Investment Performance Review
Period Ending December 31, 2018

# Town of Palm Beach OPEB Trust

Preliminary Results

Market Update
December 31, 2018

| Equities | Month | 3 M | YTD | 1 Year | 3 Yr Ann | 5 Yr Ann |
|---|---|---|---|---|---|---|
| | Index Returns (%) | | | | | |
| S&P 500 Total Return | (9.03) | (13.52) | (4.38) | (4.38) | 9.25 | 8.49 |
| Russell Midcap Index | (9.93) | (15.38) | (9.08) | (9.08) | 7.02 | 6.24 |
| Russell 2000 Index | (11.88) | (20.21) | (11.03) | (11.03) | 7.34 | 4.40 |
| Russell 1000 Growth Indx | (8.60) | (15.89) | (1.52) | (1.52) | 11.14 | 10.40 |
| Russell 1000 Value Index | (9.61) | (11.73) | (8.28) | (8.28) | 6.93 | 5.93 |
| Russell 3000 Index | (9.31) | (14.31) | (5.25) | (5.25) | 8.95 | 7.90 |
| MSCI EAFE NR | (4.85) | (12.54) | (13.79) | (13.79) | 2.87 | 0.53 |
| MSCI EM NR | (2.66) | (7.47) | (14.58) | (14.58) | 9.24 | 1.65 |

**Russell Indices Style Returns**

| YTD | V | B | G |
|---|---|---|---|
| L | -8.3 | -4.8 | -1.5 |
| M | -12.3 | -9.1 | -4.8 |
| S | -12.9 | -11.0 | -9.3 |

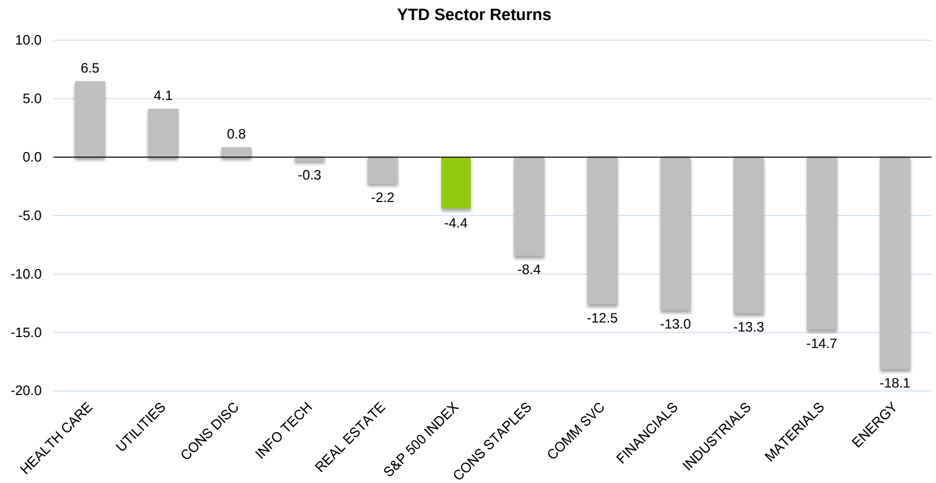
| 2017 | V | B | G |
|---|---|---|---|
| L | 13.6 | 21.7 | 30.2 |
| M | 13.3 | 18.5 | 25.3 |
| S | 7.8 | 14.6 | 22.1 |

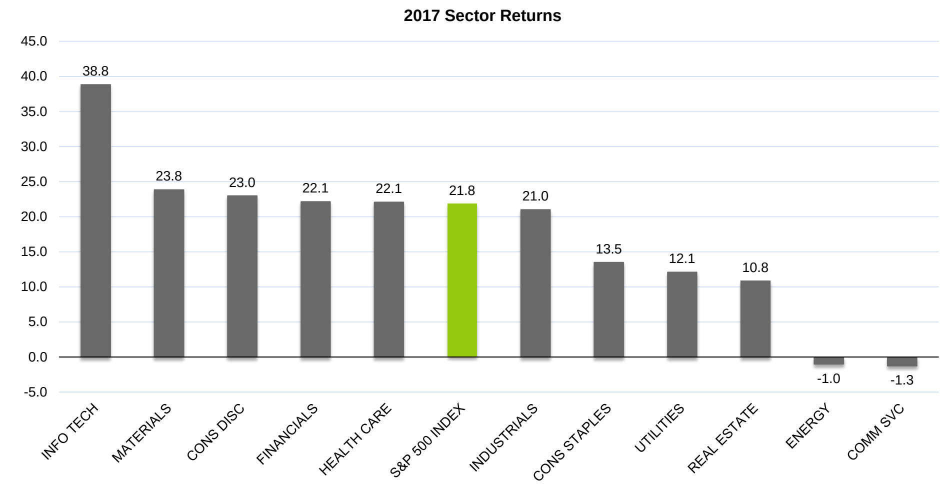
| Fixed Income | Month | 3 M | YTD | 1 Year | Mod. Adj. Duration | Yield to Worst |
|---|---|---|---|---|---|---|
| | Index Returns (%) | | | | | |
| U.S. Aggregate | 1.84 | 1.64 | 0.01 | 0.01 | 5.87 | 3.28 |
| U.S. Corporate Investment Grade | 1.47 | (0.18) | (2.51) | (2.51) | 7.10 | 4.20 |
| U.S. Corporate High Yield | (2.14) | (4.53) | (2.08) | (2.08) | 3.96 | 7.95 |
| Global Aggregate | 2.02 | 1.20 | (1.20) | (1.20) | 6.96 | 2.03 |

| Currencies | 12/31/18 | 12/31/17 | 12/31/16 |
|---|---|---|---|
| | Levels | | |
| Euro Spot | 1.15 | 1.20 | 1.05 |
| British Pound Spot | 1.28 | 1.35 | 1.23 |
| Japanese Yen Spot | 109.69 | 112.69 | 116.96 |
| Swiss Franc Spot | 0.98 | 0.97 | 1.02 |

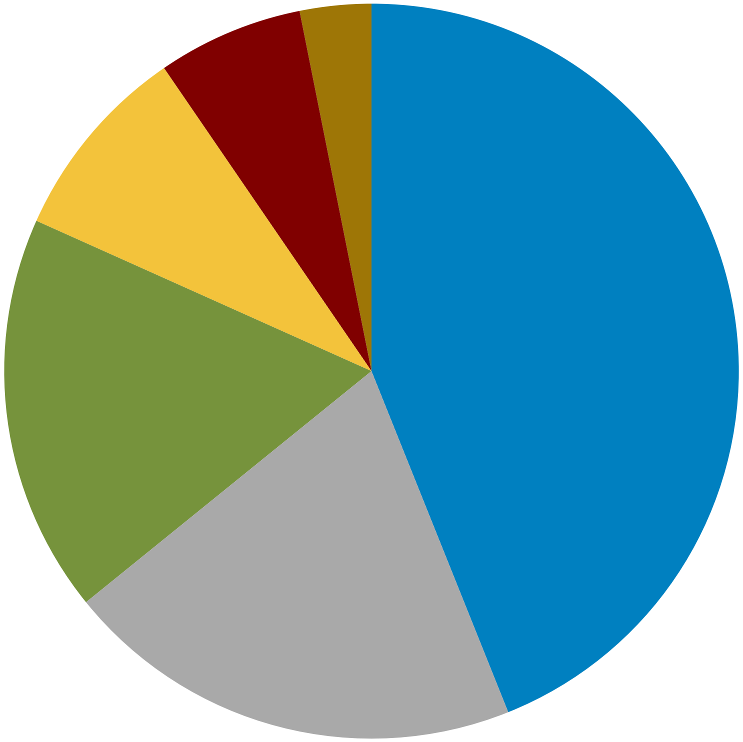
| Key Rates | 12/31/18 | 12/31/17 | 12/31/16 | 12/31/15 | 12/31/14 |
|---|---|---|---|---|---|
| | Levels (%) | | | | |
| 3 Month | 2.35 | 1.38 | 0.50 | 0.16 | 0.04 |
| US 2 Year | 2.49 | 1.88 | 1.19 | 1.05 | 0.66 |
| US 10 Year | 2.68 | 2.41 | 2.44 | 2.27 | 2.17 |
| US 30 Year | 3.01 | 2.74 | 3.07 | 3.02 | 2.75 |
| ICE LIBOR USD 3M | 2.81 | 1.69 | 1.00 | 0.61 | 0.26 |
| Euribor 3 Month ACT/360 | (0.31) | (0.33) | (0.32) | (0.13) | 0.08 |
| Bankrate 30Y Mortgage Rates Na | 4.51 | 3.85 | 4.06 | 3.90 | 3.99 |
| Prime | 5.50 | 4.50 | 3.75 | 3.50 | 3.25 |

| Commodities | 12/31/18 | 12/31/17 | 12/31/16 |
|---|---|---|---|
| | Levels | | |
| Oil | 45.41 | 57.40 | 56.24 |
| Gasoline | 2.26 | 2.49 | 2.34 |
| Natural Gas | 2.94 | 3.06 | 3.16 |
| Gold | 1,281.30 | 1,337.70 | 1,187.30 |
| Silver | 15.54 | 17.57 | 16.50 |
| Copper | 263.10 | 335.95 | 252.20 |
| Corn | 375.00 | 393.25 | 397.50 |
| BBG Commodity TR Idx | 159.72 | 179.96 | 176.94 |

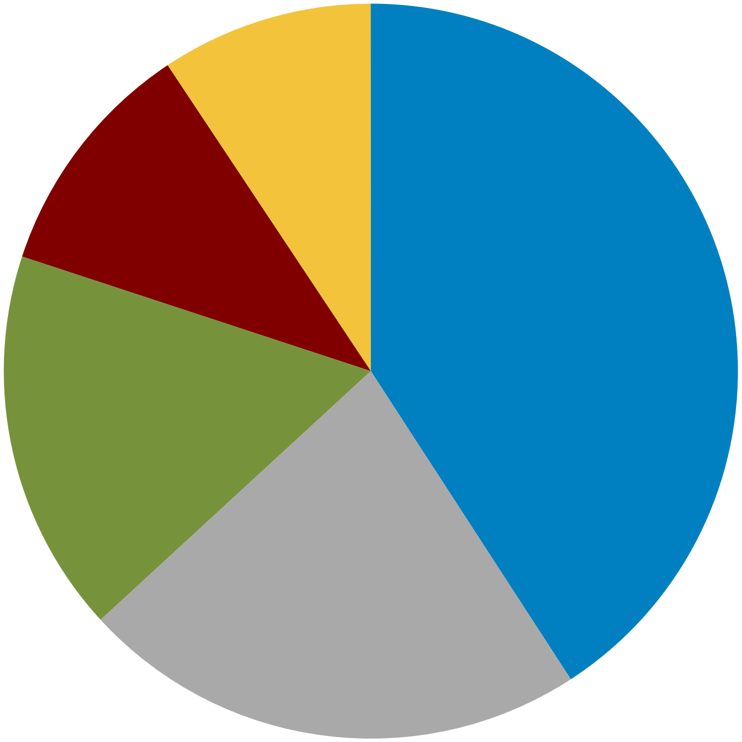


**September 30, 2018 : $32,293,472**



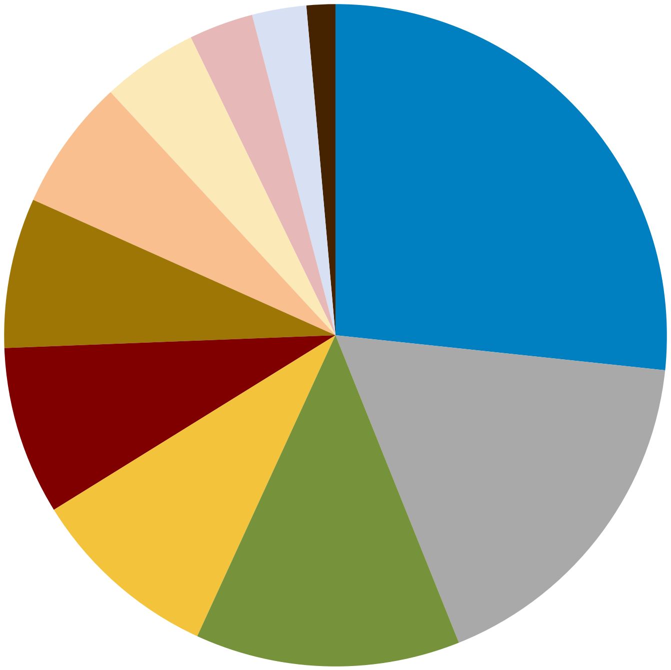
**December 31, 2018 : $29,360,346**

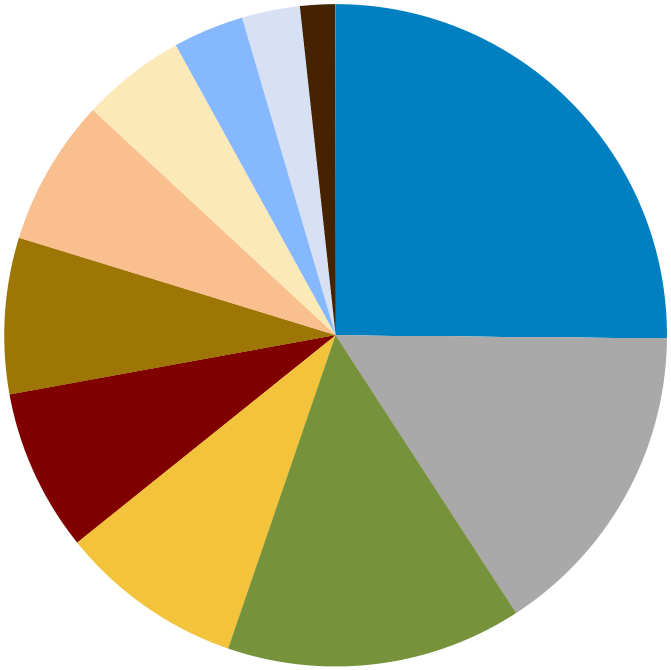


| Allocation | Market Value ($) | Allocation (%) |
|---|---|---|
| Domestic Equity | 14,186,881 | 43.93 |
| Total Fixed Income | 6,537,655 | 20.24 |
| International Equity | 5,662,702 | 17.54 |
| Total Non-Traditional Assets | 2,819,607 | 8.73 |
| Total Real Estate | 2,072,148 | 6.42 |
| Total Liquid Capital | 1,014,479 | 3.14 |

| Allocation | Market Value ($) | Allocation (%) |
|---|---|---|
| Domestic Equity | 11,988,025 | 40.83 |
| Total Fixed Income | 6,558,196 | 22.34 |
| International Equity | 4,955,828 | 16.88 |
| Total Real Estate | 3,115,209 | 10.61 |
| Total Non-Traditional Assets | 2,737,684 | 9.32 |
| Total Liquid Capital | 5,403 | 0.02 |

| September 30, 2018 : $32,293,472 | December 31, 2018 : $29,360,346 |
|---|---|





**Allocation**

| | Market Value | Allocation |
|---|---|---|
| Fidelity Total Market Index Fund (FSKAX) | 8,617,031 | 26.7 |
| Vanguard S&P MC 400 (VSPMX) | 5,569,849 | 17.2 |
| Met West Total Return Bond Fund (MWTIX) | 4,171,791 | 12.9 |
| Dodge & Cox Intl Stock Fund (DODFX) | 3,008,780 | 9.3 |
| American Funds Europacific Growth R6 (RERGX) | 2,653,922 | 8.2 |
| Forester Offshore A2, Ltd. | 2,364,799 | 7.3 |
| Intercontinental U.S. REIF | 2,072,148 | 6.4 |
| PIMCO Div Inc Bond Fund (PDIIX) | 1,510,763 | 4.7 |
| Government STIF 25 | 1,014,479 | 3.1 |
| Vanguard Total Bond Index Adm (VBTLX) | 855,101 | 2.6 |
| Crescent Direct Lending Levered Fund II | 454,808 | 1.4 |
| Principal Enhanced Property Fund | - | 0.0 |

**Allocation**

| | Market Value | Allocation |
|---|---|---|
| Fidelity Total Market Index Fund (FSKAX) | 7,381,040 | 25.1 |
| Vanguard S&P MC 400 (VSPMX) | 4,606,984 | 15.7 |
| Met West Total Return Bond Fund (MWTIX) | 4,235,446 | 14.4 |
| Dodge & Cox Intl Stock Fund (DODFX) | 2,636,132 | 9.0 |
| American Funds Europacific Growth R6 (RERGX) | 2,319,696 | 7.9 |
| Forester Offshore A2, Ltd. | 2,236,161 | 7.6 |
| Intercontinental U.S. REIF | 2,100,195 | 7.2 |
| PIMCO Div Inc Bond Fund (PDIIX) | 1,491,778 | 5.1 |
| Principal Enhanced Property Fund | 1,015,014 | 3.5 |
| Vanguard Total Bond Index Adm (VBTLX) | 830,972 | 2.8 |
| Crescent Direct Lending Levered Fund II | 501,523 | 1.7 |
| Government STIF 25 | 5,403 | 0.0 |

## Asset Allocation & Performance [Gross of Fees] - Trailing Returns

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value $ | % | MTH | QTD | FYTD | YTD | 1 YR | 3 YR | 5 YR | Inception | Inception Date |
| **Total Fund** | **29,360,346** | **100.0** | **-4.92 (57)** | **-9.06 (65)** | **-9.06 (65)** | **-6.12 (91)** | **-6.12 (91)** | **4.03 (95)** | **1.96 (98)** | **2.93 (100)** | **05/01/2007** |
| Total Fund Policy | | | -4.16 (21) | -7.65 (24) | -7.65 (24) | -4.25 (41) | -4.25 (41) | 4.44 (92) | 3.37 (93) | N/A | |
| All Public Plans-Total Fund Median | | | -4.81 | -8.59 | -8.59 | -4.62 | -4.62 | 5.58 | 4.66 | 5.14 | |
| **Domestic Equity** | **11,988,025** | **40.8** | **-10.09 (63)** | **-15.50 (52)** | **-15.50 (52)** | **-7.63 (51)** | **-7.63 (51)** | **7.70 (39)** | **6.49 (36)** | **4.78 (62)** | **06/01/2007** |
| Russell 3000 Index | | | -9.31 (48) | -14.30 (41) | -14.30 (41) | -5.24 (35) | -5.24 (35) | 8.97 (24) | 7.91 (20) | 6.54 (30) | |
| IM U.S. Equity (MF) Median | | | -9.39 | -15.37 | -15.37 | -7.49 | -7.49 | 6.82 | 5.38 | 5.42 | |
| Vanguard S&P MC 400 (VSPMX) | 4,606,984 | 15.7 | -11.31 (81) | -17.29 (59) | -17.29 (59) | -11.14 (55) | -11.14 (55) | N/A | N/A | -6.62 (55) | 11/01/2017 |
| S&P MidCap 400 Index | | | -11.32 (81) | -17.28 (59) | -17.28 (59) | -11.08 (54) | -11.08 (54) | 7.66 (30) | 6.03 (28) | -6.56 (55) | |
| IM U.S. Mid Cap Equity (MF) Median | | | -10.20 | -16.75 | -16.75 | -10.70 | -10.70 | 5.82 | 4.63 | -6.06 | |
| Fidelity Total Market Index Fund (FSKAX) | 7,381,040 | 25.1 | -9.30 (50) | -14.34 (49) | -14.34 (49) | -5.29 (28) | -5.29 (28) | 8.93 (12) | 7.92 (11) | 6.63 (16) | 06/01/2007 |
| Wilshire 5000 Total Market Index (full-cap) Index | | | -9.30 (50) | -14.43 (52) | -14.43 (52) | -5.29 (28) | -5.29 (28) | 9.01 (10) | 7.69 (17) | 6.62 (16) | |
| IM U.S. Multi-Cap Core Equity (MF) Median | | | -9.31 | -14.38 | -14.38 | -7.20 | -7.20 | 7.04 | 5.85 | 5.20 | |
| **International Equity** | **4,955,828** | **16.9** | **-5.98 (79)** | **-12.48 (53)** | **-12.48 (53)** | **-16.57 (57)** | **-16.57 (57)** | **1.87 (71)** | **-0.55 (72)** | **1.03 (44)** | **06/01/2007** |
| Total International Equity Policy | | | -4.49 (44) | -11.41 (43) | -11.41 (43) | -13.78 (27) | -13.78 (27) | 3.15 (55) | 0.70 (47) | 0.49 (56) | |
| IM International Equity (MF) Median | | | -4.80 | -12.23 | -12.23 | -16.01 | -16.01 | 3.52 | 0.50 | 0.70 | |
| Dodge & Cox Intl Stock Fund (DODFX) | 2,636,132 | 9.0 | -6.73 (88) | -12.39 (26) | -12.39 (26) | -17.98 (82) | -17.98 (82) | 3.24 (15) | -0.47 (46) | 1.00 (36) | 06/01/2007 |
| MSCI EAFE (Net) Index | | | -4.85 (10) | -12.54 (27) | -12.54 (27) | -13.79 (29) | -13.79 (29) | 2.87 (23) | 0.53 (8) | 0.42 (50) | |
| IM International Large Cap Core Equity (MF) Median | | | -5.58 | -13.68 | -13.68 | -14.90 | -14.90 | 1.60 | -0.49 | 0.33 | |
| American Funds Europacific Growth R6 (RERGX) | 2,319,696 | 7.9 | -5.12 (41) | -12.59 (43) | -12.59 (43) | N/A | N/A | N/A | N/A | -13.33 (50) | 07/01/2018 |
| MSCI AC World ex USA (Net) | | | -4.53 (26) | -11.46 (28) | -11.46 (28) | -14.20 (43) | -14.20 (43) | 4.48 (23) | 0.68 (41) | -10.84 (29) | |
| IM International Large Cap Growth Equity (MF) Median | | | -5.22 | -12.68 | -12.68 | -15.06 | -15.06 | 2.84 | 0.10 | -13.33 | |
| **Total Non-Traditional Assets** | **2,737,684** | **9.3** | **0.07** | **-4.55** | **-4.55** | **-1.65** | **-1.65** | **2.83** | **1.48** | **2.92** | **07/01/2007** |
| Forester Offshore A2, Ltd. | 2,236,161 | 7.6 | 0.09 | -5.44 | -5.44 | -2.81 | -2.81 | 1.64 | 2.18 | 3.89 | 07/01/2007 |
| Crescent Direct Lending Levered Fund II | 501,523 | 1.7 | 0.00 | 0.00 | 0.00 | N/A | N/A | N/A | N/A | 6.60 | 03/01/2018 |

Current period valuation is not yet available for Crescent Direct Lending and Forester Offshore, and a stale value was used in this report.

Returns for periods greater than one year are annualized.
Returns are expressed as percentages. Mutual fund and ETF investments are reported net of fees.
Prior to 10/31/2017, returns for Vanguard ST Infl. are not included in Total FI composite, as this fund was included in the Real Assets composite.

| | Allocation | | Performance(%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Market Value $ | % | MTH | QTD | FYTD | YTD | 1 YR | 3 YR | 5 YR | Inception | Inception Date |
| **Total Fixed Income** | **6,558,196** | **22.3** | **1.34 (44)** | **0.89 (31)** | **0.89 (31)** | **0.22 (14)** | **0.22 (14)** | **1.34 (92)** | **1.52 (43)** | **2.59 (79)** | **06/01/2007** |
| Fixed Income Composite Index | | | 1.76 (24) | 1.51 (10) | 1.51 (10) | -0.06 (17) | -0.06 (17) | 1.44 (90) | 1.72 (34) | N/A | |
| IM Global Fixed Income (MF) Median | | | 1.22 | 0.33 | 0.33 | -1.76 | -1.76 | 2.68 | 1.27 | 3.50 | |
| Vanguard Total Bond Index Adm (VBTLX) | 830,972 | 2.8 | 1.82 (10) | 1.62 (12) | 1.62 (12) | -0.07 (21) | -0.07 (21) | N/A | N/A | -0.02 (58) | 09/01/2016 |
| Blmbg. Barc. U.S. Aggregate Index | | | 1.84 (8) | 1.64 (11) | 1.64 (11) | 0.01 (18) | 0.01 (18) | 2.06 (45) | 2.52 (28) | 0.18 (41) | |
| IM U.S. Broad Market Core Fixed Income (MF) Median | | | 1.46 | 0.99 | 0.99 | -0.63 | -0.63 | 1.99 | 2.26 | 0.08 | |
| Met West Total Return Bond Fund (MWTIX) | 4,235,446 | 14.4 | 1.73 (18) | 1.53 (18) | 1.53 (18) | 0.22 (10) | 0.22 (10) | N/A | N/A | 0.56 (10) | 12/01/2017 |
| Blmbg. Barc. U.S. Aggregate Index | | | 1.84 (8) | 1.64 (11) | 1.64 (11) | 0.01 (18) | 0.01 (18) | 2.06 (45) | 2.52 (28) | 0.43 (15) | |
| IM U.S. Broad Market Core Fixed Income (MF) Median | | | 1.46 | 0.99 | 0.99 | -0.63 | -0.63 | 1.99 | 2.26 | -0.18 | |
| PIMCO Div Inc Bond Fund (PDIIX) | 1,491,778 | 5.1 | 0.01 (90) | -1.26 (90) | -1.26 (90) | -0.99 (36) | -0.99 (36) | N/A | N/A | -0.43 (29) | 12/01/2017 |
| Blmbg. Barc. Global Credit (Hedged) | | | 0.88 (68) | -0.19 (65) | -0.19 (65) | -0.81 (33) | -0.81 (33) | 4.08 (13) | 3.71 (1) | -0.30 (27) | |
| IM Global Fixed Income (MF) Median | | | 1.22 | 0.33 | 0.33 | -1.76 | -1.76 | 2.68 | 1.27 | -1.36 | |
| **Total Real Estate** | **3,115,209** | **10.6** | **1.70 (N/A)** | **1.70 (76)** | **1.70 (76)** | **N/A** | **N/A** | **N/A** | **N/A** | **7.09 (24)** | **04/01/2018** |
| NCREIF Fund Index-Open End Diversified Core (EW) | | | 1.62 (N/A) | 1.62 (78) | 1.62 (78) | 8.26 (70) | 8.26 (70) | 8.44 (53) | 10.52 (66) | 5.96 (74) | |
| IM U.S. Private Real Estate (SA+CF) Median | | | N/A | 1.80 | 1.80 | 8.71 | 8.71 | 8.79 | 11.10 | 6.15 | |
| Intercontinental U.S. REIF | 2,100,195 | 7.2 | 1.62 (N/A) | 1.62 (78) | 1.62 (78) | N/A | N/A | N/A | N/A | 7.01 (25) | 04/01/2018 |
| NCREIF Fund Index-Open End Diversified Core (EW) | | | 1.62 (N/A) | 1.62 (78) | 1.62 (78) | 8.26 (70) | 8.26 (70) | 8.44 (53) | 10.52 (66) | 5.96 (74) | |
| IM U.S. Private Real Estate (SA+CF) Median | | | N/A | 1.80 | 1.80 | 8.71 | 8.71 | 8.79 | 11.10 | 6.15 | |
| Principal Enhanced Property Fund | 1,015,014 | 3.5 | 1.85 (N/A) | 1.85 (36) | 1.85 (36) | N/A | N/A | N/A | N/A | 1.85 (36) | 10/01/2018 |
| NCREIF Fund Index-Open End Diversified Core (EW) | | | 1.62 (N/A) | 1.62 (78) | 1.62 (78) | 8.26 (70) | 8.26 (70) | 8.44 (53) | 10.52 (66) | 1.62 (78) | |
| IM U.S. Private Real Estate (SA+CF) Median | | | N/A | 1.80 | 1.80 | 8.71 | 8.71 | 8.79 | 11.10 | 1.80 | |
| **Total Liquid Capital** | **5,403** | **0.0** | | | | | | | | | |
| Government STIF 25 | 5,403 | 0.0 | | | | | | | | | |

Current period valuation is not yet available for Crescent Direct Lending and Intercontinental RE, and a stale value was used in this report.

Returns for periods greater than one year are annualized.
Returns are expressed as percentages. Mutual fund and ETF investments are reported net of fees.
Prior to 10/31/2017, returns for Vanguard ST Infl. are not included in Total FI composite, as this fund was included in the Real Assets composite.

**Comparative Performance - IRR**

| | QTD | 1 YR | 3 YR | 5 YR | Inception | Inception Date |
|---|---|---|---|---|---|---|
| Crescent Direct Lending Levered Fund II | 0.00 | N/A | N/A | N/A | 6.16 | 03/13/2018 |
| Intercontinental U.S. REIF | 1.35 | N/A | N/A | N/A | 5.87 | 04/30/2018 |
| Principal Enhanced Property Fund | 1.50 | N/A | N/A | N/A | 1.50 | 10/01/2018 |

Current period valuation is not yet available for Crescent Direct Lending and Forester Offshore; a stale value was used in this report.

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

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

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

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

Additional information included in this document may contain data provided by from index databases, public economic sources and the managers themselves.

This document may contain data provided by Bloomberg Barclays. Bloomberg Barclays Index data provided by way of Barclays Live.

This document may contain data provided by Standard and Poor's. Nothing contained within any document, advertisement or presentation from S&P Indices constitutes an offer of services in jurisdictions where S&P Indices does not have the necessary licenses. All information provided by S&P Indices is impersonal and is not tailored to the needs of any person, entity or group of persons. Any returns or performance provided within any document is provided for illustrative purposes only and does not demonstrate actual performance. Past performance is not a guarantee of future investment results.

This document may contain data provided by MSCI, Inc. Copyright MSCI, 2017. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages.

This document may contain data provided by Russell Investment Group. Russell Investment Group is the source owner of the data contained or reflected in this material and all trademarks and copyrights related thereto. The material may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. This is a user presentation of the data. Russell Investment Group is not responsible for the formatting or configuration of this material or for any inaccuracy in presentation thereof.

This document may contain data provided by Morningstar. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. Past financial performance is not guarantee of future results.

**Putting clients first.**

CHICAGO | CLEVELAND | DALLAS | DETROIT | ORLANDO | PITTSBURGH | RENO | TULSA

**AndCo Consulting** | (844) 44-ANDCO | *AndCoConsulting.com*