands Large Cap Growth (Touchstone) - Both Plans      | ×                         | V   | ×                | V              | *                | ×                | ×              | *                |
| Barrow Hanley Large Cap Value - Surplus Cash          | <b>v</b>                  | <ul> <li>Image: A set of the set of the</li></ul> | V                | $\checkmark$   | $\checkmark$     | $\checkmark$     | $\checkmark$   | $\checkmark$     |
| Barrow Hanley Large Cap Value - Pension               | <b>v</b>                  | <ul> <li>Image: A set of the set of the</li></ul> | V                | $\checkmark$   | $\checkmark$     | $\checkmark$     | $\checkmark$   | $\checkmark$     |
| Wellington Small Cap Value - Surplus Cash             | ~                         | <b>v</b>  | ×                | *              | *                | ×                | *              | $\checkmark$     |
| Wellington Small Cap Value - Pension                  | ~                         | <b>v</b>  | ×                | *              | *                | ×                | *              | $\checkmark$     |
| Conestoga Small-Cap Fund I - Both Plans               | <b>v</b>                  | <ul> <li>Image: A set of the set of the</li></ul> | V                | $\checkmark$   | $\checkmark$     | $\checkmark$     | $\checkmark$   | $\checkmark$     |
| Walter Scott Int'l (Dreyfus) - Both Plans             | <b>v</b>                  | <ul> <li>Image: A set of the set of the</li></ul> | V                | $\checkmark$   | $\checkmark$     | $\checkmark$     | *              | $\checkmark$     |
| Causeway International Value - Both Plans             | ~                         | <b>v</b>  | ×                | *              | *                | $\checkmark$     | *              | $\checkmark$     |
| Harding Loevner Inst. Emerging Markets I - Both Plans | ~                         | <b>v</b>  | ×                | $\checkmark$   | *                | $\checkmark$     | $\checkmark$   | $\checkmark$     |
| Barrow Hanley Short Fixed - Surplus Cash              | ~                         | <b>v</b>  | $\checkmark$     | *              | $\checkmark$     | $\checkmark$     | *              | $\checkmark$     |
| Barrow Hanley Short Fixed - Pension                   | ~                         | V   | $\checkmark$     | ×              | $\checkmark$     | ×                | *              | ×                |
| Dodge & Cox Fixed - Surplus Cash                      | ~                         | V   | $\checkmark$     | $\checkmark$   | $\checkmark$     | $\checkmark$     | $\checkmark$   | $\checkmark$     |
| Dodge & Cox Fixed - Pension                           | ~                         | <b>v</b>  | $\checkmark$     | $\checkmark$   | $\checkmark$     | $\checkmark$     | $\checkmark$   | $\checkmark$     |
| MetWest Fixed - Surplus Cash                          | ~                         | <b>v</b>  | $\checkmark$     | *              | $\checkmark$     | V                | *              | $\checkmark$     |
| Met West Fixed - Pension                              | ~                         | <b>v</b>  | $\checkmark$     | *              | $\checkmark$     | V                | *              | $\checkmark$     |
| Lighthouse Diversified - Pension[CE]                  | ×                         | <b>v</b>  | $\checkmark$     |                | $\checkmark$     | V                |                | $\checkmark$     |
| Pointer Offshore LTD - Pension                        | ~                         | V   | $\checkmark$     |                | *                | $\checkmark$     |                | $\checkmark$     |

#### Legend

Goals met or no material changeGoals not met or material changes

| Portfolio   | Score Factor           | Comments  |
|---|------------------------|---|
| Sands Large Cap Growth (Touchstone) - Both<br>Plans | Performance Compliance | Strong outperformance in 2017 and the first half of the year are starting to offset the effect of strong style headwinds that Sands faced in 2016. This is the type of rebound we would expect from Sands; it is a high tracking error strategy that will have periods of sharp underperformance at times, but over the long-term we expect Sands to outperform.  |
| Wellington Small Cap Value - Surplus Cash           | Performance Compliance | While we are disappointed with underperformance over the three-year period, Wellington has not performed outside of expectations. This is a quality-oriented value manager which we would expect to lag in a lower quality, growth-oriented market. 2016 was particularly challenging for the strategy to keep up, as the benchmark was up nearly 32%. We expect this manager to add value in down markets, like 2015, and believe that patience will be rewarded over the long-term. |
| Walter Scott Int'l (Dreyfus) - Both Plans           | Qualitative Compliance | As previously announced, Executive Chairman and Investment Executive team member Rodger Nisbet left the firm in August after twenty-five years at the firm. Managing Director Jane Henderson assumed the role of interim Chair of the Board. Pavilion will continue to monitor the firm for any further notable departures or significant outflows. At this time, we recommend clients retain Walter Scott.   |
| Causeway International Value - Both Plans           | Qualitative Compliance | At the end of the second quarter, Causeway announced it was expanding its investible universe of emerging markets stocks beyond South Korea and certain Chinese stocks. The firm's initial estimate is that stocks located in the market segment outside of those two countries will not likely result in more than a 5% aggregate weight of the total portfolio. There are no immediate plans to increase the maximum allowable exposure to EM within the strategy.                  |



Performance compliance represents Pavilion's view on manager performance relative to Pavilion's expectations for performance, based primarily on manager investment philosophy and process. The three and five year return, rank and Sharpe ratio goals are as follows: the annualized return exceeds the benchmark's return, the manager's peer group rank is better than the 50th percentile, and the manager's Sharpe ratio exceeds the benchmark's.

# Performance Summary

#### **Compliance Checklist**

As of September 30, 2018

| Portfolio  | Score Factor           | Comments   |
|--|------------------------|--|
| Harding Loevner Inst. Emerging Markets I -<br>Both Plans | Qualitative Compliance | Effective July 2nd, Scott Crawshaw became a co-lead portfolio Manager on the strategy, replacing Rusty Johnson. Mr. Crawshaw has served as a paper portfolio manager on the strategy since 2014. Mr. Johnson continues to serve as an analyst of emerging market companies and will manage a paper portfolio. As a reminder, paper portfolios provide signals of timely investment opportunities for the co-lead PMs to consider as they manage the model portfolio. Harding Loevner made the co-lead PM assignment changes to provide Mr. Johnson flexibility to address a pressing health issue. |
| Barrow Hanley Short Fixed - Surplus Cash                 | Qualitative Compliance | In August 2018, BHMS announced David Hardin, Managing Director and Fixed Income Portfolio Manager, plans to retire effective January 31, 2019.   |
| MetWest Fixed - Surplus Cash                             | Performance Compliance | Over the past few years, TCW has held the view that investors are not being fairly compensated for holding corporate credit given valuations<br>and what they perceive as weakening fundamentals. In addition, the team has been cautious on interest rate risk. The net result has been a<br>defensively positioned portfolio that has trailed more aggressive peers as spreads grind tighter and interest rates remain relatively range<br>bound. Going forward, we expect TCW to be in a positive position to deploy capital when the next bout of volatility arises.                           |
| Lighthouse Diversified - Pension                         | Qualitative Compliance | On July 1, 2018 Lighthouse officially acquired the assets of Mesirow Advanced Strategies. Pavilion's initial takeaway from early conversations with the managers is that the combination makes sense given the current industry environment. That said, uncertainties remain with the integration process, and we have placed the broader Lighthouse organization on "Watch" as a result. A more detailed memo is available upon request.  |

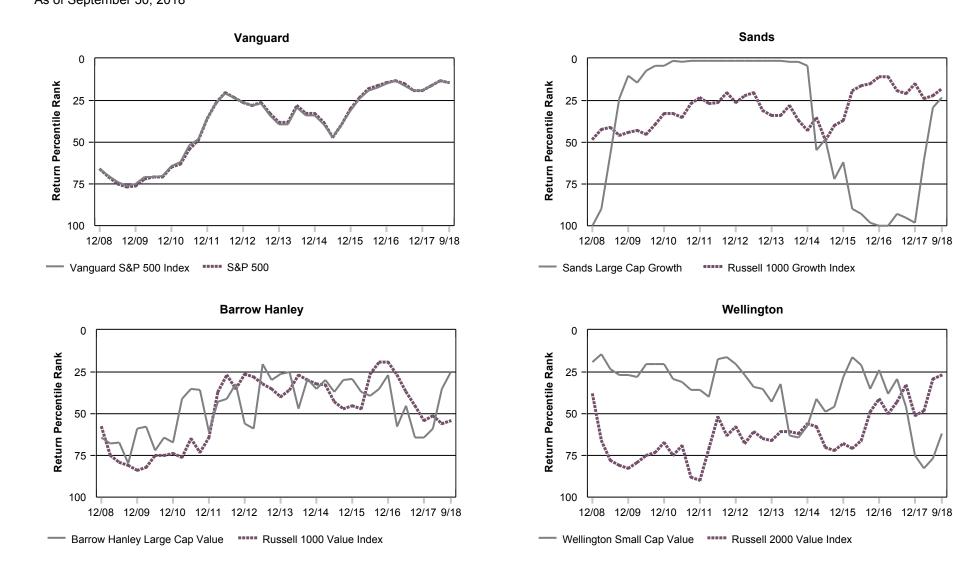


Performance compliance represents Pavilion's view on manager performance relative to Pavilion's expectations for performance, based primarily on manager investment philosophy and process. The three and five year return, rank and Sharpe ratio goals are as follows: the annualized return exceeds the benchmark's return, the manager's peer group rank is better than the 50th percentile, and the manager's Sharpe ratio exceeds the benchmark's.

#### **Manager Performance Evaluation**

Rolling 3 Year Rankings vs. Peers As of September 30, 2018

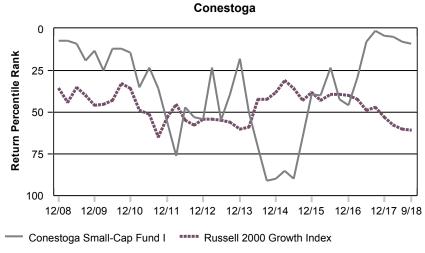
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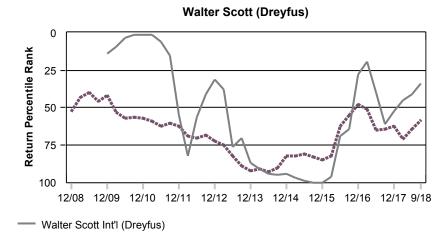


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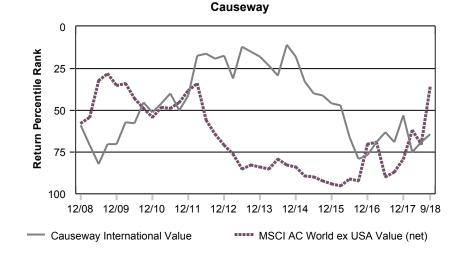
#### **Manager Performance Evaluation**

Rolling 3 Year Rankings vs. Peers As of September 30, 2018

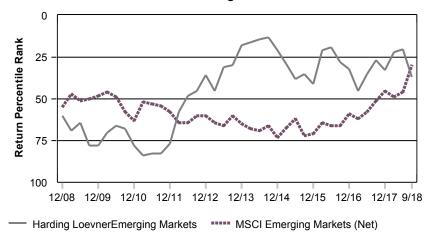




MSCI AC World ex USA Growth (Net)

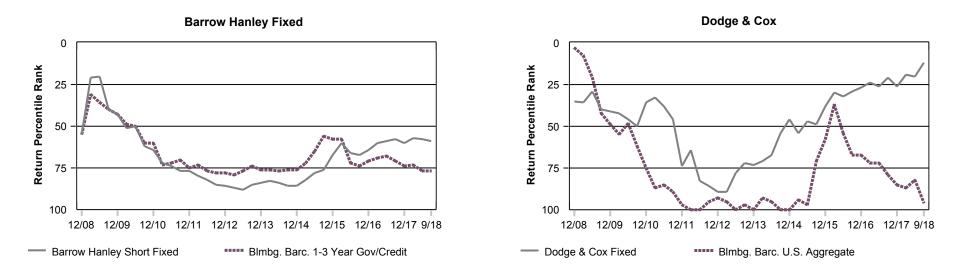




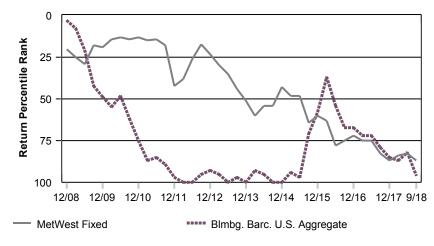


#### **Manager Performance Evaluation**

Rolling 3 Year Rankings vs. Peers







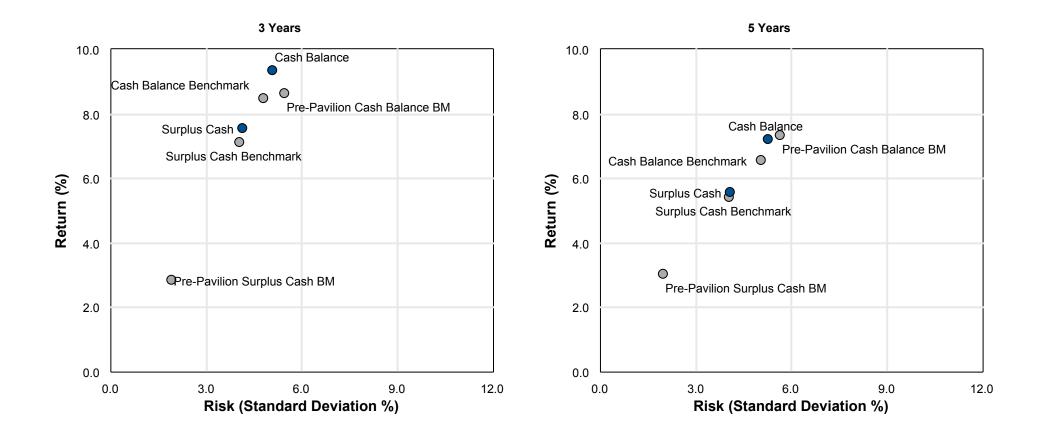


# Performance Summary



### Surplus Cash and Cash Balance Plan

Risk and Return Summary (Net of Fees) As of September 30, 2018



## Composite Asset Allocation & Performance

As of September 30, 2018

|   | Allocatio               | on _  |         |                    |               |           |                         |            |             |                    |                     |
|---|-------------------------|-------|---------|--------------------|---------------|-----------|-------------------------|------------|-------------|--------------------|---------------------|
|   | Market<br>Value<br>(\$) | %     | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | Performan<br>3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Total Surplus Cash X District             | 994,655,561             | 100.0 | 2.3     | 3.8                | 2.3           | 6.5       | 7.6                     | 5.6        | 6.3         | 5.8                | 5y 11m              |
| Surplus Cash Total Benchmark              |                         |       | 2.0     | 2.2                | 2.0           | 4.9       | 7.1                     | 5.4        | 5.7         | 5.5                |                     |
| Pre-Pavilion Surplus Cash Total Benchmark |                         |       | 0.9     | -0.2               | 0.9           | 0.7       | 2.8                     | 3.0        | 4.2         | 3.0                |                     |
| Total Surplus Cash X District X Privates  | 971,720,025             | 97.7  | 2.3     | 3.8                | 2.3           | 6.5       | 7.6                     | 5.4        | 6.3         | 5.7                | 5y 11m              |
| Surplus Cash Total Benchmark x Privates   |                         |       | 2.0     | 2.2                | 2.0           | 5.0       | 7.2                     | 5.4        | 5.8         | 5.6                |                     |
| Total Equity Composite                    | 416,600,019             | 41.9  | 4.8     | 8.3                | 4.8           | 13.6      | 14.9                    | 9.8        | 10.1        | 12.3               | 5y 11m              |
| Total Equity Benchmark - Surplus          |                         |       | 4.5     | 5.4                | 4.5           | 11.3      | 14.5                    | 10.0       | 9.3         | 12.0               |                     |
| Domestic Equity Composite                 | 271,214,749             | 27.3  | 7.3     | 14.2               | 7.3           | 20.5      | 17.7                    | 12.7       | 11.9        | 15.3               | 5y 11m              |
| Domestic Equity Benchmark - Surplus       |                         |       | 6.8     | 10.7               | 6.8           | 17.3      | 17.2                    | 13.2       | 11.2        | 15.3               |                     |
| Large Cap Equity Composite                | 220,217,266             | 22.1  | 7.3     | 13.9               | 7.3           | 20.7      | 17.4                    | 13.4       | 12.1        | 15.6               | 5y 11m              |
| Large Cap Equity Benchmark                |                         |       | 7.6     | 10.5               | 7.6           | 17.8      | 17.2                    | 13.8       | 11.2        | 15.4               |                     |
| Small Cap Equity Composite                | 50,997,482              | 5.1   | 7.2     | 15.7               | 7.2           | 19.6      | 19.1                    | 10.8       | -           | 14.4               | 5y 11m              |
| Small Cap Equity Benchmark                |                         |       | 3.6     | 11.4               | 3.6           | 15.1      | 17.1                    | 11.1       | 11.1        | 14.7               |                     |
| International Equity Composite            | 145,385,270             | 14.6  | 0.3     | -1.5               | 0.3           | 2.3       | 10.1                    | 4.2        | -           | 6.2                | 5y 11m              |
| MSCI AC World ex USA (Net)                |                         |       | 0.7     | -3.1               | 0.7           | 1.8       | 10.0                    | 4.1        | 5.2         | 6.1                |                     |



## Composite Asset Allocation & Performance

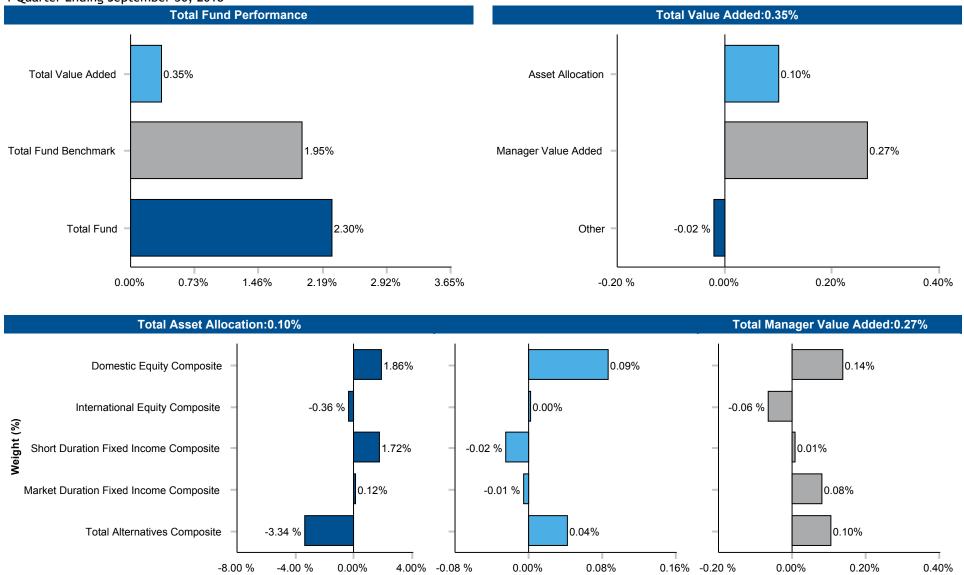
As of September 30, 2018

|   | Allocatio               | on   |         |                    |               |           | Performan  | ce(%)      |             |                    |                     |
|---|-------------------------|------|---------|--------------------|---------------|-----------|------------|------------|-------------|--------------------|---------------------|
|   | Market<br>Value<br>(\$) | %    | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Total Fixed Income Composite                    | 404,180,878             | 40.6 | 0.3     | -0.7               | 0.3           | -0.4      | 2.0        | 2.2        | 3.6         | 1.7                | 5y 11m              |
| Total Fixed Income Benchmark - Surplus          |                         |      | 0.1     | -1.1               | 0.1           | -0.9      | 1.2        | 1.9        | 3.2         | 1.4                |                     |
| Short Duration Fixed Income Composite           | 107,467,814             | 10.8 | 0.4     | 0.4                | 0.4           | 0.3       | 0.9        | 0.9        | 2.5         | 0.8                | 5y 11m              |
| Short Duration Fixed Income Benchmark - Surplus |                         |      | 0.3     | 0.4                | 0.3           | 0.2       | 0.7        | 0.8        | 2.5         | 0.8                |                     |
| Market Duration Fixed Income Composite          | 296,713,064             | 29.8 | 0.3     | -1.1               | 0.3           | -0.7      | 2.3        | 2.7        | 5.0         | 2.1                | 5y 11m              |
| Blmbg. Barc. U.S. Aggregate                     |                         |      | 0.0     | -1.6               | 0.0           | -1.2      | 1.3        | 2.2        | 3.8         | 1.5                |                     |
| Total Alternatives Composite                    | 173,874,664             | 17.5 | 1.3     | 3.9                | 1.3           | 6.8       | 4.2        | 4.8        | -           | 4.6                | 5y 5m               |
| Total Alternatives Benchmark - Surplus          |                         |      | 0.6     | 2.1                | 0.6           | 4.1       | 4.4        | 4.7        | -           | 4.5                |                     |
| Real Estate Composite                           | 22,935,536              | 2.3  | 0.4     | 3.9                | 0.4           | 4.5       | 6.0        | 10.2       | -           | 9.9                | 5y 1m               |
| NCREIF Property Index                           |                         |      | 1.7     | 5.3                | 1.7           | 7.2       | 7.8        | 9.6        | 6.4         | 9.6                |                     |
| Hedge Fund Composite                            | 150,939,128             | 15.2 | 1.4     | 3.9                | 1.4           | 7.4       | 3.6        | 3.5        | -           | 3.4                | 5y 5m               |
| HFRI Fund of Funds Composite Index              |                         |      | 0.3     | 1.0                | 0.3           | 3.1       | 3.3        | 3.2        | 2.6         | 3.1                | -                   |



#### **Attribution Analysis**

#### 1 Quarter Ending September 30, 2018



Asset Allocation Value Added

#### Average Active Weight

"Other" includes the effects of all other factors on the Fund's relative return, including rebalancing and other trading activity.



Manager Value Added

#### Manager Asset Allocation & Performance

As of September 30, 2018

|   | Allocatio               | n    | Performance(%) |                    |               |           |            |            |             |                    |                     |
|---|-------------------------|------|----------------|--------------------|---------------|-----------|------------|------------|-------------|--------------------|---------------------|
|   | Market<br>Value<br>(\$) | %    | Quarter        | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Large-Cap Equity                        |                         |      |                |                    |               |           |            |            |             |                    |                     |
| Vanguard S&P 500 Index                  | 131,305,887             | 13.2 | 7.7 (29)       | 10.5 (26)          | 7.7 (29)      | 17.9 (31) | 17.3 (15)  | 13.9 (18)  | 12.0 (28)   | 15.4 (-)           | 5y 11m              |
| S&P 500                                 |                         |      | 7.7 (29)       | 10.6 (26)          | 7.7 (29)      | 17.9 (30) | 17.3 (15)  | 13.9 (17)  | 12.0 (28)   | 15.4 (-)           |                     |
| eV Large Cap Core Median                |                         |      | 6.9            | 8.7                | 6.9           | 16.0      | 15.2       | 12.5       | 11.2        | -                  |                     |
| Sands Large Cap Growth (Touchstone)     | 45,673,036              | 4.6  | 6.5 (81)       | 29.1 (1)           | 6.5 (81)      | 33.9 (5)  | 20.1 (24)  | 13.6 (75)  | 16.6 (5)    | 17.3 (-)           | 5y 11m              |
| Russell 1000 Growth Index               |                         |      | 9.2 (17)       | 17.1 (46)          | 9.2 (17)      | 26.3 (34) | 20.6 (19)  | 16.6 (16)  | 14.3 (24)   | 17.9 (-)           |                     |
| eV Large Cap Growth Median              |                         |      | 7.7            | 16.8               | 7.7           | 24.1      | 18.7       | 15.0       | 13.1        | -                  |                     |
| Barrow Hanley Large Cap Value           | 43,238,343              | 4.3  | 7.1 (18)       | 10.3 (1)           | 7.1 (18)      | 17.2 (4)  | 15.0 (26)  | 11.7 (27)  | 11.1 (24)   | 9.5 (-)            | 18y 2m              |
| Russell 1000 Value Index                |                         |      | 5.7 (44)       | 3.9 (60)           | 5.7 (44)      | 9.5 (63)  | 13.6 (55)  | 10.7 (50)  | 9.8 (61)    | 7.3 (-)            |                     |
| eV Large Cap Value Median               |                         |      | 5.4            | 4.5                | 5.4           | 10.9      | 13.8       | 10.7       | 10.1        | -                  |                     |
| Small-Cap Equity                        |                         |      |                |                    |               |           |            |            |             |                    |                     |
| Wellington Small Cap Value              | 24,879,699              | 2.5  | 3.7 (19)       | 7.4 (29)           | 3.7 (19)      | 10.5 (33) | 13.1 (63)  | 9.6 (52)   | 11.1 (46)   | 12.8 (-)           | 5y 11m              |
| Russell 2000 Value Index                |                         |      | 1.6 (47)       | 7.1 (31)           | 1.6 (47)      | 9.3 (41)  | 16.1 (28)  | 9.9 (43)   | 9.5 (85)    | 13.0 (-)           |                     |
| eV Small Cap Value Median               |                         |      | 1.4            | 4.6                | 1.4           | 8.2       | 14.2       | 9.6        | 10.8        | -                  |                     |
| Conestoga Small Cap Growth              | 26,117,784              | 2.6  | 10.5 (19)      | 24.2 (31)          | 10.5 (19)     | 28.7 (38) | 25.8 (10)  | 15.1 (16)  | 14.7 (28)   | 29.5 (-)           | 2y 3m               |
| Russell 2000 Growth Index               |                         |      | 5.5 (71)       | 15.8 (73)          | 5.5 (71)      | 21.1 (71) | 18.0 (62)  | 12.1 (59)  | 12.7 (68)   | 23.2 (-)           |                     |
| eV Small Cap Growth Median              |                         |      | 7.5            | 20.8               | 7.5           | 25.9      | 19.0       | 12.4       | 13.6        | -                  |                     |
| International Equity                    |                         |      |                |                    |               |           |            |            |             |                    |                     |
| Causeway International Value            | 50,811,239              | 5.1  | 1.2 (38)       | -4.6 (76)          | 1.2 (38)      | 0.3 (49)  | 7.8 (65)   | 3.4 (71)   | 6.2 (38)    | -3.0 (-)           | 0y 5m               |
| MSCI AC World ex USA (Net)              |                         |      | 0.7 (55)       | -3.1 (41)          | 0.7 (55)      | 1.8 (28)  | 10.0 (29)  | 4.1 (47)   | 5.2 (61)    | -3.5 (-)           |                     |
| MSCI AC World ex USA Value (net)        |                         |      | 1.7 (25)       | -3.7 (58)          | 1.7 (25)      | 0.4 (48)  | 9.3 (37)   | 2.9 (81)   | 4.5 (76)    | -4.5 (-)           |                     |
| Custom Non US Diversified Value Median  |                         |      | 0.8            | -3.4               | 0.8           | 0.2       | 8.3        | 3.9        | 5.6         | -                  |                     |
| Walter Scott Int'l (Dreyfus)            | 58,956,653              | 5.9  | 3.0 (1)        | 3.3 (24)           | 3.0 (1)       | 8.0 (27)  | 12.9 (35)  | 5.7 (73)   | 7.2 (56)    | 7.1 (-)            | 5y 11m              |
| MSCI AC World ex USA (Net)              |                         |      | 0.7 (35)       | -3.1 (92)          | 0.7 (35)      | 1.8 (87)  | 10.0 (65)  | 4.1 (96)   | 5.2 (93)    | 6.1 (-)            |                     |
| MSCI AC World ex USA Growth (Net)       |                         |      | -0.3 (62)      | -2.5 (87)          | -0.3 (62)     | 3.1 (72)  | 10.6 (59)  | 5.3 (82)   | 5.8 (85)    | 7.1 (-)            |                     |
| Custom Non US Diversified Growth Median |                         |      | 0.1            | 0.5                | 0.1           | 5.3       | 11.5       | 6.3        | 7.5         | -                  |                     |
| Harding Loevner Emerging Markets        | 35,617,378              | 3.6  | -5.4 (82)      | -9.5 (50)          | -5.4 (82)     | -4.3 (59) | 11.8 (38)  | 4.3 (34)   | 5.9 (50)    | 10.4 (-)           | 3y 1m               |
| MSCI Emerging Markets (Net)             |                         |      | -1.1 (28)      | -7.7 (24)          | -1.1 (28)     | -0.8 (22) | 12.4 (31)  | 3.6 (48)   | 5.4 (57)    | 10.9 (-)           |                     |
| eV International Emerging Equity Median |                         |      | -2.7           | -9.5               | -2.7          | -3.5      | 11.0       | 3.5        | 5.9         | -                  |                     |



#### Manager Asset Allocation & Performance

As of September 30, 2018

|   | Allocatio   | )n   |          |           | Performance(%) |           |          |          |           |           |           |  |  |
|---|-------------|------|----------|-----------|----------------|-----------|----------|----------|-----------|-----------|-----------|--|--|
|   | Market      |      |          | Year      |                |           |          |          |           |           |           |  |  |
|   | Value       |      |          | То        | Fiscal         | 1         | 3        | 5        | 10        | Since     | Inception |  |  |
|   | (\$)        | %    | Quarter  | Date      | YTD            | Year      | Years    | Years    | Years     | Inception | Period    |  |  |
| Short Duration Fixed Income               |             |      |          |           |                |           |          |          |           |           |           |  |  |
| Barrow Hanley Short Fixed                 | 104,857,865 | 10.5 | 0.4 (59) | 0.4 (62)  | 0.4 (59)       | 0.3 (69)  | 1.0 (60) | 0.9 (70) | 1.6 (83)  | 4.6 (-)   | 27y 6m    |  |  |
| Blmbg. Barc. 1-3 Year Gov/Credit          |             |      | 0.3 (79) | 0.4 (64)  | 0.3 (79)       | 0.2 (73)  | 0.7 (78) | 0.8 (78) | 1.7 (80)  | 4.1 (-)   |           |  |  |
| eV US Short Fixed Income Median           |             |      | 0.5      | 0.6       | 0.5            | 0.5       | 1.1      | 1.2      | 2.3       | -         |           |  |  |
| Cash Composite                            | 2,609,949   | 0.3  | 0.2      | 0.2       | 0.2            | 0.4       | 0.4      | 0.3      | -         | 0.1       | 5y 11m    |  |  |
| 00 Day U.S. Treasury Bill                 |             |      | 0.5      | 1.3       | 0.5            | 1.6       | 0.8      | 0.5      | 0.3       | 0.4       |           |  |  |
| Market Duration Fixed Income              |             |      |          |           |                |           |          |          |           |           |           |  |  |
| Dodge & Cox Fixed                         | 148,564,450 | 14.9 | 0.6 (18) | -0.7 (18) | 0.6 (18)       | -0.4 (27) | 3.3 (13) | 3.2 (27) | 5.4 (38)  | 2.6 (-)   | 5y 11m    |  |  |
| Blmbg. Barc. U.S. Aggregate               |             |      | 0.0 (86) | -1.6 (75) | 0.0 (86)       | -1.2 (76) | 1.3 (97) | 2.2 (84) | 3.8 (100) | 1.5 (-)   |           |  |  |
| eV Core Plus Fixed Income Median          |             |      | 0.3      | -1.2      | 0.3            | -0.7      | 2.3      | 2.8      | 5.2       | -         |           |  |  |
| MetWest Fixed                             | 135,148,740 | 13.6 | 0.0 (88) | -1.4 (65) | 0.0 (88)       | -1.1 (73) | 1.5 (88) | 2.2 (83) | 5.4 (37)  | 1.6 (-)   | 5y 11m    |  |  |
| Blmbg. Barc. U.S. Aggregate               |             |      | 0.0 (86) | -1.6 (75) | 0.0 (86)       | -1.2 (76) | 1.3 (97) | 2.2 (84) | 3.8 (100) | 1.5 (-)   |           |  |  |
| eV Core Plus Fixed Income Median          |             |      | 0.3      | -1.2      | 0.3            | -0.7      | 2.3      | 2.8      | 5.2       | -         |           |  |  |
| Met West Total Return Bond Plan - CONCERN | 12,999,873  | 1.3  | 0.1 (76) | -1.2 (44) | 0.1 (76)       | -0.8 (57) | 1.4 (89) | 2.3 (76) | -         | 1.4 (-)   | 2y 8m     |  |  |
| Blmbg. Barc. U.S. Aggregate               |             |      | 0.0 (86) | -1.6 (75) | 0.0 (86)       | -1.2 (76) | 1.3 (97) | 2.2 (84) | 3.8 (100) | 1.2 (-)   |           |  |  |
| eV Core Plus Fixed Income Median          |             |      | 0.3      | -1.2      | 0.3            | -0.7      | 2.3      | 2.8      | 5.2       | -         |           |  |  |
| Real Estate                               |             |      |          |           |                |           |          |          |           |           |           |  |  |
| Daktree Real Estate Opportunities Fund VI | 7,532,312   | 0.8  | 0.8      | 5.2       | 0.8            | 6.5       | 4.6      | 8.6      | -         | 8.4       | 5y 1m     |  |  |
| NCREIF Property Index                     |             |      | 1.7      | 5.3       | 1.7            | 7.2       | 7.8      | 9.6      | 6.4       | 9.6       |           |  |  |
| Walton Street Real Estate Fund VII, L.P.  | 7,759,624   | 0.8  | 0.0      | 1.8       | 0.0            | 3.4       | 8.5      | -        | -         | 14.6      | 4y 11m    |  |  |
| NCREIF Property Index                     |             |      | 1.7      | 5.3       | 1.7            | 7.2       | 7.8      | 9.6      | 6.4       | 9.6       |           |  |  |
| Walton Street Real Estate Fund VIII, L.P. | 7,643,600   | 0.8  | -0.3     | 4.3       | -0.3           | 8.9       | -        | -        | -         | 14.2      | 1y 4m     |  |  |
| NCREIF Property Index                     |             |      | 1.7      | 5.3       | 1.7            | 7.2       | 7.8      | 9.6      | 6.4       | 7.1       |           |  |  |
| Hedge Funds                               |             |      |          |           |                |           |          |          |           |           |           |  |  |
| Hedge Fund Composite                      | 150,939,128 | 15.2 | 1.4      | 3.9       | 1.4            | 7.4       | 3.6      | 3.5      | -         | 3.4       | 5y 5m     |  |  |
| HFRI Fund of Funds Composite Index        |             |      | 0.3      | 1.0       | 0.3            | 3.1       | 3.3      | 3.2      | 2.6       | 3.1       |           |  |  |



#### Manager Asset Allocation & Performance

As of September 30, 2018

|   | Allocati                | on    |         |                    |               |           | Performan  | ce(%)      |             |                    |                     |
|---|-------------------------|-------|---------|--------------------|---------------|-----------|------------|------------|-------------|--------------------|---------------------|
|   | Market<br>Value<br>(\$) | %     | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Total Plan                                |                         |       |         |                    |               |           |            |            |             |                    |                     |
| Total Surplus Cash X District             | 994,655,561             | 100.0 | 2.3     | 3.8                | 2.3           | 6.5       | 7.6        | 5.6        | 6.3         | 5.8                | 5y 11m              |
| Total Surplus Cash Benchmark              |                         |       | 2.0     | 2.2                | 2.0           | 4.9       | 7.1        | 5.4        | 5.7         | 5.5                |                     |
| Pre-Pavilion Total Surplus Cash Benchmark |                         |       | 0.9     | -0.2               | 0.9           | 0.7       | 2.8        | 3.0        | 4.2         | 3.0                |                     |



#### Composite Asset Allocation & Performance

As of September 30, 2018

|  | Allocati                | on    |         |                    |               |           | Performan  | ce(%)      |             |                    |                     |
|--|-------------------------|-------|---------|--------------------|---------------|-----------|------------|------------|-------------|--------------------|---------------------|
|  | Market<br>Value<br>(\$) | %     | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Total Cash Balance Plan                        | 274,676,038             | 100.0 | 2.8     | 5.4                | 2.8           | 8.6       | 9.4        | 7.2        | 8.7         | 8.3                | 5y 11m              |
| Total Cash Balance Plan Benchmark              |                         |       | 2.5     | 2.9                | 2.5           | 6.3       | 8.5        | 6.6        | 7.1         | 7.4                |                     |
| Pre-Pavilion Total Cash Balance Plan Benchmark |                         |       | 3.4     | 1.8                | 3.4           | 5.1       | 8.6        | 7.4        | 7.7         | 8.3                |                     |
| Total Cash Balance Plan X Private Structures   | 259,685,721             | 94.5  | 2.9     | 5.5                | 2.9           | 8.8       | 9.6        | 7.0        | 8.6         | 8.1                | 5y 11m              |
| Cash Balance Plan Total X Privates Benchmark   |                         |       | 2.5     | 2.7                | 2.5           | 6.2       | 8.5        | 6.4        | 7.0         | 7.2                |                     |
| Total Equity Composite                         | 141,317,478             | 51.4  | 5.1     | 9.7                | 5.1           | 15.0      | 15.1       | 10.0       | 10.3        | 12.2               | 5y 11m              |
| Total Equity Benchmark                         |                         |       | 4.7     | 5.6                | 4.7           | 11.6      | 14.6       | 10.1       | 9.3         | 12.0               |                     |
| Domestic Equity Composite                      | 92,724,684              | 33.8  | 7.2     | 15.4               | 7.2           | 21.7      | 17.9       | 13.1       | 12.2        | 15.5               | 5y 11m              |
| Domestic Equity Benchmark                      |                         |       | 6.9     | 10.6               | 6.9           | 17.4      | 17.2       | 13.4       | 11.2        | 15.3               |                     |
| Large Cap Equity Composite                     | 77,468,421              | 28.2  | 7.2     | 15.3               | 7.2           | 22.1      | 17.6       | 13.5       | 12.3        | 15.7               | 5y 11m              |
| Large Cap Equity Benchmark                     |                         |       | 7.6     | 10.5               | 7.6           | 17.8      | 17.2       | 13.8       | 11.2        | 15.4               |                     |
| Small Cap Equity Composite                     | 15,256,263              | 5.6   | 7.2     | 15.7               | 7.2           | 19.5      | 19.1       | 10.8       | -           | 14.4               | 5y 11m              |
| Small Cap Equity Benchmark                     |                         |       | 3.6     | 11.4               | 3.6           | 15.1      | 17.1       | 11.1       | 11.1        | 14.7               | 2                   |
| International Equity Composite                 | 48,592,794              | 17.7  | 1.1     | -0.4               | 1.1           | 3.4       | 10.2       | 4.2        | -           | 6.3                | 5y 11m              |
| MSCI AC World ex USA (Net)                     |                         |       | 0.7     | -3.1               | 0.7           | 1.8       | 10.0       | 4.1        | 5.2         | 6.1                | •                   |



#### Composite Asset Allocation & Performance

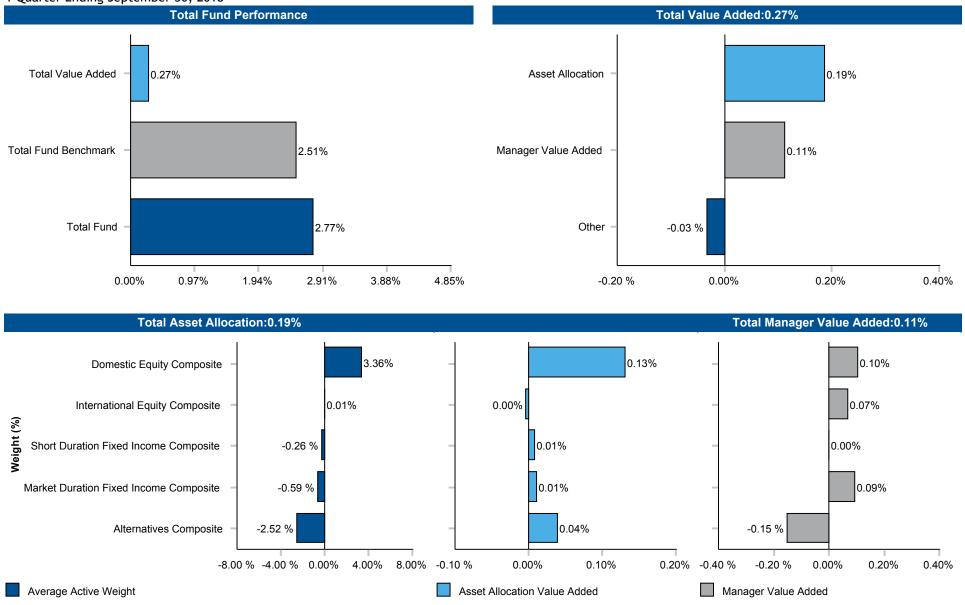
As of September 30, 2018

|  | Allocatio               | on   |         |                    |               |           | Performan  | ce(%)      |             |                    |                     |
|--|-------------------------|------|---------|--------------------|---------------|-----------|------------|------------|-------------|--------------------|---------------------|
|  | Market<br>Value<br>(\$) | %    | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Total Fixed Income Composite           | 85,889,425              | 31.3 | 0.4     | -0.6               | 0.4           | -0.3      | 2.1        | 2.3        | 5.2         | 1.9                | 5y 11m              |
| Total Fixed Income Benchmark           |                         |      | 0.1     | -1.3               | 0.1           | -1.0      | 1.1        | 1.8        | 3.6         | 1.3                |                     |
| Short Duration Fixed Income Composite  | 17,396,263              | 6.3  | 0.4     | 0.7                | 0.4           | 0.6       | 1.0        | 0.9        | -           | 0.9                | 5y 11m              |
| Short Duration Fixed Income Benchmark  |                         |      | 0.3     | 0.4                | 0.3           | 0.2       | 0.7        | 0.8        | 0.5         | 0.8                |                     |
| Market Duration Fixed Income Composite | 68,493,162              | 24.9 | 0.4     | -0.9               | 0.4           | -0.5      | 2.3        | 2.7        | 5.4         | 2.3                | 5y 11m              |
| Blmbg. Barc. U.S. Aggregate            |                         |      | 0.0     | -1.6               | 0.0           | -1.2      | 1.3        | 2.2        | 3.8         | 1.5                |                     |
| Total Alternatives Composite           | 47,469,136              | 17.3 | -0.1    | 3.0                | -0.1          | 4.9       | 5.2        | 7.7        | -           | 7.9                | 5y 11m              |
| Total Alternatives Benchmark           |                         |      | 0.7     | 2.4                | 0.7           | 4.4       | 4.8        | 5.3        | -           | 5.8                |                     |
| Hedge Fund of Fund Composite           | 32,478,819              | 11.8 | -0.3    | 2.6                | -0.3          | 5.1       | 4.7        | 6.1        | -           | 6.7                | 5y 11m              |
| HFRI Fund of Funds Composite Index     |                         |      | 0.3     | 1.0                | 0.3           | 3.1       | 3.3        | 3.2        | 2.6         | 3.8                | -                   |
| Real Estate Composite                  | 14,990,317              | 5.5  | 0.4     | 4.0                | 0.4           | 4.6       | 5.9        | 10.5       | -           | 9.9                | 5y 9m               |
| NCREIF Property Index                  |                         |      | 1.7     | 5.3                | 1.7           | 7.2       | 7.8        | 9.6        | 6.4         | 9.8                | •                   |



#### **Attribution Analysis**

1 Quarter Ending September 30, 2018



"Other" includes the effects of all other factors on the Fund's relative return, including rebalancing and other trading activity.



#### Manager Asset Allocation & Performance

As of September 30, 2018

|  | Allocatio   | Allocation |           |           |           |           | Performan | ce(%)     |           |           |           |
|--|-------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|  | Market      |            |           | Year      |           |           |           |           |           |           |           |
|  | Value       | 0/         | Ouerter   | To        | Fiscal    | 1<br>Xaar | 3         | 5         | 10        | Since     | Inception |
|  | (\$)        | %          | Quarter   | Date      | YTD       | Year      | Years     | Years     | Years     | Inception | Period    |
| Large-Cap Equity                         | 27 1 52 002 | 10.5       | 7.7 (20)  | 10.5 (20) |           | 17.0 (21) | 17.2 (10) | 12.0 (10) | 12.0 (20) | 154 ()    | 6 11      |
| Vanguard Institutional Index Fund        | 37,153,093  | 13.5       | 7.7 (29)  | 10.5 (26) | 7.7 (29)  | 17.9 (31) | 17.3 (16) | 13.9 (18) | 12.0 (28) | 15.4 (-)  | 5y 11m    |
| S&P 500                                  |             |            | 7.7 (29)  | 10.6 (26) | 7.7 (29)  | 17.9 (30) | 17.3 (15) | 13.9 (17) | 12.0 (28) | 15.4 (-)  |           |
| eV Large Cap Core Median                 |             |            | 6.9       | 8.7       | 6.9       | 16.0      | 15.2      | 12.5      | 11.2      | -         |           |
| Sands Large Cap Growth (Touchstone)      | 20,052,708  | 7.3        | 6.5 (81)  | 29.1 (1)  | 6.5 (81)  | 33.9 (5)  | 20.1 (24) | 13.6 (75) | 16.6 (5)  | 17.3 (-)  | 5y 11m    |
| Russell 1000 Growth Index                |             |            | 9.2 (17)  | 17.1 (46) | 9.2 (17)  | 26.3 (34) | 20.6 (19) | 16.6 (16) | 14.3 (24) | 17.9 (-)  |           |
| eV Large Cap Growth Median               |             |            | 7.7       | 16.8      | 7.7       | 24.1      | 18.7      | 15.0      | 13.1      | -         |           |
| Barrow Hanley Large Cap Value            | 20,262,620  | 7.4        | 7.2 (16)  | 10.6 (1)  | 7.2 (16)  | 17.6 (2)  | 15.2 (21) | 12.0 (20) | 11.3 (20) | 14.2 (-)  | 5y 11m    |
| Russell 1000 Value Index                 |             |            | 5.7 (44)  | 3.9 (60)  | 5.7 (44)  | 9.5 (63)  | 13.6 (55) | 10.7 (50) | 9.8 (61)  | 12.8 (-)  |           |
| eV Large Cap Value Median                |             |            | 5.4       | 4.5       | 5.4       | 10.9      | 13.8      | 10.7      | 10.1      | -         |           |
| Small-Cap Equity                         |             |            |           |           |           |           |           |           |           |           |           |
| Wellington Small Cap Value               | 7,723,000   | 2.8        | 3.7 (20)  | 7.3 (30)  | 3.7 (20)  | 10.4 (34) | 13.0 (66) | 9.5 (52)  | 11.1 (47) | 12.7 (-)  | 5y 11m    |
| Russell 2000 Value Index                 |             |            | 1.6 (47)  | 7.1 (31)  | 1.6 (47)  | 9.3 (41)  | 16.1 (28) | 9.9 (43)  | 9.5 (85)  | 13.0 (-)  |           |
| eV Small Cap Value Median                |             |            | 1.4       | 4.6       | 1.4       | 8.2       | 14.2      | 9.6       | 10.8      | -         |           |
| Conestoga Small Cap Growth               | 7,533,263   | 2.7        | 10.5 (19) | 24.2 (31) | 10.5 (19) | 28.8 (38) | 25.8 (10) | 15.1 (16) | 14.7 (28) | 29.5 (-)  | 2y 3m     |
| Russell 2000 Growth Index                |             |            | 5.5 (71)  | 15.8 (73) | 5.5 (71)  | 21.1 (71) | 18.0 (62) | 12.1 (59) | 12.7 (68) | 23.2 (-)  |           |
| eV Small Cap Growth Median               |             |            | 7.5       | 20.8      | 7.5       | 25.9      | 19.0      | 12.4      | 13.6      | -         |           |
| International Equity                     |             |            |           |           |           |           |           |           |           |           |           |
| Causeway International Value             | 19,568,674  | 7.1        | 1.2 (38)  | -4.6 (76) | 1.2 (38)  | 0.3 (49)  | 7.8 (65)  | 3.4 (71)  | 6.2 (38)  | -3.0 (-)  | 0y 5m     |
| MSCI AC World ex USA (Net)               |             |            | 0.7 (55)  | -3.1 (41) | 0.7 (55)  | 1.8 (28)  | 10.0 (29) | 4.1 (47)  | 5.2 (61)  | -3.5 (-)  |           |
| MSCI AC World ex USA Value (net)         |             |            | 1.7 (25)  | -3.7 (58) | 1.7 (25)  | 0.4 (48)  | 9.3 (37)  | 2.9 (81)  | 4.5 (76)  | -4.5 (-)  |           |
| Custom Non US Diversified Value Median   |             |            | 0.8       | -3.4      | 0.8       | 0.2       | 8.3       | 3.9       | 5.6       | -         |           |
| Walter Scott Int'l (Dreyfus)             | 22,554,776  | 8.2        | 3.0 (1)   | 3.3 (24)  | 3.0 (1)   | 8.0 (27)  | 12.9 (35) | 5.7 (73)  | 7.2 (56)  | 7.1 (-)   | 5y 11m    |
| MSCI AC World ex USA (Net)               |             |            | 0.7 (35)  | -3.1 (92) | 0.7 (35)  | 1.8 (87)  | 10.0 (65) | 4.1 (96)  | 5.2 (93)  | 6.1 (-)   |           |
| MSCI AC World ex USA Growth (Net)        |             |            | -0.3 (62) | -2.5 (87) | -0.3 (62) | 3.1 (72)  | 10.6 (59) | 5.3 (82)  | 5.8 (85)  | 7.1 (-)   |           |
| Custom Non US Diversified Growth Median  |             |            | 0.1       | 0.5       | 0.1       | 5.3       | 11.5      | 6.3       | 7.5       | -         |           |
| Harding Loevner Inst. Emerging Markets I | 6,469,344   | 2.4        | -5.4 (82) | -9.5 (50) | -5.4 (82) | -4.3 (59) | 11.8 (38) | 4.3 (34)  | 5.9 (50)  | 8.8 (-)   | 1y 11m    |
| MSCI Emerging Markets (Net)              |             |            | -1.1 (28) | -7.7 (24) | -1.1 (28) | -0.8 (22) | 12.4 (31) | 3.6 (48)  | 5.4 (57)  | 10.5 (-)  |           |
| eV International Emerging Equity Median  |             |            | -2.7      | -9.5      | -2.7      | -3.5      | 11.0      | 3.5       | 5.9       | -         |           |



#### Manager Asset Allocation & Performance

As of September 30, 2018

|  | Allocati      | Allocation |          |            |               |           | Performan  | ce(%)      |             |                    |                     |
|--|---------------|------------|----------|------------|---------------|-----------|------------|------------|-------------|--------------------|---------------------|
|  | Market        |            |          | Year       |               |           |            |            |             |                    |                     |
|  | Value<br>(\$) | %          | Quarter  | To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Period |
| Short Duration Fixed Income                    |               |            |          |            |               |           |            |            |             |                    |                     |
| Barrow Hanley Short Fixed                      | 12,059,425    | 4.4        | 0.3 (81) | 0.4 (62)   | 0.3 (81)      | 0.2 (72)  | 0.8 (76)   | 0.7 (84)   | 1.5 (86)    | 0.7 (-)            | 5y 11m              |
| Blmbg. Barc. 1-3 Year Gov/Credit               |               |            | 0.3 (79) | 0.4 (64)   | 0.3 (79)      | 0.2 (73)  | 0.7 (78)   | 0.8 (78)   | 1.7 (80)    | 0.8 (-)            |                     |
| eV US Short Fixed Income Median                |               |            | 0.5      | 0.6        | 0.5           | 0.5       | 1.1        | 1.2        | 2.3         | -                  |                     |
| Cash Composite                                 | 5,336,838     | 1.9        | 0.4      | 1.2        | 0.4           | 1.5       | 2.3        | 2.3        | -           | 2.0                | 5y 11m              |
| 90 Day U.S. Treasury Bill                      |               |            | 0.5      | 1.3        | 0.5           | 1.6       | 0.8        | 0.5        | 0.3         | 0.4                |                     |
| Market Duration Fixed Income                   |               |            |          |            |               |           |            |            |             |                    |                     |
| Dodge & Cox Income Fund                        | 34,261,651    | 12.5       | 0.6 (15) | -0.6 (15)  | 0.6 (15)      | -0.1 (17) | 3.1 (15)   | 3.1 (36)   | 5.3 (39)    | 6.6 (-)            | 29y 9m              |
| Blmbg. Barc. U.S. Aggregate                    |               |            | 0.0 (86) | -1.6 (75)  | 0.0 (86)      | -1.2 (76) | 1.3 (97)   | 2.2 (84)   | 3.8 (100)   | 6.1 (-)            |                     |
| eV Core Plus Fixed Income Median               |               |            | 0.3      | -1.2       | 0.3           | -0.7      | 2.3        | 2.8        | 5.2         | -                  |                     |
| Met West Total Return Fund Pl                  | 34,231,511    | 12.5       | 0.1 (75) | -1.2 (43)  | 0.1 (75)      | -0.8 (56) | 1.4 (91)   | 2.3 (80)   | 5.7 (28)    | 2.1 (-)            | 5y 11m              |
| Blmbg. Barc. U.S. Aggregate                    |               |            | 0.0 (86) | -1.6 (75)  | 0.0 (86)      | -1.2 (76) | 1.3 (97)   | 2.2 (84)   | 3.8 (100)   | 1.5 (-)            |                     |
| eV Core Plus Fixed Income Median               |               |            | 0.3      | -1.2       | 0.3           | -0.7      | 2.3        | 2.8        | 5.2         | -                  |                     |
| Hedge Fund of Funds                            |               |            |          |            |               |           |            |            |             |                    |                     |
| Lighthouse Diversified[CE]                     | 16,561,012    | 6.0        | -0.1     | 1.4        | -0.1          | 3.2       | 3.3        | 4.8        | 4.3         | 5.2                | 5y 11m              |
| HFRI Fund of Funds Composite Index             |               |            | 0.3      | 1.0        | 0.3           | 3.1       | 3.3        | 3.2        | 2.6         | 3.8                |                     |
| Pointer Offshore LTD                           | 15,917,807    | 5.8        | -0.6     | 3.9        | -0.6          | 7.2       | 6.2        | 7.7        | 8.1         | 8.4                | 5y 9m               |
| HFRI Fund of Funds Composite Index             |               |            | 0.3      | 1.0        | 0.3           | 3.1       | 3.3        | 3.2        | 2.6         | 3.6                |                     |
| Real Estate                                    |               |            |          |            |               |           |            |            |             |                    |                     |
| Oaktree RE Opportunities Fund VI               | 4,459,604     | 1.6        | 0.8      | 6.8        | 0.8           | 8.1       | 4.8        | 9.4        | -           | 9.1                | 5y 8m               |
| NCREIF Property Index                          |               |            | 1.7      | 5.3        | 1.7           | 7.2       | 7.8        | 9.6        | 6.4         | 9.8                |                     |
| Walton Street Real Estate Fund VII, L.P.       | 4,651,021     | 1.7        | 0.0      | 1.9        | 0.0           | 3.6       | 8.6        | 14.0       | -           | 13.9               | 5y 3m               |
| NCREIF Property Index                          |               |            | 1.7      | 5.3        | 1.7           | 7.2       | 7.8        | 9.6        | 6.4         | 9.6                |                     |
| Walton Street Real Estate Fund VIII, L.P.      | 5,879,692     | 2.1        | -0.3     | 4.3        | -0.3          | 8.9       | -          | -          | -           | 14.2               | 1y 4m               |
| NCREIF Property Index                          |               |            | 1.7      | 5.3        | 1.7           | 7.2       | 7.8        | 9.6        | 6.4         | 7.1                | -                   |
| Total Plan                                     |               |            |          |            |               |           |            |            |             |                    |                     |
| Total Cash Balance Plan                        | 274,676,038   | 100.0      | 2.8      | 5.4        | 2.8           | 8.6       | 9.4        | 7.2        | 8.7         | 8.3                | 5y 11m              |
| Total Cash Balance Plan Benchmark              |               |            | 2.5      | 2.9        | 2.5           | 6.3       | 8.5        | 6.6        | 7.1         | 7.4                |                     |
| Pre-Pavilion Total Cash Balance Plan Benchmark |               |            | 3.4      | 1.8        | 3.4           | 5.1       | 8.6        | 7.4        | 7.7         | 8.3                |                     |



# Private Real Estate Summary

As of September 30, 2018 (\$ in Millions)

| Partnership                       | Vintage<br>Year | Committed<br>Capital | Paid-in<br>Capital | Unfunded<br>Commitment | Market<br>Value <sup>1</sup> | Distributions | Total<br>Value | Net<br>IRR <sup>2</sup> | TV / PI | D/PI |
|-----------------------------------|-----------------|----------------------|--------------------|------------------------|------------------------------|---------------|----------------|-------------------------|---------|------|
| Surplus Cash                      |                 |                      |                    |                        |                              |               |                |                         |         |      |
| Oaktree RE Opportunities VI       | 2012            | \$14.0               | \$14.0             | \$0.0                  | \$7.5                        | \$12.2        | \$19.7         | 8.5%                    | 1.4     | 0.9  |
| Walton Street RE Fund VII         | 2012            | \$14.0               | \$11.9             | \$2.1                  | \$7.8                        | \$9.0         | \$16.7         | 12.5%                   | 1.4     | 0.8  |
| Walton Street RE Fund VIII        | 2017            | \$13.0               | \$6.9              | \$6.1                  | \$7.6                        | \$0.0         | \$7.6          | 13.2%                   | 1.1     | 0.0  |
| Angelo Gordon Realty Value Fund X | 2018            | \$20.0               | \$0.0              | \$20.0                 | \$0.0                        | \$0.0         | \$0.0          | n/a                     | n/a     | n/a  |
| Total                             |                 | \$61.0               | \$32.8             | \$28.2                 | \$22.9                       | \$21.2        | \$44.1         |                         | 1.3     | 0.6  |
| Cash Balance                      |                 |                      |                    |                        |                              |               |                |                         |         |      |
| Oaktree RE Opportunities VI       | 2012            | \$8.4                | \$8.4              | \$0.0                  | \$4.5                        | \$9.6         | \$14.1         | 8.4%                    | 1.7     | 1.1  |
| Walton Street RE Fund VII         | 2012            | \$8.4                | \$7.3              | \$1.1                  | \$4.7                        | \$5.7         | \$10.4         | 12.9%                   | 1.4     | 0.8  |
| Walton Street RE Fund VIII        | 2017            | \$10.0               | \$5.3              | \$4.7                  | \$5.9                        | \$0.0         | \$5.9          | 13.2%                   | 1.1     | 0.0  |
| Total                             |                 | \$26.8               | \$21.0             | \$5.8                  | \$15.0                       | \$15.4        | \$30.4         |                         | 1.4     | 0.7  |

<sup>1</sup> If a market value has not yet been released for a particular fund, the previous quarter's value is adjusted according to subsequent contributions and distributions. <sup>2</sup> Net IRR is through the previous quarter end.





# **Asset Class Diversification**



## **Asset Class Diversification**

# Surplus Cash Investment Program Structure As of September 30, 2018

| Manager                         | Asset Class/Type     | Total Assets<br>(\$, mil.) | Percent of<br>Total | Target<br>Allocation | Weighting<br>Relative to<br>Target | Target<br>Range |
|---------------------------------|----------------------|----------------------------|---------------------|----------------------|------------------------------------|-----------------|
| Large-Cap Domestic Equity       |                      | \$220.2                    | 22.1%               | 20.0%                | + 2.1%                             |                 |
| Vanguard S&P 500 Index          | Large-Cap Index      | \$131.3                    | 13.2%               | 10.0%                | + 3.2%                             |                 |
| Sands                           | Large-Cap Growth     | \$ 45.7                    | 4.6%                | 5.0%                 | - 0.4%                             |                 |
| Barrow Hanley                   | Large-Cap Value      | \$ 43.2                    | 4.3%                | 5.0%                 | - 0.7%                             | 20.200/         |
| Barrow Humey                    | Large Cup Value      | ψ 1 <u>3.2</u>             | 1.370               | 5.070                | 0.770                              | 20-30%          |
| Small-Cap Domestic Equity       |                      | \$ 51.0                    | 5.1%                | 5.0%                 | + 0.1%                             |                 |
| Conestoga                       | Small-Cap Growth     | \$ 26.1                    | 2.6%                | 2.5%                 | + 0.1%                             |                 |
| Wellington                      | Small-Cap Value      | \$ 24.9                    | 2.5%                | 2.5%                 | + 0.0%                             |                 |
| International Equity            |                      | \$145.4                    | 14.6%               | 15.0%                | - 0.4%                             | 10-20%          |
| Causeway                        | International Value  | \$ 50.8                    | 5.1%                |                      |                                    |                 |
| Walter Scott                    | International Growth | \$ 59.0                    | 5.9%                |                      |                                    |                 |
| Harding Loevner                 | Emerging             | \$ 35.6                    | 3.6%                |                      |                                    |                 |
| Short-Duration Fixed Income     |                      | \$107.5                    | 10.8%               | 10.0%                | + 0.8%                             | 8-12%           |
| Barrow Hanley                   | Short Duration       | \$104.9                    | 10.5%               |                      |                                    |                 |
| Cash                            | Money Market         | \$ 2.6                     | 0.3%                |                      |                                    |                 |
| Market-Duration Fixed Income    |                      | \$296.7                    | 29.8%               | 30.0%                | - 0.2%                             | 25-35%          |
| Dodge & Cox                     | Market Duration      | \$148.6                    | 14.9%               | 15.0%                | - 0.1%                             |                 |
| MetWest                         | Market Duration      | \$148.1                    | 14.9%               | 15.0%                | - 0.1%                             |                 |
| Alternatives                    |                      | \$173.9                    | 17.5%               | 20.0%                | - 2.5%                             | 17-23%          |
| Oaktree RE Opps VI              | Real Estate          | \$ 7.5                     | 0.8%                |                      |                                    |                 |
| Walton Street RE VII            | Real Estate          | \$ 7.8                     | 0.8%                |                      |                                    |                 |
| Walton Street RE VIII           | Real Estate          | \$ 7.6                     | 0.8%                |                      |                                    |                 |
| Direct Hedge Fund Composite     | Hedge Fund           | \$150.9                    | 15.2%               |                      |                                    |                 |
| Total (X District)              |                      | \$994.7                    | 100.0%              |                      |                                    |                 |
| District Assets - Barrow Hanley | Short Duration       | \$ 31.2                    |                     |                      |                                    |                 |
| Debt Reserves - Ponder          | Short Duration       | \$159.5                    |                     |                      |                                    |                 |
| Total Surplus Cash              |                      | \$1,185.3                  |                     |                      |                                    |                 |

\*Totals may not add due to rounding.

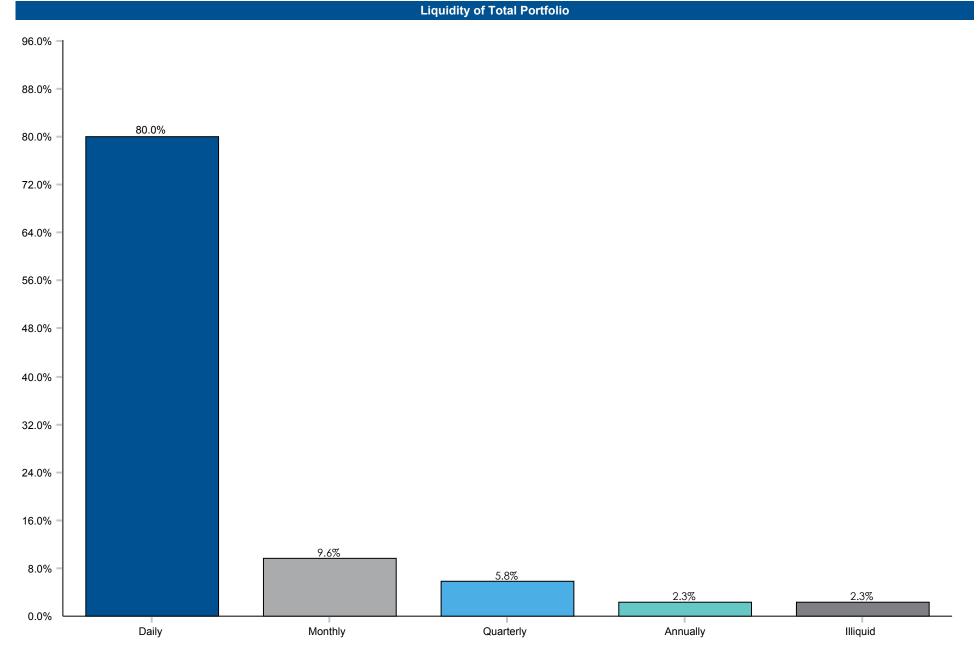


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# Liquidity Schedule As of September 30, 2018

| Investments   | Market Value<br>(\$) | Daily<br>(\$) | Monthly<br>(\$) | Quarterly<br>(\$) | Annually<br>(\$) | llliquid<br>(\$) | Withdrawals | Notes                                       |
|---|----------------------|---------------|-----------------|-------------------|------------------|------------------|-------------|---|
| Vanguard S&P 500 Index                              | 131,305,887          | 131,305,887   |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Sands Large Cap Growth (Touchstone)                 | 45,673,036           | 45,673,036    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Barrow Hanley Large Cap Value                       | 43,238,343           | 43,238,343    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Wellington Small Cap Value                          | 24,879,699           |               | 24,879,699      |                   |                  |                  | Monthly     | 10 Day Notice                               |
| Conestoga Small-Cap Fund I                          | 26,117,784           | 26,117,784    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Walter Scott Int'l (Dreyfus)                        | 58,956,653           | 58,956,653    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Causeway International Value                        | 50,811,239           | 50,811,239    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Harding Loevner Inst. Emerging Markets I            | 35,617,378           | 35,617,378    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Barrow Hanley Short Fixed                           | 104,857,865          | 104,857,865   |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Cash Account  | 1,690,049            | 1,690,049     |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Cash Account - CONCERN                              | 86,660               | 86,660        |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Hedge Funds Cash                                    | 833,241              | 833,241       |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Dodge & Cox Fixed                                   | 148,564,450          | 148,564,450   |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| MetWest Fixed                                       | 135,148,740          | 135,148,740   |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Met West Total Return Bond Plan - CONCERN           | 12,999,873           | 12,999,873    |                 |                   |                  |                  | Daily       | Daily, No Lock-Up                           |
| Oaktree Capital Management RE Opportunities Fund VI | 7,532,312            |               |                 |                   |                  | 7,532,312        | Illiquid    | Illiquid                                    |
| Walton Street Real Estate Fund VII, L.P.            | 7,759,624            |               |                 |                   |                  | 7,759,624        | Illiquid    | Illiquid                                    |
| Walton Street Real Estate Fund VIII, L.P.           | 7,643,600            |               |                 |                   |                  | 7,643,600        | Illiquid    | Illiquid                                    |
| Blackrock The 32 Capital Fund, Ltd.                 | 5,939,979            |               | 5,939,979       |                   |                  |                  | Monthly     | 30 Day Notice, No Lock-Up                   |
| Bloom Tree Offshore Fund Ltd.                       | 10,365,401           |               |                 | 10,365,401        |                  |                  | Quarterly   | 45 Day Notice, No Lock-Up                   |
| Capeview Azri 2X Fund USD B - U                     | 3,911,760            |               | 3,911,760       |                   |                  |                  | Monthly     | 30 Day Notice, No Lock-Up                   |
| Capeview Azri Fund USD B – UV                       | 6,397,088            |               |                 | 6,397,088         |                  |                  | Quarterly   | 30 Day Notice, 2.5% Redemption Penalty      |
| Chatham Asset High Yield Offshore Fund, Ltd         | 10,303,985           |               |                 | 10,303,985        |                  |                  | Quarterly   | 45 Day Notice, 20% Fund level gate          |
| DK Distressed Opportunities International, Ltd.[CE] | 11,095,452           |               |                 |                   | 11,095,452       |                  | Annually    | 90 Day Notice, No Lock-Up                   |
| EMSO Saguaro, Ltd.                                  | 10,150,993           |               | 10,150,993      |                   |                  |                  | Monthly     | 60 Day Notice, 15% Fund level gate          |
| Fir Tree International Value Fund (Non-US), L.P.    | 503,158              |               |                 |                   | 503,158          |                  | Annually    | Redemption in Progress                      |
| Indus Japan Fund Ltd.                               | 10,398,047           |               |                 | 10,398,047        |                  |                  | Quarterly   | 30 Day Notice, No Lock-up                   |
| Luxor Capital Partners Offshore, Ltd.[CE]           | 869,262              |               |                 | 869,262           |                  |                  | Quarterly   | Redemption in Progress                      |
| Marshall Wace Eureka Fund Class B2                  | 10,235,091           |               | 10,235,091      |                   |                  |                  | Monthly     | 30 Day Notice, No Lock-Up                   |
| Moore Macro Managers Fund                           | 10,660,101           |               |                 | 10,660,101        |                  |                  | Quarterly   | 60 Day Notice, No Lock-Up                   |
| Pine River Fund Ltd.[CE]                            | 90,043               |               |                 | 90,043            |                  |                  | Quarterly   | Redemption in Progress                      |
| Renaissance RIDGE                                   | 9,526,521            |               | 9,526,521       |                   |                  |                  | Monthly     | Monthly with 45 Days Notice                 |
| Carlson Black Diamond Arbitrage Ltd.                | 10,078,162           |               | 10,078,162      |                   |                  |                  | Monthly     | 45 Day Notice, No Lock-Up                   |
| Robeco Transtrend Diversified Fund LLC              | 10,981,277           |               | 10,981,277      |                   |                  |                  | Monthly     | 5 Day Notice, No Lock-Up                    |
| Stone Milliner Macro Inc Class A NI[CE]             | 10,195,239           |               | 10,195,239      |                   |                  |                  | Monthly     | 60 Day Notice, 25% Master Fund level gate   |
| Tiger Eye Fund, Ltd.                                | 8,382,818            |               |                 | 8,382,818         |                  |                  | Quarterly   | 60 Day Notice, 1% Penalty within First Year |
| York Credit Opportunities Unit Trust                | 10,854,750           |               |                 |                   | 10,854,750       |                  | Annually    | 60 Day Notice, No Lock-Up                   |
| Total (\$)  | 994,655,561          | 795,901,198   | 95,898,721      | 57,466,746        | 22,453,360       | 22,935,536       |             |   |
| Total (%)   | 100.0                | 80.0          | 9.6             | 5.8               | 2.3              | 2.3              |             |   |

# Liquidity Schedule





## **Asset Class Diversification**

# Cash Balance Plan Investment Program Structure As of September 30, 2018

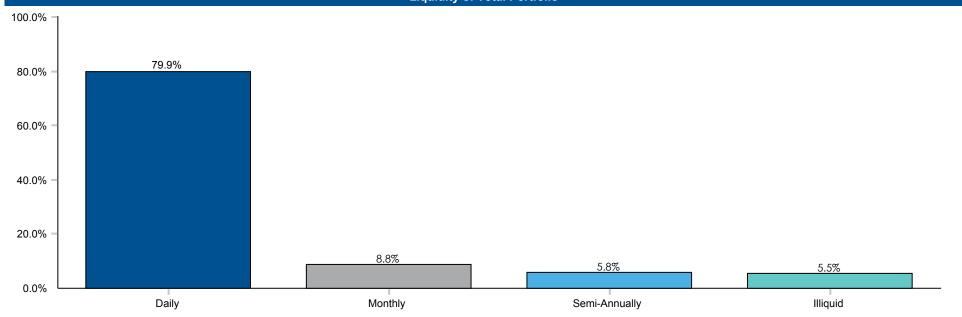
|                              |                      | Total Assets | Percent of | Target     | Weighting<br>Relative to | Target |
|------------------------------|----------------------|--------------|------------|------------|--------------------------|--------|
| Manager                      | Asset Class/Type     | (\$, mil.)   | Total      | Allocation | Target                   | Range  |
| Large-Cap Domestic Equity    |                      | \$ 77.5      | 28.2%      | 27.0%      | + 1.2%                   |        |
| Vanguard S&P 500 Index       | Large-Cap Index      | \$ 37.2      | 13.5%      | 13.5%      | + 0.0%                   |        |
| Sands                        | Large-Cap Growth     | \$ 20.1      | 7.3%       | 6.8%       | + 0.5%                   |        |
| Barrow Hanley                | Large-Cap Value      | \$ 20.3      | 7.4%       | 6.8%       | + 0.6%                   | 27-37% |
| Small-Cap Domestic Equity    |                      | \$ 15.3      | 5.6%       | 5.0%       | + 0.6%                   |        |
| Conestoga                    | Small-Cap Growth     | \$ 7.5       | 2.7%       | 2.5%       | + 0.2%                   |        |
| Wellington                   | Small-Cap Value      | \$ 7.7       | 2.8%       | 2.5%       | + 0.3%                   |        |
| International Equity         |                      | \$ 48.6      | 17.7%      | 18.0%      | - 0.3%                   | 15-21% |
| Causeway                     | International Value  | \$ 19.6      | 7.1%       |            |                          |        |
| Walter Scott                 | International Growth | \$ 22.6      | 8.2%       |            |                          |        |
| Harding Loevner              | Emerging Markets     | \$ 6.5       | 2.4%       |            |                          |        |
| Short-Duration Fixed Income  |                      | \$ 17.4      | 6.3%       | 5.0%       | + 1.3%                   | 0-8%   |
| Barrow Hanley                | Short Duration       | \$ 12.1      | 4.4%       |            |                          |        |
| Cash                         | Money Market         | \$ 5.3       | 1.9%       |            |                          |        |
| Market-Duration Fixed Income | )                    | \$ 68.5      | 24.9%      | 25.0%      | - 0.1%                   | 20-30% |
| Dodge & Cox                  | Market Duration      | \$ 34.3      | 12.5%      | 12.5%      | - 0.0%                   |        |
| MetWest                      | Market Duration      | \$ 34.2      | 12.5%      | 12.5%      | - 0.0%                   |        |
| Alternatives                 |                      | \$ 47.5      | 17.3%      | 20.0%      | - 2.7%                   | 17-23% |
| Lighthouse                   | HFOF                 | \$ 16.6      | 6.0%       |            |                          |        |
| Pointer                      | HFOF                 | \$ 15.9      | 5.8%       |            |                          |        |
| Oaktree RE Opps VI           | Real Estate          | \$ 4.5       | 1.6%       |            |                          |        |
| Walton Street RE VII         | Real Estate          | \$ 4.7       | 1.7%       |            |                          |        |
| Walton Street RE VIII        | Real Estate          | \$ 5.9       | 2.1%       |            |                          |        |
| Total                        |                      | \$274.7      | 100.0%     |            |                          |        |

\*Totals may not add due to rounding.



# Liquidity Schedule - Cash Balance

| Investments                               | Market Value<br>(\$) | Daily<br>(\$) | Monthly<br>(\$) | Semi-Annually<br>(\$) | llliquid<br>(\$) | Contributions | Withdrawals   | Notes                    |
|---|----------------------|---------------|-----------------|-----------------------|------------------|---------------|---------------|--------------------------|
| Vanguard Institutional Index Fund         | 37,153,093           | 37,153,093    | (Ψ)<br>         | (Ψ/<br>               | (Ψ)<br>          | Daily         | Daily         | Daily, No Lock-Up        |
| Sands Large Cap Growth (Touchstone)       | 20,052,708           | 20,052,708    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Barrow Hanley Large Cap Value             | 20,262,620           | 20,262,620    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Conestoga Small-Cap Fund I                | 7,533,263            | 7,533,263     |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Wellington Small Cap Value                | 7,723,000            |               | 7,723,000       |                       |                  | Monthly       | Monthly       | Monthly, 10 Day Notice   |
| Causeway International Value              | 19,568,674           | 19,568,674    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Walter Scott Int'l (Dreyfus)              | 22,554,776           | 22,554,776    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Harding Loevner Inst. Emerging Markets I  | 6,469,344            | 6,469,344     |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Barrow Hanley Short Fixed                 | 12,059,425           | 12,059,425    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Cash Account                              | 5,327,824            | 5,327,824     |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Dodge & Cox Income Fund                   | 34,261,651           | 34,261,651    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Met West Total Return Fund Pl             | 34,231,511           | 34,231,511    |                 |                       |                  | Daily         | Daily         | Daily, No Lock-Up        |
| Lighthouse Diversified[CE]                | 16,561,012           |               | 16,561,012      |                       |                  | Monthly       | Monthly       | 90 Day Notice            |
| Pointer Offshore LTD                      | 15,917,807           |               |                 | 15,917,807            |                  | Semi-Annually | Semi-Annually | Notice by Mar 15/Sept 15 |
| Oaktree RE Opportunities Fund V           | 4,459,604            |               |                 |                       | 4,459,604        | Illiquid      | Illiquid      | Illiquid                 |
| Walton Street Real Estate Fund VII, L.P.  | 4,651,021            |               |                 |                       | 4,651,021        | Illiquid      | Illiquid      | Illiquid                 |
| Walton Street Real Estate Fund VIII, L.P. | 5,879,692            |               |                 |                       | 5,879,692        | Illiquid      | Illiquid      | Illiquid                 |
| Total (\$)                                | 274,667,025          | 219,474,889   | 24,284,011      | 15,917,807            | 14,990,317       |               |               |                          |
| Total (%)                                 | 100.0                | 79.9          | 8.8             | 5.8                   | 5.5              |               |               |                          |
|   |                      |               | Liquidity       | of Total Portfolio    |                  |               |               |                          |





## Surplus Cash Equity Portfolio Characteristics

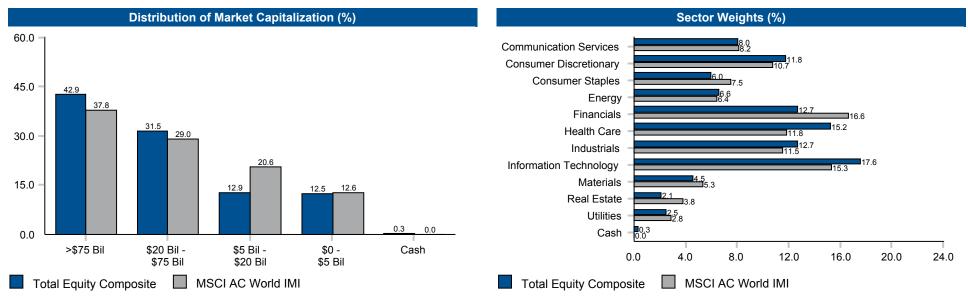
Surplus Cash Equity Composite vs. MSCI AC World IMI

As of September 30, 2018

Down Market Capture (5 Years, Monthly)

| Portfolio Char                        | racteristics |           | Top Ten Equity Holdings   |           |           |        |           |  |  |
|---------------------------------------|--------------|-----------|---------------------------|-----------|-----------|--------|-----------|--|--|
|                                       | Portfolio    | Benchmark |                           | Portfolio | Benchmark | Active | Quarterly |  |  |
| Wtd. Avg. Mkt. Cap (\$M)              | 144,660      | 137,087   |                           | Weight    | Weight    | Weight | Return    |  |  |
| Median Mkt. Cap (\$M)                 | 18,462       | 1,717     |                           | (%)       | (%)       | (%)    | (%)       |  |  |
| Price/Earnings ratio                  | 20.4         | 17.4      | Amazon.com Inc            | 2.1       | 1.5       | 0.6    | 17.8      |  |  |
| Price/Book ratio                      | 3.4          | 2.8       | Microsoft Corp            | 1.4       | 1.5       | -0.1   | 16.4      |  |  |
| 5 Yr. EPS Growth Rate (%)             | 12.3         | 11.6      | Apple Inc                 | 1.3       | 2.1       | -0.8   | 22.4      |  |  |
| Current Yield (%)                     | 1.9          | 2.4       | Visa Inc                  | 1.1       | 0.5       | 0.6    | 13.5      |  |  |
| Debt to Equity                        | 0.7          | 3.5       | Alphabet Inc              | 1.1       | 0.7       | 0.4    | 6.9       |  |  |
| Number of Stocks                      | 822          | 8,870     | Facebook Inc              | 0.9       | 0.7       | 0.2    | -15.4     |  |  |
| Beta (5 Years, Monthly)               | 0.96         | 1.00      | Netflix Inc               | 0.9       | 0.3       | 0.6    | -4.4      |  |  |
| Consistency (5 Years, Monthly)        | 48.33        | 0.00      | Alibaba Group Holding Ltd | 0.8       | 0.4       | 0.4    | -11.2     |  |  |
| Sharpe Ratio (5 Years, Monthly)       | 0.99         | 0.92      | Salesforce.com Inc.       | 0.8       | 0.2       | 0.6    | 16.6      |  |  |
| Information Ratio (5 Years, Monthly)  | 0.26         | -         | Adobe Systems Inc         | 0.8       | 0.2       | 0.6    | 10.7      |  |  |
| Up Market Capture (5 Years, Monthly)  | 99.89        | 100.00    |                           |           |           |        |           |  |  |
| Down Market Capture (5 Years Monthly) | 93 90        | 100.00    | % of Portfolio            | 11.2      | 8.1       | 3.1    |           |  |  |

100.00



Equity composite holdings are a consolidation of the underlying manager exposures weighted by the ending market value. Cash holdings for certain managers may not be included.

93.90

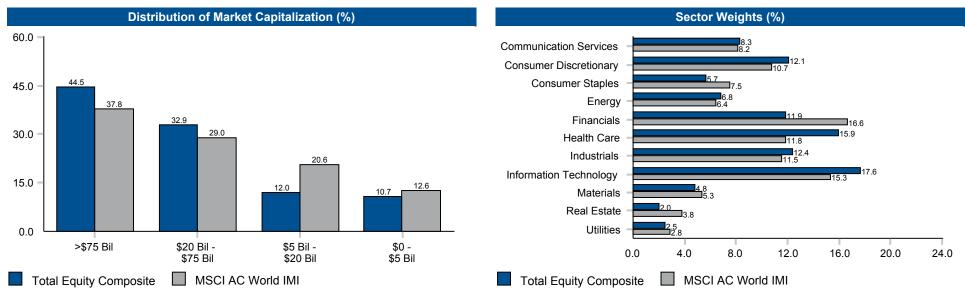


## **Cash Balance Plan Equity Portfolio Characteristics**

Cash Balance Plan Equity Composite vs. MSCI AC World IMI

As of September 30, 2018

| Portfolio Char                         | acteristics |           | Top Ten Equity Holdings   |                     |                     |                  |                     |  |  |
|--|-------------|-----------|---------------------------|---------------------|---------------------|------------------|---------------------|--|--|
|  | Portfolio   | Benchmark |                           | Portfolio<br>Weight | Benchmark<br>Weight | Active<br>Weight | Quarterly<br>Return |  |  |
| Wtd. Avg. Mkt. Cap (\$M)               | 145,561     | 137,087   |                           | (%)                 | (%)                 | (%)              | (%)                 |  |  |
| Median Mkt. Cap (\$M)                  | 18,462      | 1,717     |                           |                     |                     |                  |                     |  |  |
| Price/Earnings ratio                   | 20.5        | 17.4      | Amazon.com Inc            | 2.3                 | 1.5                 | 0.8              | 17.8                |  |  |
| Price/Book ratio                       | 3.4         | 2.8       | Visa Inc                  | 1.3                 | 0.5                 | 0.8              | 13.5                |  |  |
| 5 Yr. EPS Growth Rate (%)              | 12.3        | 11.6      | Microsoft Corp            | 1.3                 | 1.5                 | -0.2             | 16.4                |  |  |
| Current Yield (%)                      | 1.9         | 2.4       | Alphabet Inc              | 1.2                 | 0.7                 | 0.5              | 6.9                 |  |  |
| Debt to Equity                         | 0.7         | 3.5       | Apple Inc                 | 1.1                 | 2.1                 | -1.0             | 22.4                |  |  |
| Number of Stocks                       | 824         | 8,870     | Netflix Inc               | 1.1                 | 0.3                 | 0.8              | -4.4                |  |  |
| Beta (5 Years, Monthly)                | 0.97        | 1.00      | Facebook Inc              | 1.0                 | 0.7                 | 0.3              | -15.4               |  |  |
| Consistency (5 Years, Monthly)         | 50.00       | 0.00      | Alibaba Group Holding Ltd | 0.9                 | 0.4                 | 0.5              | -11.2               |  |  |
| Sharpe Ratio (5 Years, Monthly)        | 1.00        | 0.92      | Salesforce.com Inc.       | 0.9                 | 0.2                 | 0.7              | 16.6                |  |  |
| Information Ratio (5 Years, Monthly)   | 0.32        | 0.92      | Adobe Systems Inc         | 0.9                 | 0.2                 | 0.7              | 10.7                |  |  |
| Up Market Capture (5 Years, Monthly)   | 101.28      | 100.00    |                           |                     |                     |                  |                     |  |  |
| Down Market Capture (5 Years, Monthly) | 95.38       | 100.00    | % of Portfolio            | 12.0                | 8.1                 | 3.9              |                     |  |  |



Equity composite holdings are a consolidation of the underlying manager exposures weighted by the ending market value. Cash holdings for certain managers may not be included.



# Surplus Cash Equity Portfolio - Country/Region Allocation

Surplus Cash Equity Composite vs. MSCI AC World IMI

|                          | Total Equity Composite | MSCI AC World IMI |
|--------------------------|------------------------|-------------------|
| Canada                   | 1.5                    | 3.1               |
| United States            | 61.6                   | 53.0              |
| Australia                | 0.6                    | 2.2               |
| Hong Kong                | 3.7                    | 2.3               |
| New Zealand              | 0.0                    | 0.1               |
| Singapore                | 0.0                    | 0.4               |
| Pacific ex Japan         | 4.3                    | 5.0               |
| Japan                    | 4.7                    | 8.0               |
| Austria                  | 0.0                    | 0.1               |
| Belgium                  | 0.0                    | 0.4               |
| Bermuda                  | 0.1                    | 0.2               |
| Denmark                  | 1.0                    | 0.5               |
| Finland                  | 0.3                    | 0.4               |
| France                   | 2.5                    | 2.9               |
| Germany                  | 2.3                    | 2.8               |
| Ireland                  | 1.5                    | 1.2               |
| Italy                    | 0.3                    | 0.7               |
| Netherlands              | 0.9                    | 1.7               |
| Norway                   | 0.0                    | 0.3               |
| Portugal                 | 0.0                    | 0.1               |
| Spain                    | 0.5                    | 0.9               |
| Sweden                   | 0.0                    | 1.0               |
| Switzerland              | 3.3                    | 2.8               |
| Europe ex UK             | 12.8                   | 16.0              |
| United Kingdom           | 6.0                    | 5.1               |
| Israel                   | 0.0                    | 0.2               |
| Middle East              | 0.0                    | 0.2               |
| <b>Developed Markets</b> | 90.8                   | 90.4              |

|                         | Total Equity Composite | MSCI AC World IMI |
|-------------------------|------------------------|-------------------|
| China                   | 2.0                    | 1.8               |
| India                   | 0.5                    | 1.0               |
| Indonesia               | 0.3                    | 0.2               |
| Korea                   | 1.3                    | 1.7               |
| Malaysia                | 0.0                    | 0.3               |
| Philippines             | 0.0                    | 0.1               |
| Taiwan                  | 1.3                    | 1.4               |
| Thailand                | 0.1                    | 0.3               |
| EM Asia                 | 5.4                    | 6.7               |
| Czech Republic          | 0.1                    | 0.0               |
| Greece                  | 0.0                    | 0.0               |
| Hungary                 | 0.0                    | 0.0               |
| Poland                  | 0.0                    | 0.1               |
| Russia                  | 0.7                    | 0.4               |
| Turkey                  | 0.1                    | 0.1               |
| EM Europe               | 0.9                    | 0.6               |
| Brazil                  | 0.6                    | 0.7               |
| Cayman Islands          | 0.0                    | 0.0               |
| Chile                   | 0.1                    | 0.1               |
| Colombia                | 0.1                    | 0.0               |
| Mexico                  | 0.5                    | 0.3               |
| Peru                    | 0.0                    | 0.0               |
| Virgin Islands          | 0.0                    | 0.0               |
| EM Latin America        | 1.2                    | 1.2               |
| Egypt                   | 0.1                    | 0.0               |
| Qatar                   | 0.0                    | 0.1               |
| South Africa            | 0.5                    | 0.6               |
| United Arab Emirates    | 0.2                    | 0.1               |
| EM Mid East+Africa      | 0.7                    | 0.8               |
| <b>Emerging Markets</b> | 8.3                    | 9.4               |
| Frontier Markets        | 0.1                    | 0.0               |
| Cash                    | 0.3                    | 0.0               |
| Other                   | 0.5                    | 0.2               |
| Total                   | 100.0                  | 100.0             |
|                         |                        |                   |

# Cash Balance Plan Equity Portfolio - Country/Region Allocation

Cash Balance Plan Equity Composite vs. MSCI AC World IMI

|                          | Total Equity Composite | MSCI AC World IMI |
|--------------------------|------------------------|-------------------|
| Canada                   | 1.7                    | 3.1               |
| United States            | 61.9                   | 53.0              |
| Australia                | 0.7                    | 2.2               |
| Hong Kong                | 3.2                    | 2.3               |
| New Zealand              | 0.0                    | 0.1               |
| Singapore                | 0.0                    | 0.4               |
| Pacific ex Japan         | 3.9                    | 5.0               |
| Japan                    | 5.4                    | 8.0               |
| Austria                  | 0.0                    | 0.1               |
| Belgium                  | 0.0                    | 0.4               |
| Bermuda                  | 0.1                    | 0.2               |
| Denmark                  | 1.1                    | 0.5               |
| Finland                  | 0.4                    | 0.4               |
| France                   | 2.8                    | 2.9               |
| Germany                  | 2.6                    | 2.8               |
| Ireland                  | 1.7                    | 1.2               |
| Italy                    | 0.3                    | 0.7               |
| Netherlands              | 1.1                    | 1.7               |
| Norway                   | 0.0                    | 0.3               |
| Portugal                 | 0.0                    | 0.1               |
| Spain                    | 0.6                    | 0.9               |
| Sweden                   | 0.0                    | 1.0               |
| Switzerland              | 3.6                    | 2.8               |
| Europe ex UK             | 14.3                   | 16.0              |
| United Kingdom           | 6.7                    | 5.1               |
| Israel                   | 0.0                    | 0.2               |
| Middle East              | 0.0                    | 0.2               |
| <b>Developed Markets</b> | 93.8                   | 90.4              |

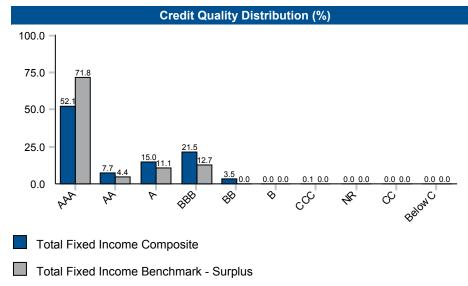
|                      | Total Equity Composite | MSCI AC World IMI |
|----------------------|------------------------|-------------------|
| China                | 1.8                    | 1.8               |
| India                | 0.3                    | 1.0               |
| Indonesia            | 0.2                    | 0.2               |
| Korea                | 1.0                    | 1.7               |
| Malaysia             | 0.0                    | 0.3               |
| Philippines          | 0.0                    | 0.1               |
| Taiwan               | 0.9                    | 1.4               |
| Thailand             | 0.1                    | 0.3               |
| EM Asia              | 4.3                    | 6.7               |
| Czech Republic       | 0.1                    | 0.0               |
| Greece               | 0.0                    | 0.0               |
| Hungary              | 0.0                    | 0.0               |
| Poland               | 0.0                    | 0.1               |
| Russia               | 0.4                    | 0.4               |
| Turkey               | 0.0                    | 0.1               |
| EM Europe            | 0.5                    | 0.6               |
| Brazil               | 0.3                    | 0.7               |
| Cayman Islands       | 0.0                    | 0.0               |
| Chile                | 0.1                    | 0.1               |
| Colombia             | 0.0                    | 0.0               |
| Mexico               | 0.3                    | 0.3               |
| Peru                 | 0.0                    | 0.0               |
| Virgin Islands       | 0.0                    | 0.0               |
| EM Latin America     | 0.7                    | 1.2               |
| Egypt                | 0.0                    | 0.0               |
| Qatar                | 0.0                    | 0.1               |
| South Africa         | 0.3                    | 0.6               |
| United Arab Emirates | 0.1                    | 0.1               |
| EM Mid East+Africa   | 0.4                    | 0.8               |
| Emerging Markets     | 5.8                    | 9.4               |
| Frontier Markets     | 0.1                    | 0.0               |
| Cash                 | 0.0                    | 0.0               |
| Other                | 0.3                    | 0.2               |
| Total                | 100.0                  | 100.0             |

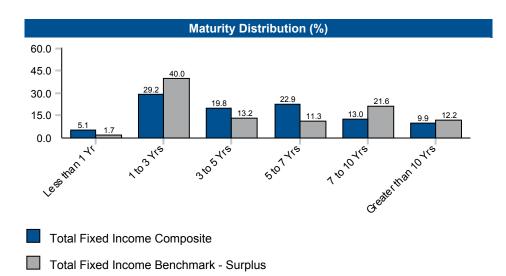
### Surplus Cash Fixed Income Portfolio Characteristics

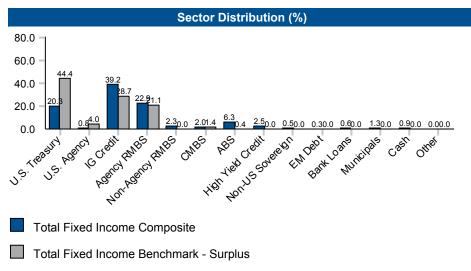
Surplus Cash Fixed Income Composite vs. Total Fixed Income Benchmark - Surplus

| Portfolio Characteristics |           |           |  |  |
|---------------------------|-----------|-----------|--|--|
|                           | Portfolio | Benchmark |  |  |
| Effective Duration        | 4.5       | 5.2       |  |  |
| Avg. Maturity             | 6.4       | 6.7       |  |  |
| Avg. Quality              | AA        | AA-       |  |  |
| Yield To Maturity (%)     | 3.6       | 3.3       |  |  |

| Historical Statistics - 5 Years        |                         |                           |                     |
|--|-------------------------|---------------------------|---------------------|
|  | Up<br>Market<br>Capture | Down<br>Market<br>Capture | Maximum<br>Drawdown |
| Total Fixed Income Composite           | 92.1                    | 69.6                      | -1.7                |
| Total Fixed Income Benchmark - Surplus | 100.0                   | 100.0                     | -2.6                |







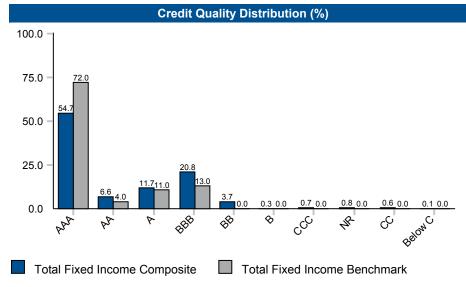


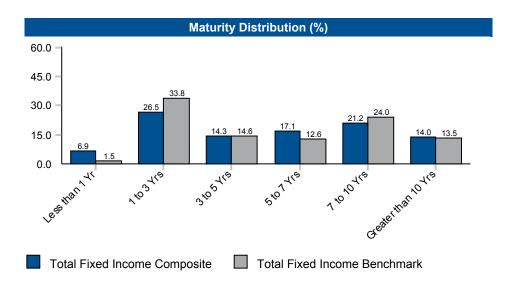
### **Cash Balance Fixed Income Portfolio Characteristics**

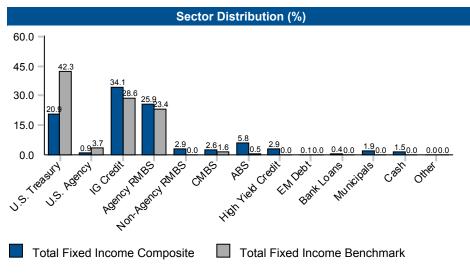
Cash Balance Fixed Income Composite vs. Total Fixed Income Benchmark

| Portfolio Characteristics |           |           |  |  |
|---------------------------|-----------|-----------|--|--|
|                           | Portfolio | Benchmark |  |  |
| Effective Duration        | 4.7       | 5.5       |  |  |
| Avg. Maturity             | 7.0       | 7.3       |  |  |
| Avg. Quality              | AA        | AA-       |  |  |
| Yield To Maturity (%)     | 3.7       | 3.4       |  |  |

| Historical Statistics - 5 Years |                         |                           |                     |
|---------------------------------|-------------------------|---------------------------|---------------------|
|                                 | Up<br>Market<br>Capture | Down<br>Market<br>Capture | Maximum<br>Drawdown |
| Total Fixed Income Composite    | 98.4                    | 73.7                      | -2.0                |
| Total Fixed Income Benchmark    | 100.0                   | 100.0                     | -2.5                |











# **Direct Hedge Fund Portfolio**



## Surplus Cash Hedge Fund Portfolio Executive Summary

## Portfolio Update - Third Quarter 2018

The Surplus Cash Hedge Fund Portfolio (the "Portfolio") returned +1.4% during the third quarter, outperforming the HFRI Fund of Funds Composite Index by 1.1%. Each of the Portfolio's four strategies delivered positive absolute returns. Equity Long / Short (+2.2%), Macro (+1.3%) and Relative Value (+1.1%) delivered strong gains while Credit (+0.7%) made a slightly smaller contribution. The Equity Long / Short, Macro and Relative Value composites outperformed their reference indices by +1.7%, +1.3% and +0.5%, respectively, while Credit lagged its reference index by 0.7%.

| Strategy         | 3Q18<br>Absolute<br>Performance | 12-month<br>Absolute<br>Performance | Strategy Commentary   | Manager Performance<br>Q3 Contributors/Detractors |   |                                  |  |  |  |
|------------------|---------------------------------|-------------------------------------|---|---|---|----------------------------------|--|--|--|
| Equity<br>Long / | +                               | +                                   | <i>Tiger Eye</i> 's software and other technology positions, along with<br>a transportation name, generated strong performance. <i>Bloom</i><br><i>Tree</i> 's long technology and telecom services names as well as a<br>short theme on passive components performed well. <i>CapeView</i> | +   | Bloom Tree<br>Tiger Eye<br>Marshall Wace<br>CapeView 2x | +6.7%<br>+6.6%<br>+0.3%<br>-1.8% |  |  |  |
| Short            |                                 |                                     | detracted due to poor performance from European airlines and<br>other idiosyncratic names.  | -   | CapeView  | -0.7%                            |  |  |  |
| Credit           | +                               | +                                   | <i>Davidson Kempner (DK)</i> had successful debt and equity positions in technology, telecommunications and the municipal debt of Puerto Rico; <i>Chatham</i> increased on good performance   | +   | DK<br>Chatham   | +2.0%<br>+1.4%                   |  |  |  |
| Credit           |                                 | т                                   | from some of its large debt and equity positions. <i>York</i> delivered negative returns mostly due to idiosyncratic, concentrated positioning in post-reorg equity names.  | -   | York  | -1.3%                            |  |  |  |
| Macro            | +                               | +                                   | Systematic macro manager <i>BP Transtrend</i> had another positive quarter driven by positions in energy and equities markets.<br>Emerging markets discretionary manager <i>Emso</i> sustained small  | +   | BP Transtrend<br>Stone Milliner                         | +4.4% +1.2%                      |  |  |  |
| iviaci o         | Ŧ                               | т                                   | losses in fixed income positions in a number of markets,<br>including Argentina, Brazil, South Africa, Venezuela and<br>Greece.   | -   | Emso<br>Moore   | -0.5%<br>-0.1%                   |  |  |  |
| Relative         |                                 |                                     | Systematic manager <i>Renaissance</i> added to performance with gains from trading in domestic equity signals in the healthcare,  | +   | Renaissance   | +3.5%                            |  |  |  |
| Value            | +                               | +                                   | consumer discretionary, and information technology sectors.<br>BlackRock 32's negative performance was mostly driven by<br>signals across its Emerging Market sleeve.   | -   | BlackRock 32  | -3.9%                            |  |  |  |

## **Investment Activity**

Redemptions already in progress and proceeds received are summarized in the table below:

| Fund  | Strategy  | Redemption details   | Redemption<br>Status | Status of Proceeds  |  |  |  |
|---|---|--|----------------------|---|--|--|--|
| Luxor Capital Partners<br>Offshore, Ltd.          | Equity  | Redemption submitted as of June 30, 2017.                                      | In progress          | Remaining amount continues to be<br>held into liquidating special purpose<br>vehicle (no timeline available). |  |  |  |
| Pine River Fund Ltd.                              | Ltd. Relative Value Redemption submitted starting on December 31, 2016. Pine River is currently liquidating the fund. |  | In progress          | Further distributions are expected<br>over time as the fund's liquidation<br>process continues.               |  |  |  |
| Fir Tree International Value<br>Fund (USTE), L.P. | Relative<br>Value   | Redemption for second investment<br>were requested as of November 30,<br>2017. | In progress          | Remaining amount relates to non-<br>marketable positions which will be<br>sold over time.                     |  |  |  |

On July 1, 2018, \$4 million of excess cash was reinvested in existing manager Moore Macro Managers Fund, Ltd. (Macro).

On September 1, 2018, \$10 million in excess cash was reinvested into a new Relative Value strategy, (Carlson) Black Diamond Arbitrage Ltd.

### **Recommendations or Action Items**

A full redemption request was submitted in October for exposure to the Tiger Eye Fund and will take place as of December 31, 2018. Pavilion is also reviewing exposure to The BlackRock 32 Capital Fund Ltd. and will work with El Camino management to approve and implement any required changes.



## Direct Hedge Fund Portfolio Asset Allocation & Performance

### As of September 30, 2018

|   | Allocati                | on    |         |                    | Performance(%) |           |            |                   |                     |  |  |  |
|---|-------------------------|-------|---------|--------------------|----------------|-----------|------------|-------------------|---------------------|--|--|--|
|   | Market<br>Value<br>(\$) | %     | Quarter | Year<br>To<br>Date | Fiscal<br>YTD  | 1<br>Year | 3<br>Years | Since<br>Invested | Inception<br>Period |  |  |  |
| Hedge Fund Composite                    | 150,939,128             | 100.0 | 1.4     | 3.9                | 1.4            | 7.4       | 3.6        | 3.4               | 5y 5m               |  |  |  |
| HFRI Fund of Funds Composite Index      |                         |       | 0.3     | 1.0                | 0.3            | 3.1       | 3.3        | 3.1               |                     |  |  |  |
| El Camino HF Composite Benchmark        |                         |       | 0.6     | 1.6                | 0.6            | 4.0       | 5.3        | 3.8               |                     |  |  |  |
| Equity HF Composite                     | 50,559,468              | 33.5  | 2.2     | 4.9                | 2.2            | 9.1       | 2.7        | 3.3               | 5y 5m               |  |  |  |
| HFRI Equity Hedge (Total) Index         |                         |       | 0.5     | 1.7                | 0.5            | 5.1       | 7.3        | 5.4               |                     |  |  |  |
| Credit HF Composite                     | 32,254,187              | 21.4  | 0.7     | 5.0                | 0.7            | 8.3       | 7.9        | 6.0               | 5y 5m               |  |  |  |
| HFRI ED: Distressed/Restructuring Index |                         |       | 1.4     | 4.3                | 1.4            | 6.0       | 7.3        | 4.2               |                     |  |  |  |
| Macro HF Composite                      | 41,987,609              | 27.8  | 1.3     | 1.0                | 1.3            | 5.1       | 2.1        | 2.0               | 5y 5m               |  |  |  |
| HFRI Macro (Total) Index                |                         |       | 0.0     | -1.8               | 0.0            | 0.5       | 0.4        | 0.6               |                     |  |  |  |
| Relative Value HF Composite             | 26,137,864              | 17.3  | 1.1     | 5.7                | 1.1            | 5.9       | 2.7        | 2.7               | 5y 5m               |  |  |  |
| HFRI RV: Multi-Strategy Index           |                         |       | 0.6     | 2.0                | 0.6            | 3.1       | 4.2        | 3.6               |                     |  |  |  |

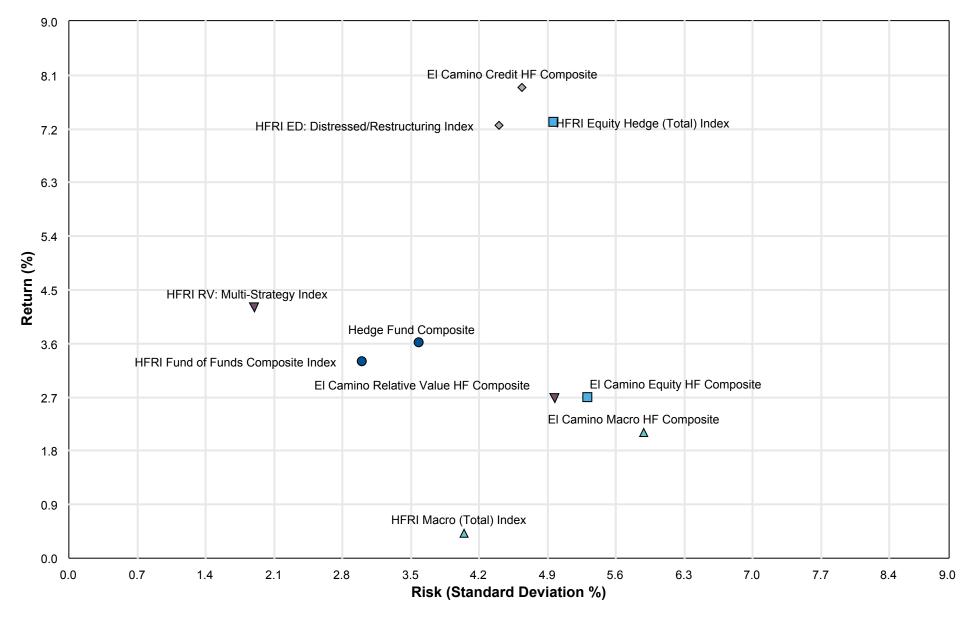
Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized. The El Camino HF Composite Benchmark consists of 40% HFRI Equity Hedge (Total) Index, 20% HFRI ED: Distressed/Restructuring Index, 20% HFRI Macro (Total) Index, and 20% HFRI RV: Multi-Strategy Index.



## **Direct Hedge Fund Portfolio**

Risk and Return Summary (Net of Fees)

3 Years Ending September 30, 2018



Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.

## **Direct Hedge Fund Portfolio Risk Statistics**

### As of September 30, 2018

|   | Since<br>Inception<br>Return | Since<br>Inception<br>Standard<br>Deviation | Since<br>Inception<br>Maximum<br>Drawdown | Since<br>Inception<br>Best<br>Quarter | Since<br>Inception<br>Worst<br>Quarter | Since<br>Inception<br>Sharpe<br>Ratio | Since<br>Inception<br>Sortino<br>Ratio | Inception<br>Period |
|---|------------------------------|---|---|---------------------------------------|--|---------------------------------------|--|---------------------|
| Total Portfolio                         |                              |   |   |                                       |  |                                       |  |                     |
| Hedge Fund Composite                    | 3.4                          | 3.7   | -9.5                                      | 4.9                                   | -5.7                                   | 0.8                                   | 1.2                                    | 5y 5m               |
| HFRI Fund of Funds Composite Index      | 3.1                          | 3.2   | -7.6                                      | 3.7                                   | -4.2                                   | 0.8                                   | 1.2                                    |                     |
| Equity Long/Short                       |                              |   |   |                                       |  |                                       |  |                     |
| El Camino Equity HF Composite           | 3.3                          | 5.1   | -14.3                                     | 5.7                                   | -8.1                                   | 0.6                                   | 0.8                                    | 5y 5m               |
| HFRI Equity Hedge (Total) Index         | 5.4                          | 5.2   | -10.3                                     | 6.0                                   | -6.3                                   | 0.9                                   | 1.5                                    |                     |
| Credit                                  |                              |   |   |                                       |  |                                       |  |                     |
| El Camino Credit HF Composite           | 6.0                          | 5.1   | -18.5                                     | 7.0                                   | -6.6                                   | 1.1                                   | 1.8                                    | 5y 5m               |
| HFRI ED: Distressed/Restructuring Index | 4.2                          | 4.8   | -17.5                                     | 7.4                                   | -6.4                                   | 0.8                                   | 1.2                                    |                     |
| Масто                                   |                              |   |   |                                       |  |                                       |  |                     |
| El Camino Macro HF Composite            | 2.0                          | 6.0   | -7.4                                      | 7.9                                   | -4.8                                   | 0.3                                   | 0.4                                    | 5y 5m               |
| HFRI Macro (Total) Index                | 0.6                          | 4.0   | -4.6                                      | 5.1                                   | -4.0                                   | 0.1                                   | 0.1                                    |                     |
| Relative Value                          |                              |   |   |                                       |  |                                       |  |                     |
| El Camino Relative Value HF Composite   | 2.7                          | 4.8   | -13.8                                     | 5.3                                   | -8.1                                   | 0.5                                   | 0.7                                    | 5y 5m               |
| HFRI RV: Multi-Strategy Index           | 3.6                          | 2.1   | -4.2                                      | 2.9                                   | -2.4                                   | 1.5                                   | 2.7                                    | -                   |

Returns are expressed as percentages and are net of investment management fees. Returns for periods greater than one year are annualized.



## **Asset Class Diversification**

Hedge Fund Portfolio As of September 30, 2018

| Manager Asset Class/Typ                 | Total Assets<br>e (\$, mil.) | Percent of<br>Total | Target<br>Allocation | Relative to<br>Target |
|---|------------------------------|---------------------|----------------------|-----------------------|
| Equity Hedge Funds                      | \$ 50.6                      | 33.5%               | 40.0%                | - 6.5%                |
| Luxor Event Driven Equ                  | ity \$ 0.9                   | 0.6%                |                      |                       |
| CapeView 1x European Equity             | \$ 6.4                       | 4.2%                |                      |                       |
| CapeView 2x European Equity             | \$ 3.9                       | 2.6%                |                      |                       |
| Bloom Tree Global Equity                | \$ 10.4                      | 6.9%                |                      |                       |
| Marshall Wace Eureka Global Equity      | \$ 10.2                      | 6.8%                |                      |                       |
| Tiger Eye US Equity                     | \$ 8.4                       | 5.6%                |                      |                       |
| Indus Japan Japanese Equity             | \$ 10.4                      | 6.9%                |                      |                       |
| Credit Hedge Funds                      | \$ 32.3                      | 21.4%               | 20.0%                | + 1.4%                |
| Davidson Kempner Distressed Credit      | \$ 11.1                      | 7.4%                |                      |                       |
| York Multi-Strategy C                   | redit \$ 10.9                | 7.2%                |                      |                       |
| Chatham Asset High Yield                | \$ 10.3                      | 6.8%                |                      |                       |
| Macro Hedge Funds                       | \$ 42.0                      | 27.8%               | 20.0%                | + 7.8%                |
| BP Transtrend Systematic Macr           | o \$ 11.0                    | 7.3%                |                      |                       |
| Moore Discretionary Ma                  | sero \$10.7                  | 7.1%                |                      |                       |
| Stone Milliner Discretionary Ma         | stro \$ 10.2                 | 6.8%                |                      |                       |
| EMSO Saguaro Discretionary Ma           | scro \$ 10.2                 | 6.7%                |                      |                       |
| Relative Value Hedge Funds              | \$ 26.1                      | 17.3%               | 20.0%                | - 2.7%                |
| BlackRock 32 Capital Quantitative Mar   | ket Neutral \$ 5.9           | 3.9%                |                      |                       |
| Renaissance RIDGE Quantitative Mar      | ket Neutral \$ 9.5           | 6.3%                |                      |                       |
| Fir Tree Multi-Strategy                 | \$ 0.5                       | 0.3%                |                      |                       |
| Pine River Multi-Strategy               | \$ 0.1                       | 0.1%                |                      |                       |
| Black Diamond Arbitrage Event/Merger Ar | bitrage \$10.1               | 6.7%                |                      |                       |
| Total Hedge Fund Portfolio              | \$150.9                      | 100.0%              |                      |                       |

\*Totals may not add due to rounding.



## Direct Hedge Fund Performance Summary

|                                    | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | Since<br>Invested | 2017 | 2016  | 2015 | 2014 | 2013 | 2012 | Inception<br>Period |
|------------------------------------|---------|--------------------|---------------|-----------|------------|------------|-------------------|------|-------|------|------|------|------|---------------------|
| Total Portfolio                    |         |                    |               |           |            |            |                   |      |       |      |      |      |      |                     |
| Hedge Fund Composite               | 1.4     | 3.9                | 1.4           | 7.4       | 3.6        | 3.5        | 3.4               | 7.2  | 1.0   | -1.6 | 2.2  | -    | -    | 5y 5m               |
| HFRI Fund of Funds Composite Index | 0.3     | 1.0                | 0.3           | 3.1       | 3.3        | 3.2        | 3.1               | 7.8  | 0.5   | -0.3 | 3.4  | 9.0  | 4.8  |                     |
| El Camino HF Composite Benchmark   | 0.6     | 1.6                | 0.6           | 4.0       | 5.3        | 3.9        | 3.8               | 7.7  | 6.7   | -2.1 | 2.2  | 9.9  | 6.6  |                     |
| Equity Long/Short                  |         |                    |               |           |            |            |                   |      |       |      |      |      |      |                     |
| Equity HF Composite                | 2.2     | 4.9                | 2.2           | 9.1       | 2.7        | 3.0        | 3.3               | 12.1 | -8.0  | 2.0  | -0.4 | -    | -    | 5y 5m               |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 5.4               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |
| Bloom Tree Offshore Fund, Ltd.     | 6.7     | 1.9                | 6.7           | 3.2       | 2.6        | 4.4        | 3.9               | 8.6  | -3.8  | 6.3  | 3.0  | 12.8 | 13.7 | 4y 6m               |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 4.3               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |
| CapeView Azri Fund Limited         | -0.7    | 4.4                | -0.7          | 7.3       | 1.4        | 4.2        | 4.3               | 7.6  | -8.3  | 9.8  | 4.6  | 11.4 | 5.8  | 5y 3m               |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 5.7               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |
| CapeView Azri 2X Fund              | -1.8    | 8.0                | -1.8          | 14.7      | 2.8        | 8.7        | 8.9               | 16.2 | -15.9 | 21.6 | 9.8  | 24.4 | 12.7 | 5y 3m               |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 5.7               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |
| Indus Japan Fund Ltd.              | 0.2     | -0.3               | 0.2           | 6.5       | 4.8        | 5.8        | 4.8               | 21.6 | -7.5  | 1.8  | 6.3  | 45.0 | 8.1  | 4y 10m              |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 4.6               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |
| Marshall Wace Eureka Fund Class B2 | 0.3     | 5.9                | 0.3           | 9.8       | 7.0        | 9.2        | 9.6               | 12.0 | 1.3   | 11.7 | 8.1  | 21.1 | 7.0  | 1y 2m               |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 6.1               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |
| Tiger Eye Fund, Ltd.               | 6.6     | 13.8               | 6.6           | 19.3      | 7.5        | 7.2        | 6.1               | 17.9 | -5.0  | -2.0 | 3.9  | 37.7 | 17.7 | 4y 6m               |
| HFRI Equity Hedge (Total) Index    | 0.5     | 1.7                | 0.5           | 5.1       | 7.3        | 5.1        | 4.3               | 13.3 | 5.5   | -1.0 | 1.8  | 14.3 | 7.4  |                     |

Returns are expressed as percentages. Returns for periods greater than one year are annualized. From May 1, 2013, results shown are El Camino Hedge Fund Portfolio returns. Returns for CapeView Azri 2x Fund prior to October 2010 are those of CapeView Azri Fund Limited; returns for BP Transtrend Diversified Fund, LLC prior to April 2008 are those of the Transtrend Diversified Trend Program Enhanced Risk (USD) Fund.



## Direct Hedge Fund Performance Summary

|   | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | Since<br>Invested | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | Inception<br>Period |
|---|---------|--------------------|---------------|-----------|------------|------------|-------------------|------|------|------|------|------|------|---------------------|
| Credit  |         |                    |               |           |            |            |                   |      |      |      |      |      |      |                     |
| Credit HF Composite   | 0.7     | 5.0                | 0.7           | 8.3       | 7.9        | 5.5        | 6.0               | 9.9  | 14.7 | -8.2 | 2.8  | -    | -    | 5y 5m               |
| HFRI ED: Distressed/Restructuring Index                     | 1.4     | 4.3                | 1.4           | 6.0       | 7.3        | 3.8        | 4.2               | 6.3  | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 |                     |
| Chatham Asset High Yield Offshore Fund, Ltd                 | 1.4     | 5.4                | 1.4           | 10.6      | 14.2       | 11.6       | 10.2              | 13.5 | 24.3 | 5.6  | 5.5  | 12.5 | 11.5 | 1y 2m               |
| HFRI ED: Distressed/Restructuring Index                     | 1.4     | 4.3                | 1.4           | 6.0       | 7.3        | 3.8        | 5.7               | 6.3  | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 |                     |
| DK Distressed Opportunities International (Cayman) Ltd.[CE] | 2.0     | 7.9                | 2.0           | 10.1      | 11.0       | 7.9        | 8.4               | 9.5  | 21.4 | -6.2 | 3.2  | 21.7 | 13.5 | 5y 5m               |
| HFRI ED: Distressed/Restructuring Index                     | 1.4     | 4.3                | 1.4           | 6.0       | 7.3        | 3.8        | 4.2               | 6.3  | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 |                     |
| York Credit Opportunities Unit Trust                        | -1.3    | 1.7                | -1.3          | 4.5       | 4.0        | 3.5        | 3.8               | 12.5 | 4.1  | -7.9 | 3.4  | 15.6 | 18.9 | 5y 5m               |
| HFRI ED: Distressed/Restructuring Index                     | 1.4     | 4.3                | 1.4           | 6.0       | 7.3        | 3.8        | 4.2               | 6.3  | 15.1 | -8.1 | -1.4 | 14.0 | 10.1 |                     |
| Масго   |         |                    |               |           |            |            |                   |      |      |      |      |      |      |                     |
| Macro HF Composite  | 1.3     | 1.0                | 1.3           | 5.1       | 2.1        | 3.7        | 2.0               | 0.1  | 5.0  | 1.0  | 7.7  | -    | -    | 5y 5m               |
| HFRI Macro (Total) Index                                    | 0.0     | -1.8               | 0.0           | 0.5       | 0.4        | 1.5        | 0.6               | 2.2  | 1.0  | -1.3 | 5.6  | -0.4 | -0.1 |                     |
| BP Transtrend Diversified Fund LLC                          | 4.4     | 3.6                | 4.4           | 17.7      | 4.0        | 7.3        | 4.6               | 1.4  | 8.2  | -1.1 | 18.9 | 0.6  | 1.2  | 5y 5m               |
| HFRI Macro (Total) Index                                    | 0.0     | -1.8               | 0.0           | 0.5       | 0.4        | 1.5        | 0.6               | 2.2  | 1.0  | -1.3 | 5.6  | -0.4 | -0.1 |                     |
| EMSO Saguaro, Ltd.  | -0.5    | -3.0               | -0.5          | -2.5      | 6.1        | 4.9        | -0.4              | 7.7  | 10.2 | 6.2  | 2.6  | 2.7  | 17.1 | 1y 2m               |
| HFRI Macro (Total) Index                                    | 0.0     | -1.8               | 0.0           | 0.5       | 0.4        | 1.5        | 0.4               | 2.2  | 1.0  | -1.3 | 5.6  | -0.4 | -0.1 |                     |
| Moore Macro Managers Fund Ltd.                              | -0.1    | 2.5                | -0.1          | 4.4       | 1.5        | 2.9        | 2.4               | 0.6  | 0.0  | 3.1  | 5.4  | 13.4 | 8.9  | 4y 6m               |
| HFRI Macro (Total) Index                                    | 0.0     | -1.8               | 0.0           | 0.5       | 0.4        | 1.5        | 1.3               | 2.2  | 1.0  | -1.3 | 5.6  | -0.4 | -0.1 |                     |
| Stone Milliner Macro Fund Inc.[CE]                          | 1.2     | 3.3                | 1.2           | 1.1       | 1.6        | 4.9        | 1.3               | -5.5 | 4.9  | 5.7  | 14.3 | 11.2 | 8.1  | 3y 7m               |
| HFRI Macro (Total) Index                                    | 0.0     | -1.8               | 0.0           | 0.5       | 0.4        | 1.5        | -0.7              | 2.2  | 1.0  | -1.3 | 5.6  | -0.4 | -0.1 |                     |

Returns are expressed as percentages. Returns for periods greater than one year are annualized. From May 1, 2013, results shown are El Camino Hedge Fund Portfolio returns. Returns for CapeView Azri 2x Fund prior to October 2010 are those of CapeView Azri Fund Limited; returns for BP Transtrend Diversified Fund, LLC prior to April 2008 are those of the Transtrend Diversified Trend Program Enhanced Risk (USD) Fund.



## Direct Hedge Fund Performance Summary

|  | Quarter | Year<br>To<br>Date | Fiscal<br>YTD | 1<br>Year | 3<br>Years | 5<br>Years | Since<br>Invested | 2017 | 2016  | 2015 | 2014 | 2013 | 2012 | Inception<br>Period |
|--|---------|--------------------|---------------|-----------|------------|------------|-------------------|------|-------|------|------|------|------|---------------------|
| Relative Value                         |         |                    |               |           |            |            |                   |      |       |      |      |      |      |                     |
| Relative Value HF Composite            | 1.1     | 5.7                | 1.1           | 5.9       | 2.7        | 2.3        | 2.7               | 4.4  | -0.4  | -4.0 | 1.6  | -    | -    | 5y 5m               |
| HFRI RV: Multi-Strategy Index          | 0.6     | 2.0                | 0.6           | 3.1       | 4.2        | 3.7        | 3.6               | 4.1  | 6.4   | 0.7  | 3.4  | 7.9  | 8.2  |                     |
| (BlackRock) The 32 Capital Fund, Ltd.  | -3.9    | 3.5                | -3.9          | 3.5       | -0.7       | 2.3        | 3.6               | 7.4  | -11.4 | 8.6  | -0.3 | 7.1  | 8.9  | 2y 2m               |
| HFRI EH: Equity Market Neutral Index   | 0.7     | 1.5                | 0.7           | 3.6       | 3.3        | 3.7        | 3.5               | 4.9  | 2.2   | 4.3  | 3.1  | 6.5  | 3.0  |                     |
| HFRI RV: Multi-Strategy Index          | 0.6     | 2.0                | 0.6           | 3.1       | 4.2        | 3.7        | 4.3               | 4.1  | 6.4   | 0.7  | 3.4  | 7.9  | 8.2  |                     |
| (Carlson) Black Diamond Arbitrage Ltd. | 0.2     | 4.6                | 0.2           | 4.4       | 8.8        | 7.9        | 0.6               | 6.8  | 10.8  | 10.5 | 3.9  | 7.5  | 2.6  | 0y 1m               |
| HFRI ED: Merger Arbitrage Index        | 0.6     | 3.3                | 0.6           | 3.3       | 4.5        | 3.5        | 0.3               | 4.3  | 3.6   | 3.3  | 1.7  | 4.7  | 2.8  |                     |
| HFRI ED: Multi-Strategy Index          | 1.8     | 0.6                | 1.8           | 3.0       | 3.9        | 2.9        | 0.6               | 4.4  | 6.1   | -1.0 | 1.3  | 10.1 | 6.5  |                     |
| Renaissance RIDGE                      | 3.5     | 7.1                | 3.5           | 9.6       | 12.5       | 15.7       | 5.9               | 12.4 | 13.3  | 25.6 | 17.0 | 7.7  | 5.1  | 0y 11m              |
| HFRI EH: Equity Market Neutral Index   | 0.7     | 1.5                | 0.7           | 3.6       | 3.3        | 3.7        | 2.5               | 4.9  | 2.2   | 4.3  | 3.1  | 6.5  | 3.0  |                     |
| HFRI RV: Multi-Strategy Index          | 0.6     | 2.0                | 0.6           | 3.1       | 4.2        | 3.7        | 2.6               | 4.1  | 6.4   | 0.7  | 3.4  | 7.9  | 8.2  |                     |

Returns are expressed as percentages. Returns for periods greater than one year are annualized. From May 1, 2013, results shown are El Camino Hedge Fund Portfolio returns. Returns for CapeView Azri 2x Fund prior to October 2010 are those of CapeView Azri Fund Limited; returns for BP Transtrend Diversified Fund, LLC prior to April 2008 are those of the Transtrend Diversified Trend Program Enhanced Risk (USD) Fund.









## Appendix Benchmark Descriptions As of September 30, 2018

## **Surplus Cash**

#### Surplus Cash Total Benchmark

Beginning March 2015, the Surplus Cash Total Benchmark consists of 40% Total Equity Benchmark - Surplus, 30% Barclays Capital Aggregate, 10% Short Duration Fixed Income Benchmark - Surplus, and 20% Total Alternatives Benchmark - Surplus, and 20% Total Equity Benchmark - Surplus, and 20% Total Alternatives Benchmark - Surplus, and 10% Total Alternatives Benchmark - Surplus, and 20% Total Equity Benchmark - Surplus, and 10% Total Alternatives Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 22% Short Duration Fixed Income Benchmark - Surplus, and 70% Total Equity Benchmark - Surplus, and 8% HFRI Fund of Funds Composite Index. From November 2012 to April 2013, the Surplus Cash Total Benchmark - Surplus and 70% Total Equity Benchmark - Surplus Cash Total Equity Benchmark - Surplus and 85% Total Equity Benchmark - Surplus. From August 2000 to December 2006, the Surplus Cash Total Benchmark consisted of 2% Total Equity Benchmark - Surplus. From Angregate, 10% Total Equity Benchmark - Surplus. From Angregate, 20% total Equity Benchmark - Surplus. From Angregate, 20% total Equity Benchmark - Surplus and 98% Total Equity Benchmark - Surplus and 85% Total Equity Benchmark - S

#### Surplus Cash Total Benchmark X Privates

Beginning March 2015 the Surplus Cash Total Benchmark consists of 42.1% Total Equity Benchmark - Surplus, 31.6% Barclays Capital Aggregate, 10.5% Short Duration Fixed Income Benchmark - Surplus, and 15.8% Total Alternatives Benchmark - Surplus. From August 2013 to March 2014, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, 40% Barclays Capital Aggregate, 20% Short Duration Fixed Income Benchmark - Surplus, and 10% Total Alternatives Benchmark - Surplus. During July 2013, the Surplus Cash Total Benchmark consisted of 30% Total Equity Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus, 40% Barclays Capital Aggregate, 21% Short Duration Fixed Income Benchmark - Surplus, and 9% Total Alternatives Benchmark - Surplus, 40% Barclays Capital Aggregate, 22% Short Duration Fixed Income Benchmark - Surplus, 40% Barclays Capital Aggregate, 22% Short Duration Fixed Income Benchmark - Surplus, and 8% HFRI Fund of Funds Composite Index. From November 2012 to April 2013, the Surplus Cash Total Benchmark consists of 30% Total Equity Benchmark - Surplus and 70% Total Fixed Income Benchmark - Surplus. From August 2000 to December 2006, the Surplus Cash Total Benchmark consisted of 2% Total Equity Benchmark - Surplus. From April 1991 to July 2000, the Surplus Cash Total Benchmark consisted of 100% Total Fixed Income Benchmark - Surplus.

#### **Pre-Pavilion Surplus Cash Total Benchmark**

Beginning January 2007, the Pre-Pavilion Surplus Cash Total Benchmark consists of 15% Total Equity Benchmark - Surplus and 85% Total Fixed Income Benchmark - Surplus. From August 2000 to December 2006, the Pre-Pavilion Surplus Cash Total Benchmark consisted of 2% Total Equity Benchmark - Surplus and 98% Total Fixed Income Benchmark - Surplus. From April 1991 to July 2000, the Pre-Pavilion Surplus Cash Total Benchmark consisted of 100% Total Fixed Income Benchmark - Surplus.

#### **Total Equity Benchmark - Surplus**

Beginning March 2015, the Total Equity Benchmark - Surplus consists of 50% Large Cap Equity Benchmark, 12.5% Small Cap Equity Benchmark, and 37.5% MSCI AC World ex USA (Net). From November 2012 to February 2015, the Total Equity Benchmark - Surplus consisted of 50% Large Cap Equity Benchmark, 16.67% Small Cap Equity Benchmark, and 33.33% MSCI AC World ex USA (Net). From April 1991 to October 2012, the Total Equity Benchmark - Surplus consisted of 100% Large Cap Equity Benchmark.

#### **Domestic Equity Benchmark - Surplus**

Beginning March 2015, the Domestic Equity Benchmark - Surplus consists of 80% Large Cap Equity Benchmark and 20% Small Cap Equity Benchmark. From November 2012 to February 2015, the Domestic Equity Benchmark - Surplus consisted of 75% Large Cap Equity Benchmark and 25% Small Cap Equity Benchmark. From April 1991 to October 2012, the Domestic Equity Benchmark - Surplus consisted of 100% Large Cap Equity Benchmark.



## Appendix Benchmark Descriptions

As of September 30, 2018

#### Large Cap Equity Benchmark

Beginning November 2012, the Large Cap Equity Benchmark consists of 25% Russell 1000 Value Index, 25% Russell 1000 Growth Index, and 50% S&P 500 Index. From April 1991 to October 2012, the Large Cap Equity Benchmark consisted of 100% Russell 1000 Value Index.

#### **Small Cap Equity Benchmark**

Beginning November 2012, the Small Cap Equity Benchmark consists of 50% Russell 2000 Growth Index and 50% Russell 2000 Value Index.

#### **Total Fixed Income Benchmark - Surplus**

Beginning March 2015, the Total Fixed Income Benchmark - Surplus consists of 75% Barclays Capital Aggregate and 25% Short Duration Fixed Income Benchmark - Surplus. From August 2013 to March 2014, the Total Fixed Income Benchmark - Surplus consisted of 60.67% Barclays Capital Aggregate and 33.33% Short Duration Fixed Income Benchmark - Surplus. During July 2013, the Total Fixed Income Benchmark - Surplus consisted of 64.67% Barclays Capital Aggregate and 33.33% Short Duration Fixed Income Benchmark - Surplus. During July 2013, the Total Fixed Income Benchmark - Surplus consisted of 64.57% Barclays Capital Aggregate and 34.43% Short Duration Fixed Income Benchmark - Surplus. From May 2013 to June 2013, the Total Fixed Income Benchmark - Surplus consisted of 64.52% Barclays Capital Aggregate and 35.48% Short Duration Fixed Income Benchmark - Surplus. From November 2012 to April 2013, the Total Fixed Income Benchmark - Surplus consisted of 57.14% Barclays Capital Aggregate and 42.86% Short Duration Fixed Income Benchmark - Surplus. From January 2007 to October 2012, the Total Fixed Income Benchmark - Surplus Capital Aggregate and 60% Short Duration Fixed Income Benchmark - Surplus. From April 1991 to December 2006, the Total Fixed Income Benchmark - Surplus.

#### Short Duration Fixed Income Benchmark - Surplus

Beginning in November 2012, the Short Duration Fixed Income Benchmark - Surplus consists of 100% Barclays Capital 1-3 Year Gov't/Credit. From January 2007 to October 2012, the Short Duration Fixed Income Benchmark - Surplus consisted of 66.67% Barclays Capital Intermediate Aggregate and 33.33% Barclays Capital Gov't 1-3 Year. From May 2001 to December 2006, the Short Duration Fixed Income Benchmark - Surplus consisted of 84.69% Barclays Capital Intermediate Aggregate and 15.31% Barclays Capital Gov't 1-3 Year. From April 1991 to April 2001, the Short Duration Fixed Income Benchmark - Surplus consisted of 100% Barclays Capital Gov't 1-3 Year.

#### **Total Alternatives Benchmark - Surplus**

Beginning April 2014 the Total Alternatives Benchmark - Surplus consists of 75% HFRI Fund of Funds Composite Index and 25% NCREIF Property Index. From May 2013 to March 2014, the Total Alternatives Benchmark - Surplus consisted of 100% HFRI Fund of Funds Composite Index.



## Appendix Benchmark Descriptions

As of September 30, 2018

## **Cash Balance Plan**

#### **Cash Balance Plan Total Benchmark**

Beginning July 2017, the Cash Balance Plan Total Benchmark consists of 50% Total Equity Benchmark, 30% Total Fixed Income Benchmark, and 20% Alternatives Benchmark. From January 2013 to June 2017, the Cash Balance Plan Total Benchmark consisted of 50% Total Equity Benchmark, 35% Total Fixed Income Benchmark, and 15% Alternatives Benchmark. From November 2012 to December 2012, the Cash Balance Plan Total Benchmark, and 5% Alternatives Benchmark. From October 1990 to October 2012, the Cash Balance Plan Total Benchmark consisted of 60% Russell 1000 Value Index and 40% Barclays Capital Aggregate.

#### **Cash Balance Plan Total X Privates Benchmark**

Beginning July 2017, the Cash Balance Plan Total Benchmark X Privates consists of 33.68% Domestic Equity Benchmark, 18.95% MSCI AC World ex USA Net, 26.31% Barclays Capital Aggregate, 5.27% Short Duration Fixed Income Benchmark, and 15.79% HFRI FOF Composite. From January 2013 to June 2017, the Cash Balance Plan Total Benchmark X Privates consisted of 33.68% Domestic Equity Benchmark, 18.95% MSCI AC World ex USA Net, 26.31% Barclays Capital Aggregate, 10.53% Short Duration Fixed Income Benchmark, and 10.53% HFRI FOF Composite. From November 2012 to December 2012, the Cash Balance Plan Total Benchmark X Privates consisted of 50% Total Equity Benchmark, 45% Total Fixed Income Benchmark, and 5% HFRI FOF Composite. From October 1990 to October 2012, the Cash Balance Plan Total Benchmark X Privates consisted of 60% Russell 1000 Value Index and 40% Barclays Capital Aggregate.

#### Pre-Pavilion Cash Balance Plan Total Benchmark

Beginning October 1990, the Cash Balance Plan Total Benchmark consists of 60% Russell 1000 Value Index and 40% Barclays Capital Aggregate.

#### **Total Equity Benchmark**

Beginning November 2012, the Total Equity Benchmark consists of 54% Large Cap Equity Benchmark, 10% Small Cap Equity Benchmark, and 36% MSCI AC World ex USA (Net). From October 1990 to October 2012, the Total Equity Benchmark consisted of 100% Large Cap Equity Benchmark.

#### **Domestic Equity Benchmark**

Beginning November 2012, the Domestic Equity Benchmark consists of 84.38% Large Cap Equity Benchmark and 15.62% Small Cap Equity Benchmark. From October 1990 to October 2012, the Domestic Equity Benchmark consisted of 100% Large Cap Equity Benchmark.

#### Large Cap Equity Benchmark

Beginning November 2012, the Large Cap Equity Benchmark consists of 25% Russell 1000 Value Index, 25% Russell 1000 Growth Index, and 50% S&P 500 Index. From October 1990 to October 2012, the Large Cap Equity Benchmark consisted of 100% Russell 1000 Value Index.

#### **Small Cap Equity Benchmark**

Beginning November 2012, the Small Cap Equity Benchmark consists of 50% Russell 2000 Growth Index and 50% Russell 2000 Value Index.

#### **Total Fixed Income Benchmark**

Beginning July 2017, the Total Fixed Income Benchmark consists of 83.3333% Barclays Capital Aggregate and 16.6667% Short Duration Fixed Income Benchmark. From January 2013 to June 2017, the Total Fixed Income Benchmark consisted of 71.43% Barclays Capital Aggregate and 28.57% Short Duration Fixed Income Benchmark. From November 2012 to December 2012, the Total Fixed Income Benchmark consists of 55.56% Barclays Capital Aggregate and 44.44% Short Duration Fixed Income Benchmark. From October 1990 to October 2012, the Total Fixed Income Benchmark consisted of 100% Barclays Aggregate.

#### **Short Duration Fixed Income Benchmark**

Beginning November 2012, the Short Duration Fixed Income Benchmark consists of 100% Barclays Capital 1-3 Year Gov't/Credit. From October 1990 to October 2012, the Short Duration Fixed Income Benchmark



## Appendix Benchmark Descriptions

As of September 30, 2018 consisted of 100% 90 Day U.S. Treasury Bills.

#### **Total Alternatives Benchmark**

Beginning January 2013, the Alternatives Benchmark consists of 66.67% HFRI Fund of Funds Composite Index and 33.33% NCREIF Property Index. From November 2012 to December 2012, the Alternatives Benchmark consisted of 100% HFRI Fund of Funds Composite Index.



## **Glossary of Terms for Scorecard**

**Key Performance Indicator Definition / Explanation** Investment Performance Investment performance for the Surplus Cash portfolio was 30 bps ahead of the benchmark for the quarter with a +2.3% return. The portfolio has outgained its benchmark by 30 Surplus cash balance (millions) bps per annum since inception (Nov. 1, 2012) with a return of +5.8% annualized. The assets within the Surplus Cash account excluding debt reserves, balance sheet cash and District assets, but including Foundation and Concern assets ended the quarter at \$994.7 million, significantly higher than the beginning of the quarter due to solid investment Surplus cash return performance and significant cash inflows from operations. The adjusted fiscal year 2018 plan projected balance at fiscal year end 2019 was \$886.6 million. Cash balance plan balance (millions) The Cash Balance Plan's performance outgained its benchmark by 30 bps for the quarter with a return of +2.8% and has outperformed its benchmark since inception. The since inception annualized return stands at +8.3%, 90 basis points ahead of its benchmark per year. The assets within the Cash Balance Plan ended the quarter at \$274.7 million. The Cash balance plan return estimated expected amount for fiscal year 2019 is \$276.9 million. 403(b) plan balance (millions) The 403(b) balance has continued to rise and now stands at \$481.7 million, an increase of \$17.1 million or 3.7% over the June 30, 2018 value. Risk vs. Return Surplus cash 3-year Sharpe ratio The Sharpe ratio is the excess return of an investment over the risk free rate (US Treasuries) generated per unit of risk (standard deviation) taken to obtain that return. The higher the value, the better the risk-adjusted return. It is important to view returns in this context because it takes into account the risk associated with a particular return rather than 3-year return simply focusing on the absolute level of return. 3-year standard deviation Sharpe ratio = (actual return - risk free rate) / standard deviation Cash balance 3-year Sharpe ratio The Surplus Cash portfolio's 3-year Sharpe ratio was slightly above that of its benchmark, but nearly 4x the expected Sharpe ratio modeled. This was due to a combination of 3-year return strong returns with very little volatility over the period in comparison to what was modeled. The Cash Balance Plan's 3-year Sharpe ratio exceeded modeling expectations by 4x and was above its benchmark. Both accounts have demonstrated strong risk-adjusted returns since inception. 3-year standard deviation Asset Allocation This represents the sum of the absolute differences between the portfolio's allocations to various asset classes and the target benchmark's allocations to those asset classes. The Surplus cash absolute variances to target higher the number, the greater the portfolio's allocations deviate from the target benchmark's allocations, indicating a higher possibility for the portfolio's risk and return characteristics to differ from the Board's expectations. The threshold for an alert "yellow" status is set at 10% and the threshold for more severe "red" status is set at 20%. Both portfolios are below the 10% threshold as the private Cash balance absolute variances to target real estate managers are fully invested. Manager Compliance This section represents how individual investment managers have fared and draws attention to elevated concerns regarding performance and risk-adjusted performance all at the Surplus cash manager flags individual manager level. The number of flags are aggregated and a percentage of the total is used to highlight an alert "yellow" status (40% of the flags) and a more severe "red" status (50%). In total there are 60 potential flags for the Surplus Cash account and 68 for the Cash Balance Plan. Cash balance plan manager flags Currently, both accounts are compliant as active managers have performed well recently.



## Hedge Fund Strategy Definitions

The **Equity Strategy** is comprised of Equity Long/Short strategies. Equity hedge strategies typically have a directional bias (long or short) and trade in equities and equity-related derivatives. Managers seek to buy undervalued equities with improving fundamentals and short overvalued equities with deteriorating fundamentals.

Trade Example: Long a basket of energy stocks and short a basket of consumer electronics stocks.

The **Credit Strategy** is comprised of Distressed Securities, Credit Long/Short, Emerging Market Debt and Credit Event Driven. Credit strategies typically have a directional bias and involve the purchase of various types of debt, equity, trade claims and fixed income securities. Hedging using various instruments such as Credit Default swaps is frequently employed.

Trade Example: Buying the distressed bonds of a company which has defaulted and participating in the corporate restructuring.

The **Macro Strategy** consists of Global Macro, Managed Futures, Commodities and Currencies. Macro strategies usually have a directional bias (which can be either long or short) and involve the purchase of a variety of securities and/or derivatives related to major markets. Managed futures strategies trade similar instruments but are typically implemented by computerized systems.

Trade Example: Long the US Dollar and short the Japanese Yen.

The **Relative Value Strategy** typically does not display a distinct directional bias. Relative Value encompasses a range of strategies covering different asset classes. Arbitrage strategies focus on capturing movements or anomalies in the price spreads between related or similar instruments. The rationale for Arbitrage trades is the ultimate convergence of the market price relationship to a known, theoretical or equilibrium relationship.

Trade Example: Long the stock of a merger bid target and short the stock of the acquirer.



## **Statistical Definitions**

## **Risk Statistics**

| Statistics         | Definition   |
|--------------------|--|
| Alpha              | - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market, or a portfolio's non-systematic return.  |
| Best Quarter       | - The best of rolling 3 months(or 1 quarter) cumulative return.  |
| Beta               | - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.   |
| Consistency        | - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.   |
| Downside Risk      | - A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative set of returns. The higher the factor, the riskier the product.  |
| Excess Return      | - Arithmetic difference between the managers return and the risk-free return over a specified time period.   |
| Information Ratio  | - Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.  |
| Maximum Drawdown   | - The drawdown is defined as the percent retrenchment from a fund's peak value to the fund's valley value. It is in effect from the time the fund's retrenchment begins until a new fund high is reached. The maximum drawdown encompasses both the period from the fund's peak to the fund's valley (length), and the time from the fund's valley to a new fund high (recovery). It measures the largest percentage drawdown that has occurred in any fund's data record. |
| Return             | - Compounded rate of return for the period.  |
| Sharpe Ratio       | - Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.  |
| Sortino Ratio      | - A ratio developed by Frank A. Sortino to differentiate between good and bad volatility in the Sharpe ratio. This differentiation of upwards and downwards volatility allows the calculation to provide a risk-adjusted measure of a security or fund's performance without penalizing it for upward price changes.   |
| Standard Deviation | - A statistical measure of the range of a portfolio's performance, the variability of a return around its average return over a specified time period.   |
| Tracking Error     | - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.   |
| Worst Quarter      | - The worst of rolling 3 months(or 1 quarter) cumulative return.   |
|                    |  |

## **Custom Peer Group Universe**

Description

- Custom Non US Diversified All: The Custom Non US Diversified All universe is a custom universe that includes the eVestment Alliance Non-US Diversified Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Equity universe is made up of all Non-US Diversified (EAFE and ACWI ex-US) Equity products inclusive of all style, capitalization, and strategy approaches. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.
- *Custom Non US Diversified Core:* The Custom Non US Diversified Core universe is a custom universe that includes the eVestment Alliance Non-US Diversified Core Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Core Equity universe is made up of all actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in a mixture of growth and value stocks. This universe is inclusive of Non-US Diversified Equity strategies regardless of market capitalization. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.
- *Custom Non US Diversified Growth:* The Custom Non US Diversified Growth universe is a custom universe that includes the eVestment Alliance Non-US Diversified Growth Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Growth Equity universe is made up of all actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in stocks that are expected to have an above-average capital appreciation rate relative to the market. This universe is inclusive of Non-US Diversified Equity strategies regardless of market capitalization. The eVestment Alliance Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.
- *Custom Non US Diversified Value:* The Custom Non US Diversified Value universe is a custom universe that includes the eVestment Alliance Non-US Diversified Value Equity universe excluding all strategies included in the eVestment Alliance Non-US Diversified Small Cap Equity universe. The eVestment Alliance Non-US Diversified Value Equity universe is made up of all actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in stocks that may be trading at lower prices lower than their fundamental or intrinsic value. This universe is inclusive of Non-US Diversified Equity universe consists of actively-managed Non-US Diversified Small Cap Equity universe consists of actively-managed Non-US Diversified (EAFE and ACWI ex-US) Equity products that primarily invest in small capitalization stocks regardless of the style (growth, value or core) focus.

## Disclosures

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This performance report is not a custodial statement or statement of record. You should receive custodial statements or other statement(s) of record directly from your custodian or applicable managers.

Performance returns for period longer than one year are annualized. Returns are shown net of investment manager fees assessed by third party managers or funds, as applicable, unless otherwise denoted and generally include the effect of all cash flows (e.g., earnings, distributions). In addition, accounts may incur other transactions costs such as brokerage commissions, custodial costs and other expenses which are not denoted in this report and may not be reflected in the performance returns. Mutual fund returns assume reinvestment of all distributions at net asset value (NAV) and deduction of fund expenses. Report totals may not sum due to rounding. It is important to note that performance results do not reflect the deduction of any investment advisory fees you pay to Pavilion, therefore, performance results would be reduced by these investment advisory fees. Note, however, certain client reports may reflect the deduction of Pavilion's investment advisory fee. Information about Pavilion's investment advisory fees is available in the firm's Form ADV Part 2A, available upon request.

Generally, the client inception period represents the first full month of performance of the account. Any returns shown prior to the client inception period are obtained directly from the manager or based upon the performance of the investment product. Performance data prior to the consulting relationship with Pavilion may be sourced from prior consultant(s), if applicable.

When administrator valuations for the last month of the reported period are not available prior to report production, Pavilion may derive market values and performance based on manager provided estimates for that investment product. Alternatively, Pavilion may use carry forward market values from the prior month. Performance and market values are updated if/when the statement is received from the manager/administrator and may be different than the values in the initial report. Performance and market value estimates are denoted with [CE] (current estimate). Private equity holding results typically lag by 45 to 180 days after the report period end due to statement availability, therefore may not be included in the report.



## Disclosures

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## EL CAMINO HOSPITAL ADMINISTRATIVE POLICIES AND PROCEDURES

## 16.00 SURPLUS CASH INVESTMENT POLICY

## A. <u>Coverage:</u>

El Camino Hospital Surplus Cash

## B. Reviewed/Revised

6/98, 11/00, 6/01, 9/02, 1/04, 3/05, 5/06, 06/09, 05/12, 06/13, 2/15

## C. Policy Summary

It is the policy of the El Camino Hospital Board of Directors that cash funds of El Camino Hospital, El Camino Hospital Foundation, CONCERN: EAP, and other affiliates be prudently invested with a focus on preserving the liquidity and principal necessary to meet known and reasonably unforeseen operational and capital needs. Funds will be invested in a diversified portfolio that balances the need for liquidity with a long-term investment focus in order to improve investment returns and the organization's financial strength.

## D. **Policy**

## 1. Objectives and Purpose

- a. The policy will be to invest the Surplus Cash assets in a diversified investment portfolio that targets capital appreciation without assuming undue risk to principal. The primary objectives of the overall Surplus Cash pool shall be (1) preservation of capital, (2) capital growth, (3) maintenance of liquidity, and (4) avoidance of inappropriate concentration of investments.
- b. The assets subject to this Investment Policy include the commingled funds of the Hospital, Foundation, CONCERN, and the El Camino Hospital Foundation Gift Annuity Fund.
- c. The El Camino Hospital Foundation Gift Annuity Fund is also managed according to the following restrictions: investments shall be managed in a diversified and prudent manner and in compliance with and subject to the criteria set forth under California Insurance Code Section (CICS) 1192.9, including Section 11521.2 to 11521.3.

Administrative Policies and Procedures 16.00 Surplus Cash Investment Policy Page 2 of 12

### 2. Delegation of Responsibility

- a. Within the financial activities of the organization, it is necessary to provide a prudent framework for the regular supervision of the management of invested funds. The Board of Directors ("the Board") has the overall fiduciary responsibility for the Surplus Cash assets. The Board shall appoint an Investment Committee ("the Committee") that bears primary responsibility as detailed in section 2.d. below for oversight of El Camino Hospital management ("Management"), the independent Investment Consultant, and the overall Surplus Cash investment program. The Board shall delegate the specific management of the Surplus Cash pool's investments to Management as detailed in section 2.e. below.
- b. Management shall be defined as the Chief Executive Officer, the Chief Financial Officer, Controller, and Finance Director.
- c. Those authorized to execute transactions include the Chief Executive Officer, Chief Financial Officer, Controller, and investment advisor(s) approved by Management.

### d. Responsibilities of the Investment Committee

- (1) Establish and recommend revisions to the investment policy, as appropriate.
- (2) Review compliance with policy.
- (3) Approve allocations across investment styles and investment managers that are consistent with this investment policy.
- (4) Assure that implementation of each investment program is consistent with its overall investment objectives and risk tolerances.
- (5) Monitor performance of investment managers through reports provided by the Investment Consultant.

### e. Responsibilities of Management

- (1) Select, contract with, and when appropriate, terminate investment managers who manage the investment programs' assets.
- (2) Evaluate the investment performance objectives of each of the investment programs' investment managers.
- (3) Select, contract with, and when appropriate, terminate custodian banks/brokers that are responsible for the custody of the investment programs' assets.

- (4) Select, contract with, and when appropriate, terminate an investment consultant.
- (5) Provide each investment manager with specific investment objectives and guidelines consistent with overall objectives.
- (6) Determine and implement allocations across investment styles and investment managers that are consistent with this investment policy.
- (7) Oversee the operational investment activities of the funds subject to this investment policy and other operating procedures and policies of El Camino Hospital.
- (8) Work with the independent, external Investment Consultant in developing and/or reviewing investment recommendations for presentation to the Committee and Board.

### f. Responsibilities of the independent Investment Consultant

- (1) Review the Surplus Cash pool's investment policies and objectives and suggest appropriate changes.
- (2) Monitor long-term capital market trends and recommend appropriate asset allocation strategies to Management and the Committee.
- (3) Provide Management and the Committee with ongoing asset allocation, investment manager allocation recommendations, and total portfolio context.
- (4) Provide assistance concerning the allocation of new contributions as well as periodic asset allocation rebalancing.
- (5) On an annual basis, provide to the Surplus Cash pool's Investment Managers a list of securities that are prohibited by the Surplus Cash pool's investment policy under section 10.b.
- (6) Recommend which investment management firms should receive increased or decreased allocations and, when warranted, recommend firms that should be dismissed.
- (7) Research and recommend investment management firms and custodian(s) appropriate to implement the Surplus Cash pool's investment policies and objectives.
- (8) Measure, evaluate, and report each investment manager's performance on a quarterly basis.
- (9) Monitor adherence of each investment manager to its stated investment philosophy and style.

Administrative Policies and Procedures 16.00 Surplus Cash Investment Policy Page 4 of 12

- (10) Monitor each investment manager's adherence to the guidelines and investment policies contained in this Investment Policy and specific manager guidelines, if applicable.
- (11) Maintain contact with and report to Management and the Committee on changes within each investment manager's organization including but not limited to investment professional turnover and ownership changes.
- (12) Communicate promptly with the Management and the Committee regarding significant changes in the Investment Consultant's ownership, organizational structure, and professional staffing.
- (13) Communicate promptly to the Committee any financial arrangements between the Investment Consultant and money management firms.

### g. Responsibilities of the Custodian Bank as directed by Management

- (1) Provide complete and accurate accounting records and prompt monthly reports to reflect all transactions, cash flows, and assets held.
- (2) Disburse and receive cash flows and investments as directed by investment managers to the extent of their authority or by authorized Management.
- (3) Issue monthly reports of holdings and transactions priced in accordance with industry standards.
- (4) Provide monthly reports showing individual asset holdings with sufficient descriptive detail to include units, unit price cost, market value, CUSIP number (where available) and any other information requested by the direction of Management. Principal cash transactions, including dividends, interest and principal payments received, deposits and withdrawals, securities purchased, sold, and matured, and fee payments will also be listed.
- (5) Expeditiously transfer funds into and out of specified accounts.
- (6) Promptly forward all proxy materials received to the appropriate investment manager or Management.

### h. Responsibilities of the Investment Managers

- (1) Manage the portfolio's assets with full discretion, in accordance with the investment objectives and guidelines stated in this Investment Policy and specific investment manager guidelines.
- (2) Communicate promptly with Management and the Investment Consultant regarding all significant matters such as:

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-- major changes in the investment manager's investment outlook and strategy,

- -- shifts in portfolio construction (asset mix, sector emphasis, etc.), -- changes in the investment manager's ownership, organizational structure, or professional staffing (additions and departures), and -- other changes of a substantive nature.
- (3) Comply with all laws and regulations that involve the Surplus Cash pool as they pertain to the investment manager's duties, functions, and responsibilities as a fiduciary.
- (4) Vote the proxies on the securities held in the investment manager's portfolio in accordance with the manager's fiduciary duties and professional judgment.
- (5) Provide Management and the Investment Consultant with monthly performance and organizational updates and other information as requested.
- (6) Provide periodic presentations to the Investment Committee as requested.
- 3. <u>Reporting and Evaluation Process</u>:
  - a. Management and the Investment Consultant will be responsible for reporting the status of investments to the Committee on a regular basis.
  - b. Annual reports by Management should include a complete listing of securities held and must be verified (audited) by the District's auditors.
  - c. On a quarterly basis, the Committee will evaluate investment performance. The following will be reviewed:
    - (1) The Surplus Cash pool's asset allocation relative to the target asset allocation.
    - (2) The total fund, segment and investment manager returns relative to the stated investment objectives.
    - (3) Other items pertaining to Surplus Cash pool.
    - (4) Management will provide minutes of each meeting to the Committee.
- 4. <u>Review and/or Modification of Policy</u>:
  - a The Committee as assisted by Management and the Investment Consultant will be responsible for reviewing and modifying investment guidelines as conditions warrant, subject to approval by the Board of Directors.

- b A copy of this policy will be rendered to the Board of Directors annually.
- 5. <u>Return and Risk Parameters</u>:

The Committee has established the following return and risk parameters that will guide the investment of the Surplus Cash assets.

- (1)The Committee will review the risk tolerance of the Surplus Cash pool's assets within the context of El Camino's long-term financial plan.
- (2) The Surplus Cash pool will be actively invested to achieve growth of capital through appreciation of securities held and through the accumulation and reinvestment of dividend and interest income.
- (3) The Surplus Cash pool will be strategically allocated among asset classes and investment styles in order to enhance investment returns and diversify correlating risk factors. This strategic allocation must at all times be within investment policy allocation ranges.
- (4) The Surplus Cash pool is to be sufficiently diversified in order to reduce volatility.
- (5) Diversification of assets may be achieved by:
  - -- allocating assets to multiple asset classes,
  - -- allocating assets among various investment styles, and
  - -- retaining multiple investment management firms with complementary investment philosophies, styles, and approaches.
- (6)The time horizon for evaluating total fund investment performance shall be long-term. The time frame for evaluating the performance of investment managers generally will be rolling five-year periods.
- 6. Target Asset Allocation
  - a. The Target Asset Allocation represents the Surplus Cash pool's normal risk/reward orientation. This orientation has been determined by the Surplus Cash pool's ability to assume risk and the Committee's risk preferences.
  - b. The Target Asset Allocation and individual asset class allocation ranges are outlined in the following table:

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|                         | ASSET ALLOCATION |            |  |  |  |  |  |  |
|-------------------------|------------------|------------|--|--|--|--|--|--|
| ASSET CLASS             | Neutral          | Range      |  |  |  |  |  |  |
| Domestic Equities       | 25%              | 20% to 30% |  |  |  |  |  |  |
| International Equities  | 15%              | 10% to 20% |  |  |  |  |  |  |
| Alternatives            | 20%              | 17% to 23% |  |  |  |  |  |  |
| Broad Fixed Income      | 30%              | 25% to 35% |  |  |  |  |  |  |
| Short Term Fixed Income | 10%              | 8% to 12%  |  |  |  |  |  |  |
| Total Fund              | 100%             |            |  |  |  |  |  |  |

- c. The Plan's allocations may be allowed to be outside of the Rebalancing Ranges specified above until the Plan is rebalanced, which will take place at least quarterly, if necessary, and in the following circumstances on a temporary basis:
  - (1) The Plan is in the process of implementing new investments within asset classes specified above to which asset classes the Plan does not currently have exposure.
  - (2) The Plan experiences significant inflows or outflows over a short time frame or is expected to experience significant inflows or outflows over a specified time frame.
- d. Investments within "Alternatives" may include the following investments:
  - (1) Open-ended and closed-ended real estate investment vehicles and core, value-added and opportunistic real estate investments.

and diversified pools of direct hedge funds

- (2) Hedge fund of funds strategies that are of institutional quality and are managed by highly skilled investment professionals with robust risk management and operational due diligence processes in place. The following contractual terms are required for hedge fund of funds investments:
  - A. Maximum lockup -2 years
  - B. Minimum liquidity/redemption period annually after initial lock-up
  - C. Frequency of valuation monthly
  - ∠ D. No more than 15% of hedge fund portfolio can be allocated to a single direct hedge fund at time of purchase

- 7. <u>Rebalancing Procedure</u>
  - a. Surplus Cash pool assets will be monitored by Management to keep the asset allocation in line with the target asset allocations outlined in Section 6.
  - b. The Investment Consultant will provide rebalancing recommendations to Management and the Committee on a quarterly basis, at minimum.
  - c. In circumstances specified under section D.6.c. where Management and the Investment Consultant believe it to be necessary for the Plan's allocations to be temporarily outside of the Rebalancing Ranges, Management will provide a written recommendation to the Investment Sub-Committee detailing the requested deviation from the Rebalancing Ranges and the reasons for the deviation.
- 8. Investment Manager Selection
  - a. As stated under Delegation of Responsibilities, Management appoints investment managers who will manage, acquire or dispose of the Surplus Cash assets. In selecting an investment manager, Management will use appropriate methods to exercise due diligence and to evaluate the appropriateness and merits of the investment manager. Management has delegated to the Investment Consultant the task of researching and recommending investment managers.
  - b. In investigating potential managers, the Investment Consultant must, at a minimum, use the following procedures:
    - (1) Identify a range of possible investment manager candidates.
    - (2) Obtain relevant information about the investment manager's experience, qualifications and investment approach.
    - (3) Evaluate experience, qualifications and investment approach. Included in this evaluation will be an analysis of past performance, risk characteristics, and investment management fees.
    - (4) Document the selection process.
- 9. Investment Objectives

Investment objectives are necessary to properly measure and evaluate the success of the Surplus Cash pool's investment program.

Total return for the Surplus Cash pool's assets and the investment managers, is defined as interest and/or dividends plus (or minus) realized and unrealized capital gains (or losses) minus investment management fees.

a. The investment objectives of the Total Surplus Cash Pool are as follows:

- (1) Outperform the Composite Benchmark over rolling five-year periods.
  - A. The Composite Benchmark shall be composed of relevant indices combined in a proportion reflective of the underlying target asset allocation.
- (2) Outperform the median of a composite fund manager universe over fiveyear periods.
- b. The investment objectives of the Investment Managers are as follows:
  - (1) Outperform a passive, style-specific index over rolling five-year periods.
  - (2) Outperform the median of a style-specific peer group over rolling fiveyear periods if available.
  - (3) Assume a level of risk no greater than is appropriate for the investment manager's specific investment mandate.

### 10. Investment Restrictions

- a. This section details the investment restrictions for separate account investment managers. In the case of pooled investment vehicles (mutual funds, commingled funds and limited partnerships), the investment guidelines and restrictions defined and detailed by the vehicle will apply. Management and the Investment Consultant are responsible for the review of such guidelines and restrictions prior to investment.
- b. The purchase of the securities of companies described below is prohibited; however, as specified in section 10.a., this prohibition is waived in the case of pooled investment vehicles. For the purposes of this section, Investment Managers are expected to rely upon a list of companies engaged in such activities as provided by the Investment Consultant, who will provide such a list on a best efforts basis. In instances where companies that engage in the activities below are inadvertently purchased or held by an Investment Manager, the Investment Manager will divest of the security within 90 days of being made aware of the violation unless the Investment Manager receives a written exception to this section of the investment policy from the Investment Committee.
  - (1) Companies whose major product is tobacco (greater than 50% of company revenues).
  - (2) Companies who engage in the manufacture of firearms that are illegal for sale to or possession by civilians in the state of California.

### c. Equity Manager Guidelines

- (1) The domestic and international equity segments may be diversified across a spectrum of market capitalizations by allowing investments in small-, medium-, and large-capitalization stocks.
- (2) Unless specified otherwise in writing, equity holdings should be readily marketable and diversified by issuer, industry, and sector.
- (3) An individual security position may not exceed 10% of an equity manager's portfolio market value.
- (4) Investments in money market instruments and bonds, as a surrogate for cash reserves, are allowed subject to a maximum of 10% of total allocation.
- (5) Investments in options, futures and other derivatives are allowed only for hedging purposes or as a substitute for actual securities in cases where the derivative instrument is a more efficient means of gaining exposure to the underlying securities. Derivatives may not be used in a speculative manner or to leverage the portfolios.

### d. Fixed Income Manager Guidelines

- (1) Fixed income holdings should be readily marketable and diversified by issuer, sector, coupon and quality.
- (2) No more than 5% of the Investment Manager's bond portfolio at the time of purchase shall be invested in the securities of any one issuer. There shall, however, be no such limit on U.S. Government securities, U.S. Agency securities, or government sponsored entities, U.S Agency mortgage backed securities, or other sovereign issues rated "AAA" or "Aaa".
- (3) For managers benchmarked against the Barclays Capital U.S. Aggregate Bond Index, the average credit quality of the fixed income portfolio shall be "A-" or higher. Up to 15% of the portfolio's market value at the time of purchase may be invested in high yield debt. For split-rated securities, the higher rating will be used in determining compliance with these guidelines.
- (4) For managers benchmarked against the Barclays Capital U.S. Aggregate Bond Index, emerging markets debt shall be limited to no more than 15% of the portfolio's market value at the time of purchase.
- (5) For managers benchmarked against the Barclays Capital U.S. Aggregate Bond Index, exposure to non-U.S. dollar assets shall be limited to no more than 20% of the portfolio's market value at the time of purchase.

- (6) The portfolio's weighted average effective duration determines a bond portfolio's sensitivity to interest rate changes. A manager's market value weighted effective duration, adjusted for expected life and call provision, cannot be more than +/- 30% of the benchmark's effective duration.
- (7) Permissible Holdings include the following:
  - A. Debt securities issued or guaranteed by the United States or U.S. government sponsored entities (including U.S. Government sponsored Agency mortgage backed securities, and inflation linked bonds).
  - B. Non-agency and commercial mortgage-backed securities, including collateralized mortgage obligations and whole loans.
  - C. Corporate bonds, debentures and other forms of corporate debt obligations, including equipment trust certificates, Eurobonds, Insurance Surplus Notes, and Capital Securities.
  - D. Municipal securities (up to 20% of the portfolio).
  - E. Asset-backed securities.
  - F. Indexed notes, floaters, and other variable rate obligations.
  - G. 144A securities without registration rights (up to 20% of the portfolio).
  - H. Bank collective funds.
  - I. Certificates of deposit ("CD's") and other money market instruments from banks also issuing bankers acceptances and with current commercial paper ratings of at least A 1 (by Standard & Poor's) or P 1 (by Moody's Investors Service).
  - J. Mutual funds or commingled pools.
  - K. U.S. dollar-denominated sovereign, supranational, provincial, and municipal securities issued by foreign entities.
  - L. Non-U.S. dollar-denominated sovereign securities.
  - M. Hedging with futures contracts and options on futures contracts are permitted to offset price risks (which include interest rates, currency fluctuations and the general price level of certain financial markets) incidental to the portfolio's principal mandate. Transactions in futures contracts and options on futures contracts are restricted to those contracts that are substitutes for assets that the portfolio could

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own, and that are economically appropriate to the reduction of risks in the conduct/management of the portfolio. In no way will futures or options on futures be used to leverage the portfolio.

(8) Exceptions to these restrictions may only be made upon prior approval of the Committee.



## POLICY/PROCEDURE TITLE: Finance: Cash Balance Pension Investments

CATEGORY: Administrative LAST APPROVAL DATE: 01/2016

SUB-CATEGORY: Finance ORIGINAL DATE: 5/90

## **COVERAGE:**

All El Camino Hospital staff

### PURPOSE:

This policy has been developed to provide a prudent framework for the management and oversight of the assets of the Cash Balance pension plan (the "Plan"). The overall goal of the Plan's investment program is to achieve the highest possible investment return, and the resulting positive impact on asset values, funded status, contributions and benefits, without exceeding a prudent level of risk. The structure of the Plan's investment program was developed after evaluating the implications of increased investment return versus increased variability of return for a number of potential asset allocations with varying commitments to equity, fixed income, alternative and cash equivalent investments.

## STATEMENT:

The El Camino Hospital Cash Balance Plan ("Plan") seeks to provide post-retirement benefits to the covered employees of El Camino Hospital ("Sponsor"). The Plan's overall goal is to pay benefits as promised by the Plan in such a way that the cost (defined as contributions) and risk (defined as Funded Status volatility) are manageable for the Sponsor. The purpose of this Investment Policy Statement ("Statement") is to establish guidelines for the Plan's investment portfolio ("Portfolio"). The Statement also incorporates standards that will be used to monitor the progress of the Portfolio's investment program and to evaluate the contributions of the manager(s) hired on behalf of the Plan and its beneficiaries.



## POLICY/PROCEDURE TITLE: Finance: Cash Balance Pension Investments

## PROCEDURE:

- 1. Objectives and Purpose
  - a. The policy will be to invest Plan assets in a diversified investment portfolio that targets capital appreciation without assuming undue risk to principal. The primary objectives of the retirement Plan shall be:
    - (1) The preservation of capital in real terms with a focus on meeting future benefit payments.
    - (2) Obtaining the maximum return within reasonable and acceptable levels of risk.
- 2. Delegation of Responsibility
  - a. Within the financial activities of the organization, it is necessary to provide a prudent framework for the regular supervision of the management of invested funds. A hospital board Investment Committee (the "Committee") has been established to review and monitor investment performance of the Cash Balance Plan. The Committee bears primary responsibility as detailed in section 2.e. below for oversight of the independent Investment Consultant and the overall Plan investment program. In addition, a Retirement Plan Administrative Committee (the "RPAC") administers the Hospital's pension plan including employee communication and education, eligibility, and distributions.
  - b. The members of the Investment Committee are appointed by the hospital board of directors. The RPAC shall be composed of the Chief Financial Officer, Controller, Chief Human Resources Officer, Director Compensation and Benefits, and others appointed by the Chief Executive Officer,
  - c. Management ("Management") shall be defined as the Chief Executive Officer, Chief Financial Officer and Controller. The Plan Administrator ("Plan Administrator") shall be defined as any one of the following: Chief Executive Officer, Chief Financial Officer, Chief Human Resources Officer, Controller or Director Compensation and Benefits.
  - d. Those authorized to execute investment and financial transactions include the Chief Executive Officer, Chief Financial Officer, Controller, and investment advisor(s) approved by the Committee.
  - e. Responsibilities of the board Investment Committee



## POLICY/PROCEDURE TITLE: Finance: Cash Balance Pension Investments

- (1) Establish and recommend revisions to the investment policy, as appropriate.
- (2) Review compliance with policy.
- (3) Determine allocations across investment styles and investment managers that are consistent with this investment policy.
- (4) Assure that implementation of each investment program is consistent with its overall investment objectives and risk tolerances.
- (5) Monitor and evaluate the performance of investment managers through reports provided by the Investment Consultant no less frequently than annually.

### f. Responsibilities of Investment Management

- (1) Select, contract with, and when appropriate, terminate investment managers who manage the investment programs' assets.
- (2) Select, contract with, and when appropriate, terminate custodian banks/brokers that are responsible for the custody of the Plan's assets.
- (3) Select, contract with, and when appropriate, terminate an investment consultant.
- (4) Evaluate on a regular basis the investment performance objectives of each of the investment programs' investment managers.
- (5) Provide each investment manager with specific investment objectives and guidelines consistent with overall objectives.
- (6) Implement allocations across investment styles and investment managers that are consistent with this investment policy.
- (7) Oversee the operational investment activities of the funds subject to this investment policy.
- (8) Work with the independent, external Investment Consultant in developing and/or reviewing investment recommendations for presentation to the Committee and Board.
- (9) Review the projected cash flow requirements of the Plan at least annually.



#### g. Responsibilities of the Retirement Plan Administrative Committee

- (1) Review compliance testing. Receive annual compliance update from plan consultants. Engage and select legal advisers and consultants.
- (2) Oversee processes used to determine employee eligibility, vesting, and benefits. Receive annual contribution report.
- (3) Review annual budget regarding plan administrative and benefit costs. Review 403(b) fee policy annually. Recommend changes to policy. Ensure Hospital complies with Fee Disclosure regulations to participants.
- (4) Purchase and maintain appropriate fidelity bond. Ensure that RPAC members sign fiduciary acknowledgment and conflict of interest forms annually.
- (5) Review annual budgets including projected funding. Ensure that annual funding notices are sent to participants.
- (6) Retain, evaluate, and remove record-keepers, non-investment advisers and consultants.
- (7) Approve non-material plan changes related to administrative and regulatory changes. Review draft resolutions. Ensure implementation of plan document changes.
- (8) Review human resources and administrative policies on retirement annually. Update and recommend policy changes based on input from investment committee, plan consultants, and regulatory changes.
- (9) Each management member of the RPAC will be authorized to act as a plan administrator to effectively administrate the plan. Such authority will be documented in writing by at least two members of the RPAC.

#### h. Responsibilities of the independent Investment Consultant

- (1) Review the Plan's investment policies and objectives and suggest appropriate changes.
- (2) Monitor long-term capital market trends and recommend appropriate asset allocation strategies to the Committee.
- (3) Provide Management and the Committee with ongoing asset allocation, investment manager allocation recommendations, and total portfolio



#### context.

- (4) Provide assistance concerning the allocation of new contributions as well as periodic asset allocation rebalancing.
- (5) On an annual basis, provide to the Plan's Investment Managers a list of securities that are prohibited by the Plan's investment policy under section 10.b.
- (6) Recommend which investment management firms should receive increased or decreased allocations and, when warranted, recommend firms that should be dismissed.
- (7) Research and recommend investment management firms and custodian(s) appropriate to implement the Plan's investment policies and objectives.
- (8) Measure, evaluate, and report each investment manager's performance on a quarterly basis.
- (9) Monitor adherence of each investment manager to its stated investment philosophy and style.
- (10) Monitor each investment manager's adherence to the guidelines and investment policies contained in this Investment Policy and specific manager guidelines, if applicable.
- (11) Maintain contact with and report to Management and the Committee on changes within each investment manager's organization including but not limited to investment professional turnover and ownership changes.
- (12) Communicate promptly with Management and the Committee regarding significant changes in the Investment Consultant's ownership, organizational structure, and professional staffing.
- (13) Communicate promptly to the Committee any financial arrangements between the Investment Consultant and money management firms.

#### i. Responsibilities of the Custodian Bank as directed by a Plan Administrator

(1) Provide complete and accurate accounting records and prompt monthly reports to reflect all transactions, cash flows, and assets held.



- (2) Disburse and receive cash flows and investments as directed by investment managers to the extent of their authority or authorized by a Plan Administrator.
- (3) Issue monthly reports of holdings and transactions priced in accordance with industry standards.
- (4) Provide monthly reports showing individual asset holdings with sufficient descriptive detail to include units, unit price cost, market value, CUSIP number (where available) and any other information requested by the direction of a Plan Administrator . Principal cash transactions, including dividends, interest and principal payments received, deposits and withdrawals, securities purchased, sold, and matured, and fee payments will also be listed.
- (5) Expeditiously transfer funds into and out of specified accounts.
- (6) Promptly forward all proxy materials received to the appropriate investment manager or a Plan Administrator.

#### j. Responsibilities of the Investment Managers

- (1) Manage the portfolio's assets with full discretion, in accordance with the investment objectives and guidelines stated in this Investment Policy and specific investment manager guidelines.
- (2) Communicate promptly with Management and the Investment Consultant regarding all significant matters such as:

-- major changes in the investment manager's investment outlook and strategy,

-- shifts in portfolio construction (asset mix, sector emphasis, etc.), -- changes in the investment manager's ownership, organizational structure, or professional staffing (additions and departures), and -- other changes of a substantive nature.

- (3) Comply with all laws and regulations that involve the Plan as they pertain to the investment manager's duties, functions, and responsibilities as a fiduciary.
- (4) Vote the proxies on the securities held in the investment manager's portfolio in accordance with the manager's fiduciary duties and professional judgment.
- (5) Provide Management and the Investment Consultant with monthly performance and organizational updates and other information as



#### requested.

- (6) Provide periodic presentations to the Committee and RPAC as requested.
- 3. <u>Reporting and Evaluation Process</u>:
  - a. The achievement of investment objectives will be reviewed by the Committee annually and recommended to the Board of Directors for approval. This review will focus on the continued feasibility of achieving the objectives and the continued appropriateness of the investment policy.
  - b. The Investment Consultant will be responsible for reporting the status of investments to the Committee and Management no less frequently than annually.
  - c. On a quarterly basis, the Investment Consultant will provide a summary of the Plan's investment performance to the Committee and CFO. The following will be reviewed:
    - (1) The Plan's asset allocation relative to the target asset allocation.
    - (2) The total fund, segment and investment manager returns relative to the stated investment objectives.
    - (3) Other items pertaining to the Plan.
  - d. All major liability assumptions regarding workforce, benefit levels and actuarial assumptions will be subject to, at a minimum, an annual review by the RPAC. This review will focus on an analysis of major differences between the Plan's assumptions and actual experience.
  - e. Management will report the Plan's projected cash flow requirements to the Committee on an annual basis.
- 4. <u>Review and/or Modification of Policy</u>:

The Committee as assisted by Management and the Investment Consultant will be responsible for reviewing and modifying investment guidelines as conditions warrant, subject to approval by the Board of Directors.

5. Return and Risk Parameters:

The Committee has established the following return and risk parameters that will guide the investment of the Plan assets.



- a. The Committee will review the risk tolerance and asset allocation of the Plan within the context of the expected cash flow needs and benefit obligations of the Plan.
- b. The Plan will be actively invested to achieve growth of capital through appreciation of securities held and through the accumulation and reinvestment of dividend and interest income.
- c. The Plan will be strategically allocated among asset classes and investment styles in order to enhance investment returns and diversify correlating risk factors. This strategic allocation must at all times be within investment policy allocation ranges.
- d. The Plan is to be sufficiently diversified in order to reduce volatility.
- e. Diversification of assets may be achieved by:
  - -- allocating assets to multiple asset classes,
  - -- allocating assets among various investment styles, and
  - -- retaining multiple investment management firms with complementary investment philosophies, styles, and approaches.
- f. The time horizon for evaluating total fund investment performance shall be long-term, which is understood generally to be ten-year periods. The time frame for evaluating the performance of investment managers generally will be rolling five-year periods.
- 6. Target Asset Allocation
  - a. The Target Asset Allocation represents the Plan's normal risk/reward orientation. This orientation has been determined by the Plan's ability to assume risk, the Plan's expected cash needs and the Committee's risk preferences.
  - b. The Target Asset Allocation and individual asset class allocation ranges are outlined in the following table:



|                        | ASSET AL | LOCATION             |
|------------------------|----------|----------------------|
| ASSET CLASS            | Neutral  | Rebalancing<br>Range |
| Domestic Equities      | 32%      | 27% to 37%           |
| International Equities | 18%      | 15% to 21%           |
| Alternatives           | 20%      | 17% to 23%           |
| Broad Fixed Income     | 25%      | 20% to 30%           |
| Cash                   | 5%       | 0% to 8%             |
| Total Fund             | 100%     |                      |

- c. The Plan's allocations may be allowed to be outside of the Rebalancing Ranges specified above until the plan is rebalanced, which will take place at least quarterly, if necessary, and in the following circumstances on a temporary basis:
  - (1) The Plan is in the process of implementing new investments within asset classes specified above to which asset classes the Plan does not currently have exposure.
  - (2) The Plan experiences significant inflows or outflows over a short time frame or is expected to experience significant inflows or outflows over a specified time frame.
- d. Investments within "Alternatives" may include the following investments:
  - (1) Open-ended and closed-ended real estate investment vehicles and core, value-added and opportunistic real estate investments.
  - (2) Hedge fund of funds strategies that are of institutional quality and are managed by highly skilled investment professionals with robust risk management and operational due diligence processes in place. The following contractual terms are required for hedge fund of funds investments:
    - A. Maximum lockup 2 years
    - B. Minimum liquidity/redemption period annually after initial lock-up
    - C. Frequency of valuation monthly



- 7. <u>Rebalancing Procedure</u>
  - a. Plan assets will be monitored by Management to keep the asset allocation in line with the target asset allocations outlined in Section 6.
  - b. The Investment Consultant will provide rebalancing recommendations to Management and the Committee on a quarterly basis, at minimum.
  - c. In circumstances specified under section D.6.c. where Management and the Investment Consultant believe it to be necessary for the Plan's allocations to be temporarily outside of the Rebalancing Ranges, Management will provide a written recommendation to the Investment Committee detailing the requested deviation from the Rebalancing Ranges and the reasons for the deviation.
- 8. Investment Manager Selection
  - a. As stated under Delegation of Responsibilities, Management appoints investment managers who will manage, acquire or dispose of the Plan assets. In selecting an investment manager, Management will use appropriate methods to exercise due diligence and to evaluate the appropriateness and merits of the investment manager. The Committee has delegated to the Investment Consultant the task of researching and recommending investment managers.
  - b. In investigating potential managers, the Investment Consultant must, at a minimum, use the following procedures:
    - (1) Identify a range of possible investment manager candidates.
    - (2) Obtain relevant information about the investment manager's experience, qualifications and investment approach.
    - (3) Evaluate experience, qualifications and investment approach. Included in this evaluation will be an analysis of past performance, risk characteristics, and investment management fees.
    - (4) Document the selection process.
- 9. Investment Objectives

Investment objectives are necessary to properly measure and evaluate the success of the Plan's investment program.



Total return for the Plan's assets and the investment managers, is defined as interest and/or dividends plus (or minus) realized and unrealized capital gains (or losses) minus investment management fees.

- a. The investment objectives of the Total Plan are as follows:
  - (1) Outperform the Composite Benchmark over rolling five-year periods.
    - A. The Composite Benchmark shall be composed of relevant indices combined in a proportion reflective of the underlying target asset allocation.
  - (2) Outperform the median of a composite fund manager universe over five-year periods.
- b. The investment objectives of the Investment Managers are as follows:
  - (1) Outperform a passive, style-specific index over rolling five-year periods.
  - (2) Outperform the median of a style-specific peer group over rolling fiveyear periods if available.
  - (3) Assume a level of risk no greater than is appropriate for the investment manager's specific investment mandate.
- 10. Investment Restrictions
  - a. This section details the investment restrictions for separate account investment managers. In the case of pooled investment vehicles (mutual funds, commingled funds and limited partnerships), the investment guidelines and restrictions defined and detailed by the vehicle will apply. Management and the Investment Consultant are responsible for the review of such guidelines and restrictions prior to investment.
  - b. The purchase of the securities of companies described below is prohibited; however, as specified in section 10.a. this prohibition is waived in the case of pooled investment vehicles. For the purposes of this section, Investment Managers are expected to rely upon a list of companies engaged in such activities as provided by the Investment Consultant, who will provide such a list on a best efforts basis. In instances where companies that engage in the activities below are inadvertently purchased or held by an Investment Manager, the Investment Manager will divest of the security within 90 days of being made aware of the violation unless the Investment Manager receives a written exception to this section of the investment policy from the Investment Committee.

**NOTE:** Printed copies of this document are uncontrolled. In the case of a conflict between printed and electronic versions of this document, the electronic version prevails.



- (1) Companies whose major product is tobacco (greater than 50% of company revenues).
- (2) Companies who engage in the manufacture of firearms that are illegal for sale to or possession by civilians in the state of California.

#### c. Equity Manager Guidelines

- (1) The domestic and international equity segments may be diversified across a spectrum of market capitalizations by allowing investments in small-, medium-, and large-capitalization stocks.
- (2) Unless specified otherwise in writing, equity holdings should be readily marketable and diversified by issuer, industry, and sector.
- (3) An individual security position may not exceed 10% of an equity manager's portfolio market value.
- (4) Investments in money market instruments and bonds, as a surrogate for cash reserves, are allowed subject to a maximum of 10% of total allocation.
- (5) Investments in options, futures and other derivatives are allowed only for hedging purposes or as a substitute for actual securities in cases where the derivative instrument is a more efficient means of gaining exposure to the underlying securities. Derivatives may not be used in a speculative manner or to leverage the portfolios.

#### d. Fixed Income Manager Guidelines

- (1) Fixed income holdings should be readily marketable and diversified by issuer, sector, coupon and quality.
- (2) No more than 5% of the Investment Manager's bond portfolio at the time of purchase shall be invested in the securities of any one issuer. There shall, however, be no such limit on U.S. Government securities, U.S. Agency securities, or government sponsored entities, U.S Agency mortgage backed securities, or other sovereign issues rated "AAA" or "Aaa".
- (3) For managers benchmarked against the Barclays Capital U.S. Aggregate Bond Index, up to 20% of the portfolio's market value at the time of purchase may be invested in high yield debt. For split-rated securities, the higher rating will be used in determining compliance



with these guidelines.

- (4) For managers benchmarked against the Barclays Capital U.S. Aggregate Bond Index, emerging markets debt shall be limited to no more than 15% of the portfolio's market value at the time of purchase.
- (5) For managers benchmarked against the Barclays Capital U.S. Aggregate Bond Index, exposure to non-U.S. dollar assets shall be limited to no more than 20% of the portfolio's market value at the time of purchase.
- (6) The portfolio's weighted average effective duration determines a bond portfolio's sensitivity to interest rate changes. A manager's market value weighted effective duration, adjusted for expected life and call provision, cannot be more than +/- 30% of the benchmark's effective duration.
- (7) Permissible Holdings include the following:
  - A. Debt securities issued or guaranteed by the United States or U.S. government sponsored entities (including U.S. Government sponsored Agency mortgage backed securities, and inflation linked bonds).
  - B. Non-agency and commercial mortgage-backed securities, including collateralized mortgage obligations and whole loans.
  - C. Corporate bonds, debentures and other forms of corporate debt obligations, including equipment trust certificates, Eurobonds, Insurance Surplus Notes, and Capital Securities.
  - D. Municipal securities (up to 20% of the portfolio).
  - E. Asset-backed securities.
  - F. Indexed notes, floaters, and other variable rate obligations.
  - G. 144A securities without registration rights (up to 20% of the portfolio).
  - H. Bank collective funds.
  - I. Certificates of deposit ("CD's") and other money market instruments from banks also issuing bankers acceptances and with current commercial paper ratings of at least A 1 (by Standard & Poor's) or P 1 (by Moody's Investors Service).



- J. Mutual funds or commingled pools.
- K. U.S. dollar-denominated sovereign, supranational, provincial, and municipal securities issued by foreign entities.
- L. Non-U.S. dollar-denominated sovereign securities.
- M. On a temporary basis, securities received in exchange offers or other similar situations (subject to approval by the Committee after notification by the investment manager of the receipt of such securities).
- N. Hedging with futures contracts and options on futures contracts are permitted to offset price risks (which include interest rates, currency fluctuations and the general price level of certain financial markets) incidental to the portfolio's principal mandate. Transactions in futures contracts and options on futures contracts are restricted to those contracts that are substitutes for assets that the portfolio could own, and that are economically appropriate to the reduction of risks in the conduct/management of the portfolio. In no way will futures or options on futures be used to leverage the portfolio.
- e. Exceptions to these restrictions may only be made upon prior approval of the Committee.



f.

| APPROVAL                                   | APPROVAL DATES |
|--|----------------|
| Originating Committee or UPC Committee:    |                |
| Medical Committee (if applicable):         |                |
| ePolicy Committee:                         | 10/2015        |
| Pharmacy and Therapeutics (if applicable): |                |
| Finance Committee:                         | 11/2015        |
| Board of Directors:                        | 01/2016        |

Historical Approvals:

5/90, 5/03, 03/05, 11/06, 5/07, 5/12, 6/13