

## Ann Masel

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**Subject:** City Employee Pension Board  
**Location:** [https://us02web.zoom.us/j/86146170230?](https://us02web.zoom.us/j/86146170230?pwd=ZXZCY0ZXZHlycHV2bG8vRFduTnMxUT09)  
pwd=ZXZCY0ZXZHlycHV2bG8vRFduTnMxUT09

**Start:** Tue 2/2/2021 1:00 PM  
**End:** Tue 2/2/2021 3:00 PM  
**Show Time As:** Tentative

**Recurrence:** (none)

**Meeting Status:** Not yet responded

**Organizer:** Sarah Cairns



Hi there,

City Manager is inviting you to a scheduled Zoom meeting.

### Join Zoom Meeting

Phone US: +13462487799,,86146170230#,,, \*716450# or  
one-tap: +14086380968,,86146170230#,,, \*716450#

Meeting URL: <https://us02web.zoom.us/j/86146170230?pwd=ZXZCY0ZXZHlycHV2bG8vRFduTnMxUT09>

Meeting ID: 861 4617 0230

Passcode: 3M=Paz

### **Join by Telephone**

For higher quality, dial a number based on your current location.

Dial: US: +1 346 248 7799 or +1 408 638 0968 or +1 669 900 6833 or +1 253 215 8782 or +1 312 626 6799 or +1 646 876 9923 or +1 301 715 8592 or 877 853 5257 (Toll Free) or 888 475 4499 (Toll Free) or 833 548 0276 (Toll Free) or 833 548 0282 (Toll Free)

Meeting ID: 861 4617 0230

Passcode: 716450

International numbers

## NOTICE OF REGULAR MEETING

### AGENDA

CITY OF GALVESTON EMPLOYEES' RETIREMENT FUND  
FOR NON-CIVIL SERVICE EMPLOYEES  
TO BE HELD AT 1:00 P.M., TUESDAY, FEBRUARY 2, 2021

Notice is hereby given in accordance with the Order of the Governor issued March 16, 2020, that the Board of Trustees of the City of Galveston Employees' Retirement Fund for Police will conduct the meeting by telephone/video conference in order to advance the public health goal of limiting face-to-face meetings (also called "social distancing") to slow the spread of the Corona Virus/COVID-19. There will be no meeting or public access to the location described above.

INSTRUCTIONS FOR PARTICIPATING IN THIS MEETING ARE PROVIDED BELOW.

1. Quorum Determination
2. Call to order
3. Open Public Forum/Comments
4. Approval of minutes of November 3, 2020 meeting
5. Performance report from the Quantitative Group
6. Action on recommendations by the Quantitative Group
7. Discussion and possible action on the meetings of a Committee of Board members working with the City to discuss changes to the Plan
8. Discussion and possible action on Whitley Penn audit engagement letter for the year end December 31, 2020
9. Compiled financial statements
10. Next meeting date May 4, 2021
11. Adjournment

#### Executive Session-Pursuant to Chapter 551, Subchapter D, Texas Government Code

At any time during the meeting, the Board may convene in closed session to deliberate any of the matters listed on this agenda as authorized by Chapter 551 of the Texas Government Code, including Sections 551.071 (consultation with attorney), 551.072 (deliberation regarding real property), 551.073 (deliberation regarding prospective gifts), 551.074 (deliberation regarding personnel matters), or 551.087 (deliberation regarding economic development negotiations).

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Ann S. Masel, CPA  
Administrator

**Please Note**  
Members of the City Council may be attending and participating in the discussion.



To call in to Zoom Meeting:

Or dial the following numbers and enter the:

Meeting ID: 861 4617 0230

Passcode: 716450

Phone: 1 346 248 7799 US (Houston)

This written notice of the meeting agenda packet, are posted online at:

[www.galvestontx.gov/agendacenter](http://www.galvestontx.gov/agendacenter)

The public will be permitted to offer public comments telephonically as provided by the agenda and as permitted by the presiding officer during the meeting

I certify that the above Notice of Meeting was posted in a place convenient to the public in compliance with Chapter 551 of the Texas Government Code on January \_\_\_\_\_

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Janelle Williams, City Secretary

IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA), PERSONS IN NEED OF A SPECIAL ACCOMMODATION TO PARTICIPATE IN THIS PROCEEDING SHALL, WITHIN THREE (3) DAYS PRIOR TO ANY PROCEEDING, CONTACT THE CITY SECRETARY'S OFFICE, SUITE 201; 823 ROSENBERG; GALVESTON, TEXAS 77550; (409) 797-3510

MINUTES OF THE CITY OF GALVESTON EMPLOYEES' RETIREMENT FUND  
BOARD OF TRUSTEES OF GALVESTON, TEXAS

Meeting Date (Virtual meeting)  
November 3, 2020

The following members were present:

Don Davison  
Mike Loftin  
Robert Simmons  
Jeff Ammerman  
Lewis Rosen  
Rodney Low

The following members were absent:

None

Also attending was Ron Kern (Graystone Consulting), Mark Fenlaw (Rudd and Wisdom), and Dan Buckley (City of Galveston)

It was determined that a quorum was present, and the meeting was called to order at 1:00. It was determined that due to the nature of virtual meeting rather than "live" meeting, all votes would be taken as roll call votes.

Motion for approval of August 4, 2020 minutes was made by Mike Loftin; second by Lewis Rosen. Roll call vote passed unanimously.

Ron Kern, with the Quantitative Group, presented the Performance Evaluation. The following illustrates the returns and balances for the quarter:

| <u>Manager</u>             | Market Value | Actual | Benchmark            |       |
|----------------------------|--------------|--------|----------------------|-------|
| iShares Core S&P 500 ETF   | 8,887,443    | 8.99%  | Standard & Poors 500 | 8.93% |
| iSharesMSCI USA Min ETF    | 8,718,200    | 5.63%  | Standard & Poors 500 | 8.93% |
| Vanguard Mid Cap           | 9,291,396    | 7.93%  | Russell MidCap       | 7.46% |
| iShares Core S&P Small-Cap | 4,110,141    | 3.25%  | S&P Small Cap 600    | 3.17% |
| iShares Core MSCI EAFE E   | 2,693,973    | 5.46%  | MSCI ACWF ex-US      | 6.25% |
| iShares Core MSCI Emerg.   | 1,427,448    | 10.92% | MSCI EM Net          | 9.56% |
| Baird Aggregate Bond       | 3,519,406    | 1.06%  | Barclays US Aggre    | 0.62% |
| Met West Total Rtn Bdl     | 3,840,074    | 1.26%  | Barclays US Aggre    | 0.62% |
| TIAA CREF Bond Fund        | 3,440,513    | 1.29%  | Barclays US Aggre    | 0.62% |
| Brandywine Global Opp      | 2,121,394    | 3.84%  | SB World Govt Bond   | 2.94% |
| PIMCO Income Fund          | 2,663,493    | 3.01%  | Barclays US Aggre    | 0.62% |
| FPA Crescent               | 2,299,005    | 3.80%  | HFRI Equity Hedge    | 6.03% |
| Salient Technical Growth   | 1,401,746    | 2.80%  | HFRI Equity Hedge    | 6.03% |
| Wells Fargo Absolutel Re   | 1,303,964    | 2.16%  | HFRI Equity Hedge    | 6.03% |
| Cash                       | 1,122,374    |        |                      |       |
| Total                      | 56,840,570   |        |                      |       |

Ron discussed the performance report. He referred to page 13 of the report which discloses all fees and pointed out that total fees are approximately .37% and fees have been very carefully controlled. The Fund performance was up 5.05% for the quarter but was basically break-even, up 0.01% for the year to date through September 30. The bond index was up 6.79% for the year, illustrating that safe assets performed safely when the market fell off. Over time, funds have outperformed stock pickers.

Total rate of return since inception has been 6.95%; total over 10 years has been 7.14%.

Lewis Rosen moved, with a second by Jeff Ammerman, to accept Ron's recommendation to sell all of Wells Fargo Absolute Return Fund and distribute the proceeds into FPA Crescent and Salient Tactical Growth so that each of those 2 remaining funds will hold 50% of the alternative asset class. Motion passed unanimously.

Agenda item 7 began with Dan Buckley addressing the Board. Dan Buckley stated he would like for the City to sit down with the Board and negotiate. Discussion ensued.

Don Davison moved, with a second by Lewis Rosen, that the Chair would appoint a Committee of 3 members to meet with the City and discuss possible improvements to the Plan. The Committee would have the authority/option to include Plan Attorney, Stefan Smith, in the discussions. Roll call vote passed unanimously.

Don Davison moved, with a second by Lewis Rosen, to approve the amendment to the Plan which memorializes the previous month's action of raising the cap to \$60,000 effective October 1, 2020, for employees retiring after that time.. Roll call vote was taken, and motion passed unanimously.

The next regular meeting was set for Tuesday, February 2, 2021.

Compiled financial statements for the quarter showed an increase in changes in net assets of a decrease of (\$670,598) for year to date. The compilation report was discussed, including specifically the categories of investment income, benefits paid, administrative fees and the comparison to the same period in the prior year.

With no further business or requests, the meeting was adjourned at 2:30.

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Ann Masel, Plan Administrator

# Galveston Employees Retirement

## Quarterly Report

### December 31, 2020

**CITY OF GALVESTON  
EMPLOYEE RETIREMENT FUND**

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| ASSET ALLOCATION                        | 14   |
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| ISHARES CORE S&P 500 ETF                | 25   |
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# GRAYSTONE CONSULTING

A business of Morgan Stanley

## Capital Markets Overview

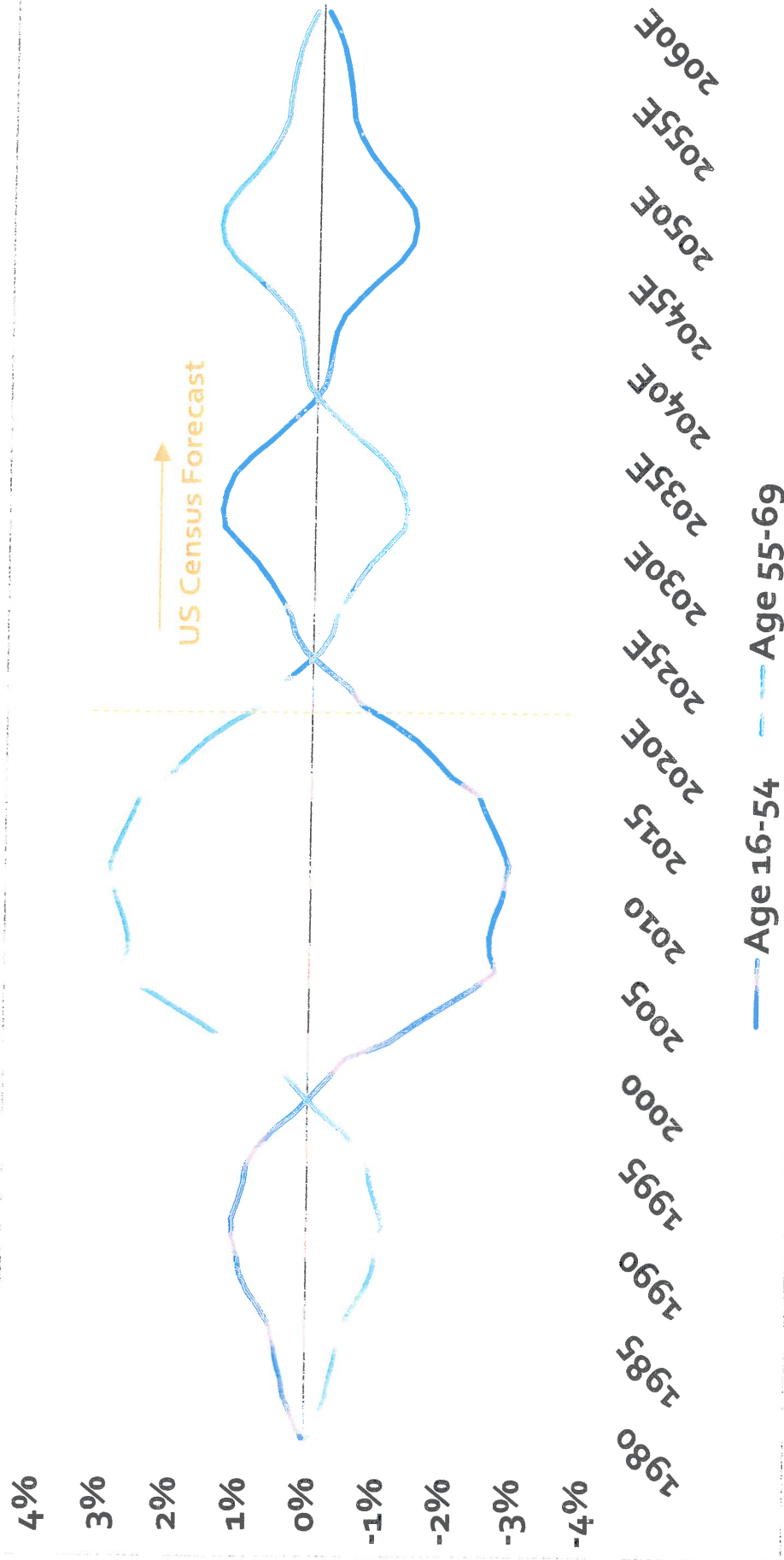
### FOURTH QUARTER 2020

- The S&P 500 saw continued gains in the fourth quarter, following a moderate third quarter and a sharp rally in the second quarter. Equities rallied 12.1% on the quarter, following a quarter in which they gained 8.5%. Equities continued to rally as investors cheered the much-anticipated \$900 billion stimulus package and the start of vaccine distribution, as well as robust economic data and easy monetary policy. Both international developed and emerging market equities outperformed the US in the fourth quarter. Morgan Stanley & Co. U.S. Equity Strategy has a 3,900 price target on the S&P 500 to December 2021.
- After the S&P 500 sectors finished the third quarter posting moderate returns, the sectors finished the fourth quarter with stronger performance. While Consumer Discretionary, Materials, and Industrials were the top-performing sectors in 3Q20, returning 15.06%, 13.31%, and 12.48%, respectively, Energy, Financials and Industrials were the top-performing sectors in 4Q20, returning 27.8%, 23.2%, and 15.7%, respectively. Laggards included Utilities, Consumer Staples, and Real Estate despite still increasing by 6.5%, 6.3%, and 5.0%, respectively. Other major US indices were also up for the quarter: The Dow Jones Industrial Average rose 10.7% and the NASDAQ Composite rose 15.7%.
- The MSCI EAFE Index (a benchmark for international developed markets) rose 16.1% while the MSCI Emerging Markets Index rose 19.6% for the quarter. Both international developed markets and emerging markets outperformed US equities by 400 and 750 basis points, respectively.
- The US aggregate bond market was positive for a consecutive quarter and outperformed on an absolute but not on a relative basis as investors took on more risk within pro-recovery trades. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, rose 0.67%.
- Morgan Stanley & Co. economists expect US real GDP will be -2.2% in Q4 2020, but forecast positive GDP growth for 2021 as economic recovery continues.

| Index Performance                 | 4Q20  | 1 Year | 3 Year | 5 Year | 7 Year | 10 Year | 15 Year | 20 Year |
|-----------------------------------|-------|--------|--------|--------|--------|---------|---------|---------|
| <b>Equities:</b>                  |       |        |        |        |        |         |         |         |
| Standard & Poor's 500             | 12.15 | 18.40  | 14.18  | 15.22  | 12.92  | 13.89   | 9.88    | 7.47    |
| Russell Mid Cap                   | 19.91 | 17.10  | 11.61  | 13.40  | 10.96  | 12.42   | 9.77    | 9.44    |
| Russell 2000                      | 31.37 | 19.96  | 10.25  | 13.26  | 9.34   | 11.21   | 8.91    | 8.74    |
| Russell Micro Cap                 | 31.39 | 20.96  | 8.78   | 11.89  | 8.09   | 10.56   | 7.34    | 8.95    |
| MSCI All Country World ex USA     | 17.01 | 10.65  | 4.88   | 8.93   | 4.82   | 4.92    | 4.89    | 5.23    |
| MSCI Emerging Markets             | 19.70 | 18.31  | 6.17   | 12.81  | 6.17   | 3.63    | 6.59    | 9.59    |
| <b>Fixed Income:</b>              |       |        |        |        |        |         |         |         |
| Bloomberg Barclays U.S. Aggregate | 0.67  | 7.51   | 5.34   | 4.44   | 4.09   | 3.84    | 4.49    | 4.83    |
| Bloomberg Barclays Long Treasury  | -3.00 | 17.70  | 9.88   | 7.85   | 8.78   | 7.80    | 7.10    | 7.18    |
| Bloomberg Barclays Long Credit    | 4.92  | 13.32  | 9.23   | 10.02  | 8.68   | 8.25    | 7.50    | 8.20    |
| Bloomberg Barclays Municipal Bond | 1.82  | 5.21   | 4.64   | 3.91   | 4.54   | 4.63    | 4.45    | 4.73    |
| Bloomberg Barclays High Yield     | 6.45  | 7.11   | 6.24   | 8.59   | 5.74   | 6.80    | 7.50    | 7.84    |
| <b>Blended:</b>                   |       |        |        |        |        |         |         |         |
| 50%MSCI ACWI / 50%Barclays Agg    | 7.63  | 12.64  | 8.13   | 8.60   | 6.73   | 6.74    | 6.20    | N/A     |
| <b>Non-Traditional:</b>           |       |        |        |        |        |         |         |         |
| HFRI Fund of Funds Composite      | 7.52  | 10.27  | 4.68   | 4.44   | 3.60   | 3.27    | 2.99    | 3.71    |
| Bloomberg Commodity Index         | 10.19 | -3.12  | -2.53  | 1.03   | -5.80  | -6.50   | -4.01   | -0.52   |
| S&P GSCI Gold Index               | -0.35 | 20.95  | 11.53  | 11.01  | 5.72   | 2.05    | 8.02    | 9.33    |
| Consumer Price Index              | 0.35  | 1.01   | 1.74   | 1.88   | 1.53   | 1.71    | 1.86    | 2.03    |
| 90 Day Treasury Bill              | 0.02  | 0.58   | 1.56   | 1.16   | 0.84   | 0.60    | 1.17    | 1.43    |

# Demographic Headwinds Should End with the Aging of Baby Boomers and the Work Force Entry of Millennials and Gen Z

Share of Working Age Population, Five-Year Change (Age 16-69)  
As of October 20, 2020



P9

Source: Haver Analytics

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures, and qualifications at the end of this material.

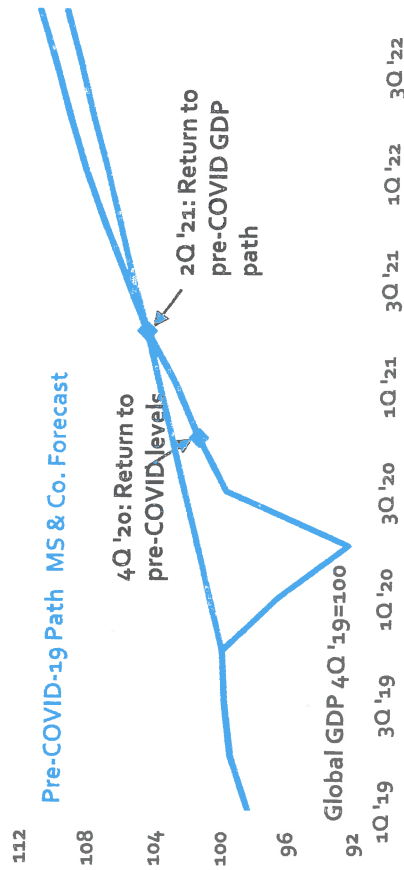
WEALTH MANAGEMENT GLOBAL INVESTMENT OFFICE | CHARTBOOK | POLICY MAKERS AND THE PANDEMIC: DEFINING A NEW BUSINESS CYCLE



# Charts in Focus : Charts to Watch in 2021

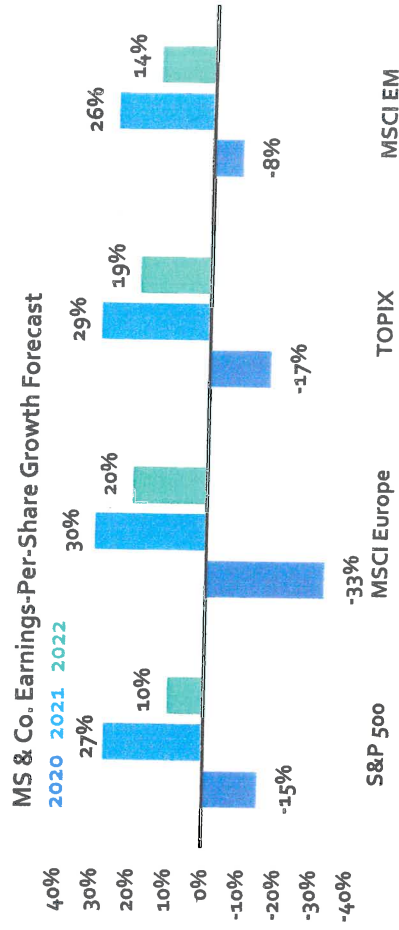
## Global Growth is Likely to Return to Pre-Covid Path in 2021

As of November 15, 2020



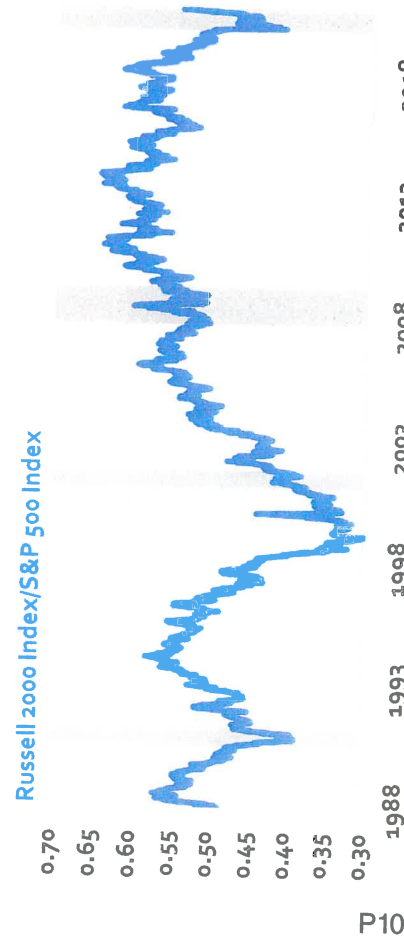
## Expect a Strong EPS Recovery Across All Regions This Year

As of November 15, 2020



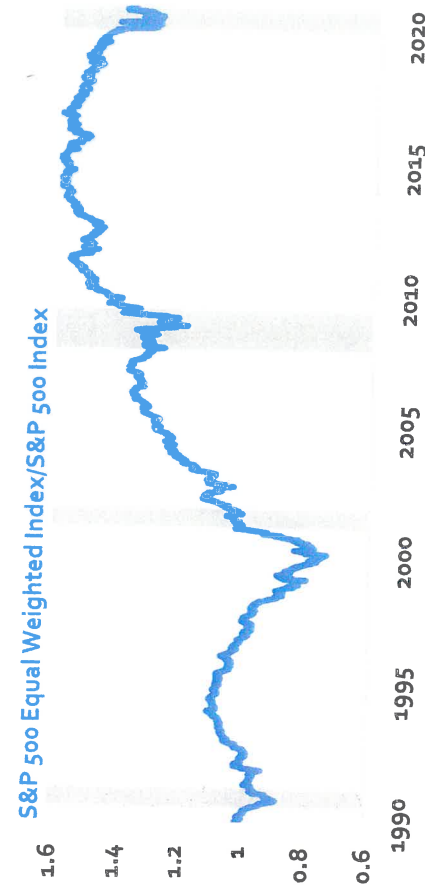
## US Small Caps Have Room to Run

As of December 29, 2020



## Market Breadth Strengthening

As of December 29, 2020

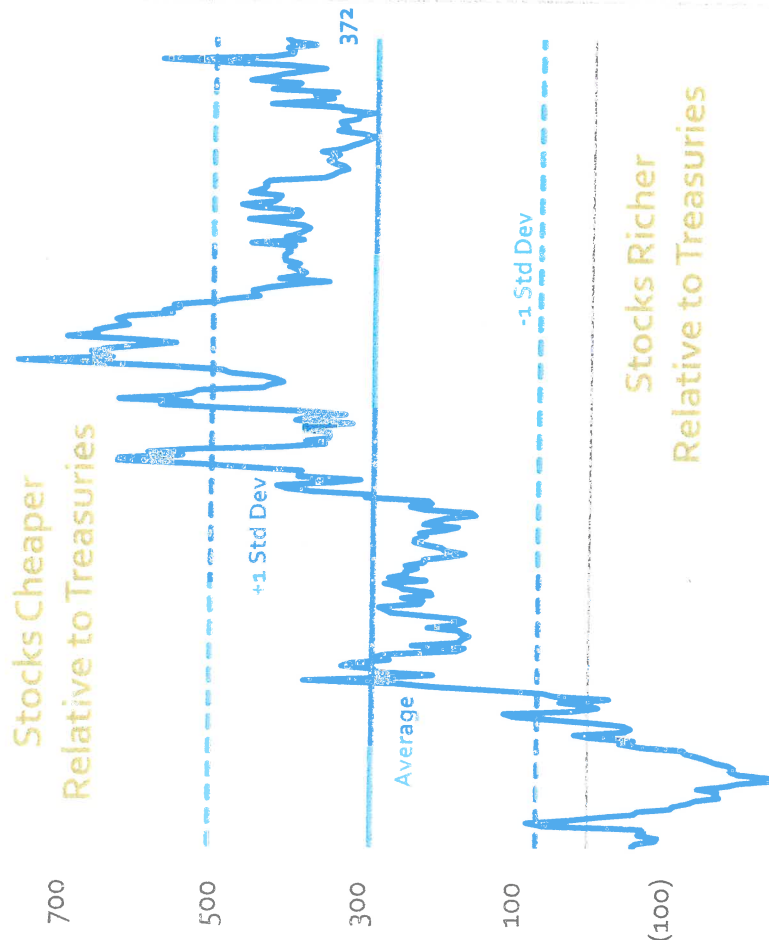


Source: Morgan Stanley & Co. Research, Bloomberg, Morgan Stanley Wealth Management GIC, Haver Analytics, IMF, national sources, Morgan Stanley Research forecasts. Note: The pre-COVID-19 GDP path refers to the trajectory that global GDP would have followed prior to the COVID-19 shock and is calculated using Morgan Stanley Research forecasts as of January 21, 2020. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

## Current Indicators: Equity Valuation

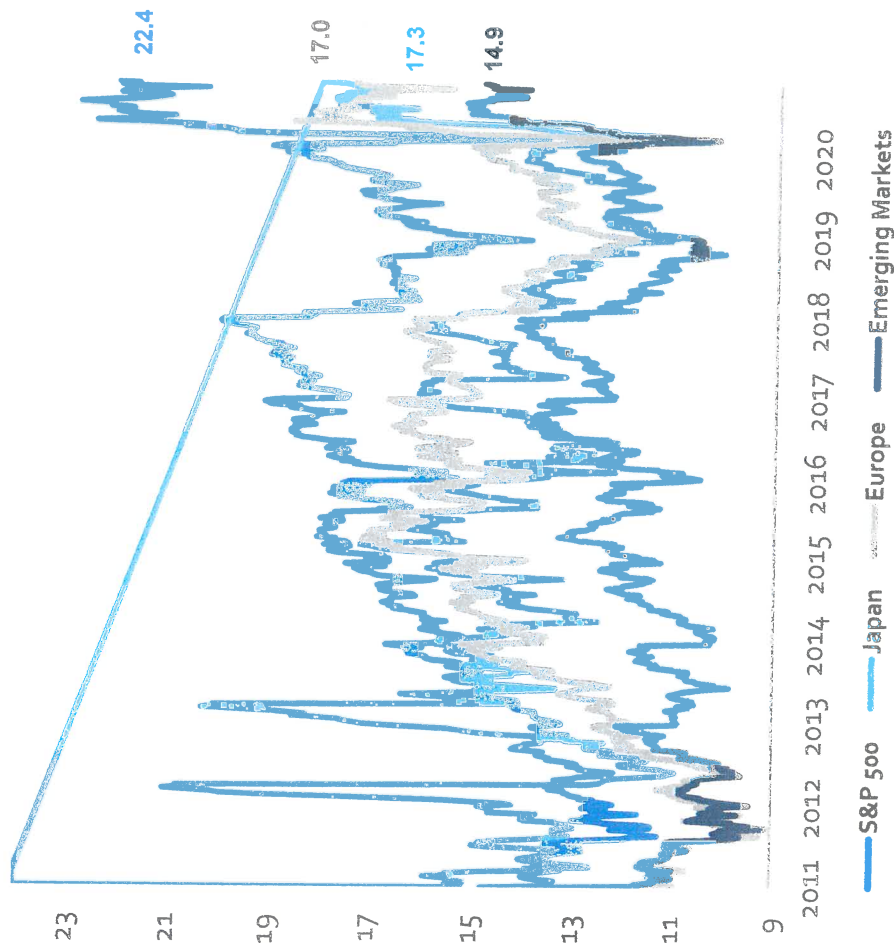
### S&P 500 Equity Risk Premium<sup>(1)</sup>

As of November 30, 2020



### P/E Relative to Rest of World

As of December 25, 2020

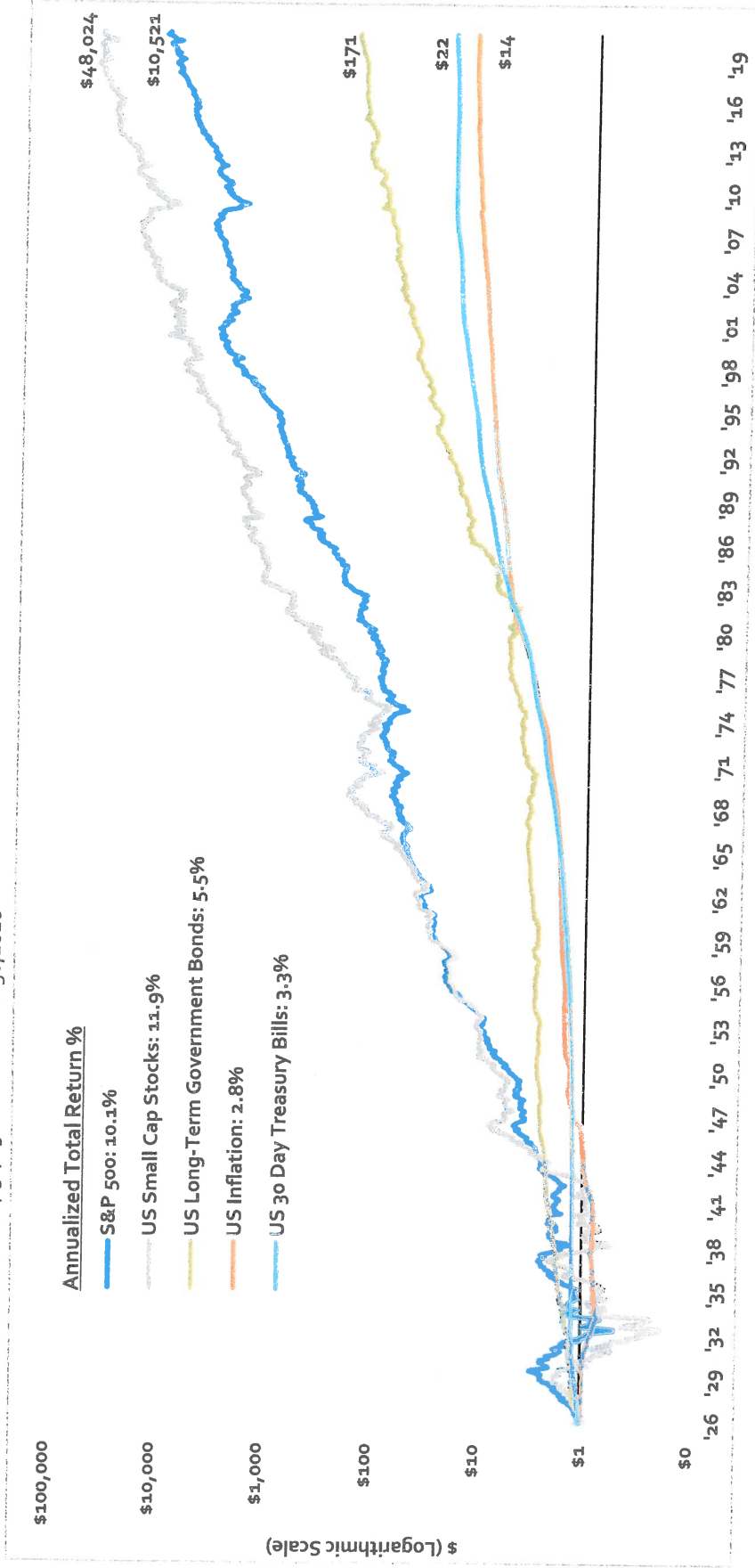


Source: FactSet, Morgan Stanley Wealth Management GIC. Note: (1) Equity risk premium = S&P 500 forward earnings yield - 10-year Treasury yield. Equity risk premium is the excess return that an individual stock or the overall stock market provides over a risk-free rate. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

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# Long Term Cumulative Returns

Cumulative Total Return of \$1 January 31, 1926 – November 30, 2020

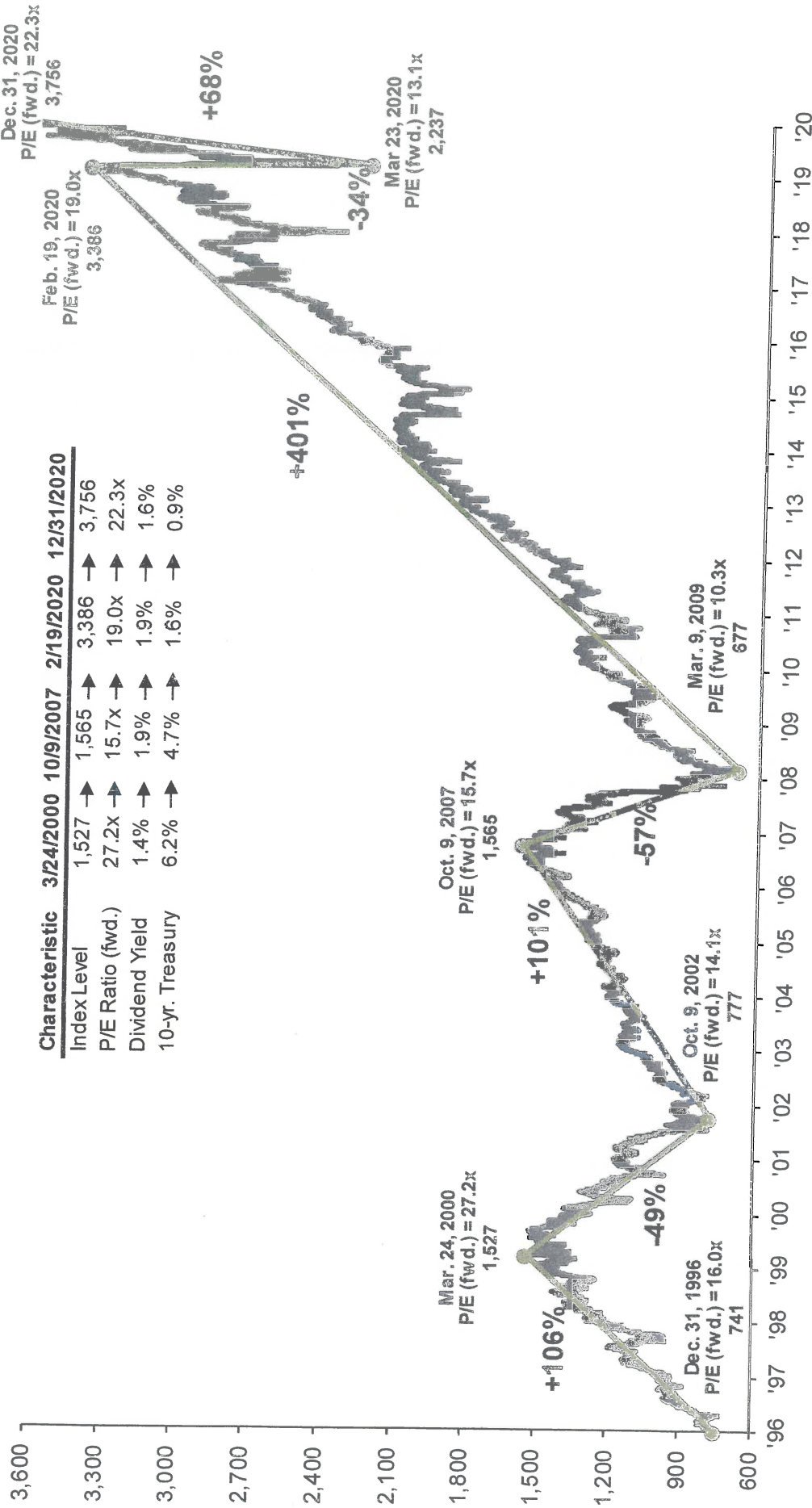


**DISCLOSURES:** Source: Calculated by Morgan Stanley Wealth Management GIC using data provided by Morningstar. (c) 2020 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (i) is proprietary to Morningstar and/or its content providers; (ii) may not be copied or distributed; and (iii) 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. Aside from the S&P 500, all indices shown above are Ibbotson indices. The hypothetical \$1 investment is for illustrative purposes only. It does not represent the performance of any specific investment. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material. Inflation data is reported with a one month lag, so current value is a repeat of last month's value. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

# S&P 500 Index at inflection points

GTM - U.S.

## S&P 500 Price Index



| Characteristic   | 3/24/2000 | 10/9/2007 | 2/19/2020 | 12/31/2020 |
|------------------|-----------|-----------|-----------|------------|
| Index Level      | 1,527     | 1,565     | 3,386     | 3,756      |
| P/E Ratio (fwd.) | 27.2x     | 15.7x     | 19.0x     | 22.3x      |
| Dividend Yield   | 1.4%      | 1.9%      | 1.9%      | 1.6%       |
| 10-yr. Treasury  | 6.2%      | 4.7%      | 1.6%      | 0.9%       |

Source: Compustat, FactSet, Federal Reserve, Standard & Poor's, J.P. Morgan Asset Management. Dividend yield is calculated as consensus estimates of dividends for the next 12 months, divided by most recent price, as provided by Compustat. Forward price-to-earnings ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Returns are cumulative and based on S&P 500 Index price movement only, and do not include the reinvestment of dividends. Past performance is not indicative of future returns. *Guide to the Markets - U.S.* Data are as of December 31, 2020.

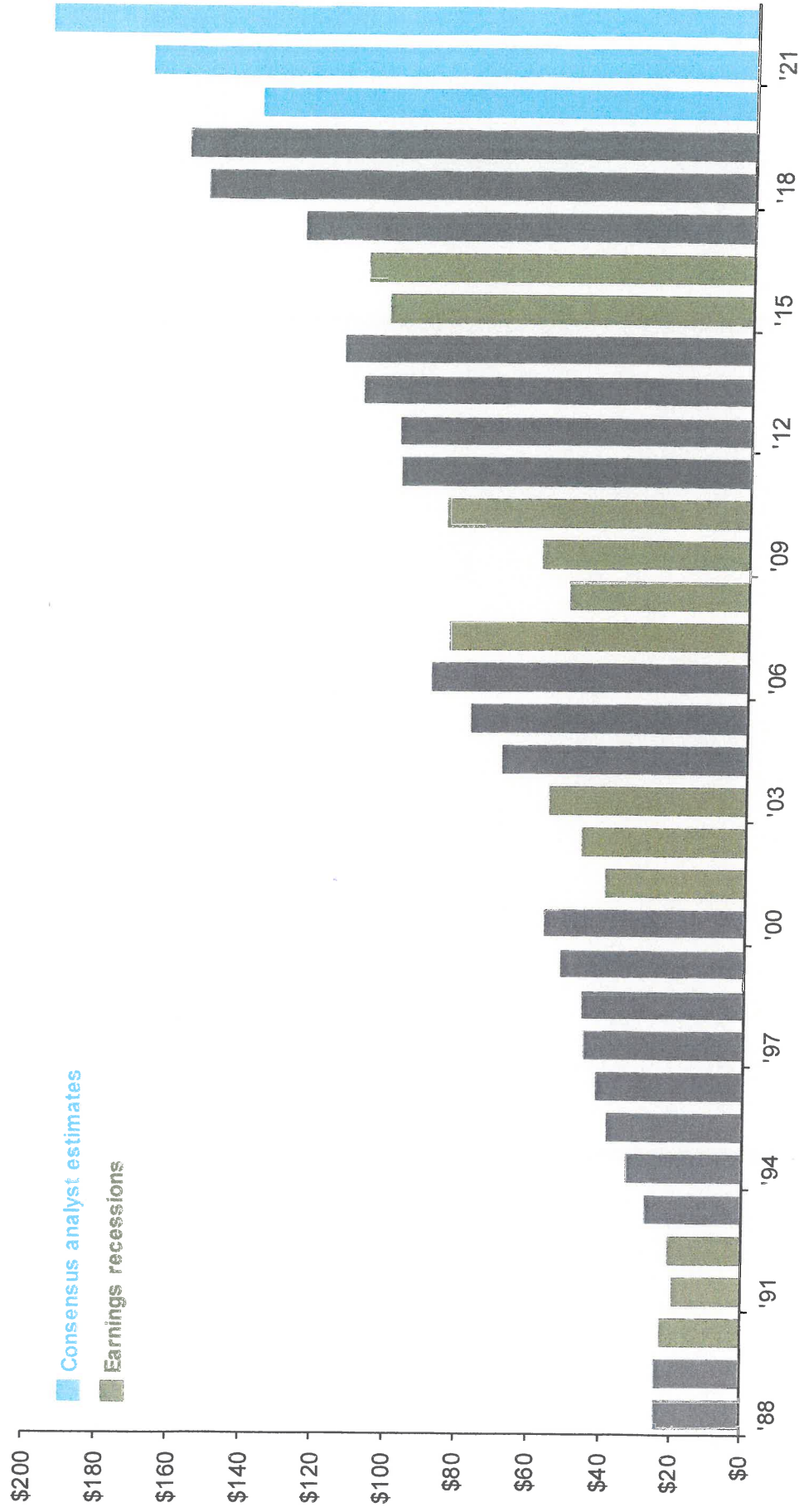


# Corporate profits

GTM - U.S.

## S&P 500 earnings per share

Index annual operating earnings



Source: Compustat, FactSet, Standard & Poor's, J.P. Morgan Asset Management. Historical EPS levels are based on annual operating earnings per share. Earnings estimates are based on estimates from FactSet Market Aggregates. Past performance is not indicative of future returns. *Guide to the Markets - U.S.* Data are as of December 31, 2020.

## Returns and valuations by style

GTM - U.S.

| 10-year annualized |       |        |       | YTD   |       |        |       | Current P/E vs. 20-year avg. P/E |       |        |      |
|--------------------|-------|--------|-------|-------|-------|--------|-------|----------------------------------|-------|--------|------|
| Value              | Blend | Growth |       | Value | Blend | Growth |       | Value                            | Blend | Growth |      |
| Large              | 10.5% | 13.9%  | 17.2% | Large | 2.8%  | 18.4%  | 38.5% | Large                            | 17.9  | 22.3   | 31.2 |
|                    |       |        |       |       |       |        |       |                                  | 13.7  | 15.4   | 18.5 |
| Mid                | 10.5% | 12.4%  | 15.0% | Mid   | 5.0%  | 17.1%  | 35.6% | Mid                              | 18.2  | 22.6   | 39.3 |
|                    |       |        |       |       |       |        |       |                                  | 14.3  | 16.2   | 20.2 |
| Small              | 8.7%  | 11.2%  | 13.5% | Small | 4.6%  | 20.0%  | 34.6% | Small                            | 18.0  | 30.1   | 76.2 |
|                    |       |        |       |       |       |        |       |                                  | 16.8  | 20.9   | 38.4 |

| Since market peak (February 2020) |       |        |       | Since market low (March 2020) |       |        |        | Current P/E as % of 20-year avg. P/E |        |        |        |
|-----------------------------------|-------|--------|-------|-------------------------------|-------|--------|--------|--------------------------------------|--------|--------|--------|
| Value                             | Blend | Growth |       | Value                         | Blend | Growth |        | Value                                | Blend  | Growth |        |
| Large                             | 1.6%  | 12.7%  | 26.8% | Large                         | 64.2% | 70.2%  | 84.9%  | Large                                | 130.6% | 144.8% | 168.5% |
| Mid                               | 3.2%  | 12.8%  | 26.8% | Mid                           | 82.4% | 88.8%  | 97.1%  | Mid                                  | 127.1% | 139.4% | 194.6% |
| Small                             | 6.9%  | 18.1%  | 28.1% | Small                         | 87.9% | 99.0%  | 108.2% | Small                                | 107.2% | 143.6% | 198.5% |

P15

Source: FactSet, Russell Investment Group, Standard & Poor's, J.P. Morgan Asset Management.  
All calculations are cumulative total return, including dividends reinvested for the stated period. Since Market Peak represents period from February 19, 2020 to December 31, 2020. Since Market Low represents period from March 23, 2020 to December 31, 2020. Returns are cumulative returns, not annualized. For all time periods, total return is based on Russell style indices with the exception of the large blend category, which is based on the S&P 500 Index. Past performance is not indicative of future returns. The price-to-earnings is a bottom-up calculation based on the most recent index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates.  
*Guide to the Markets - U.S. Data are as of December 31, 2020.*

**J.P.Morgan**  
Asset Management

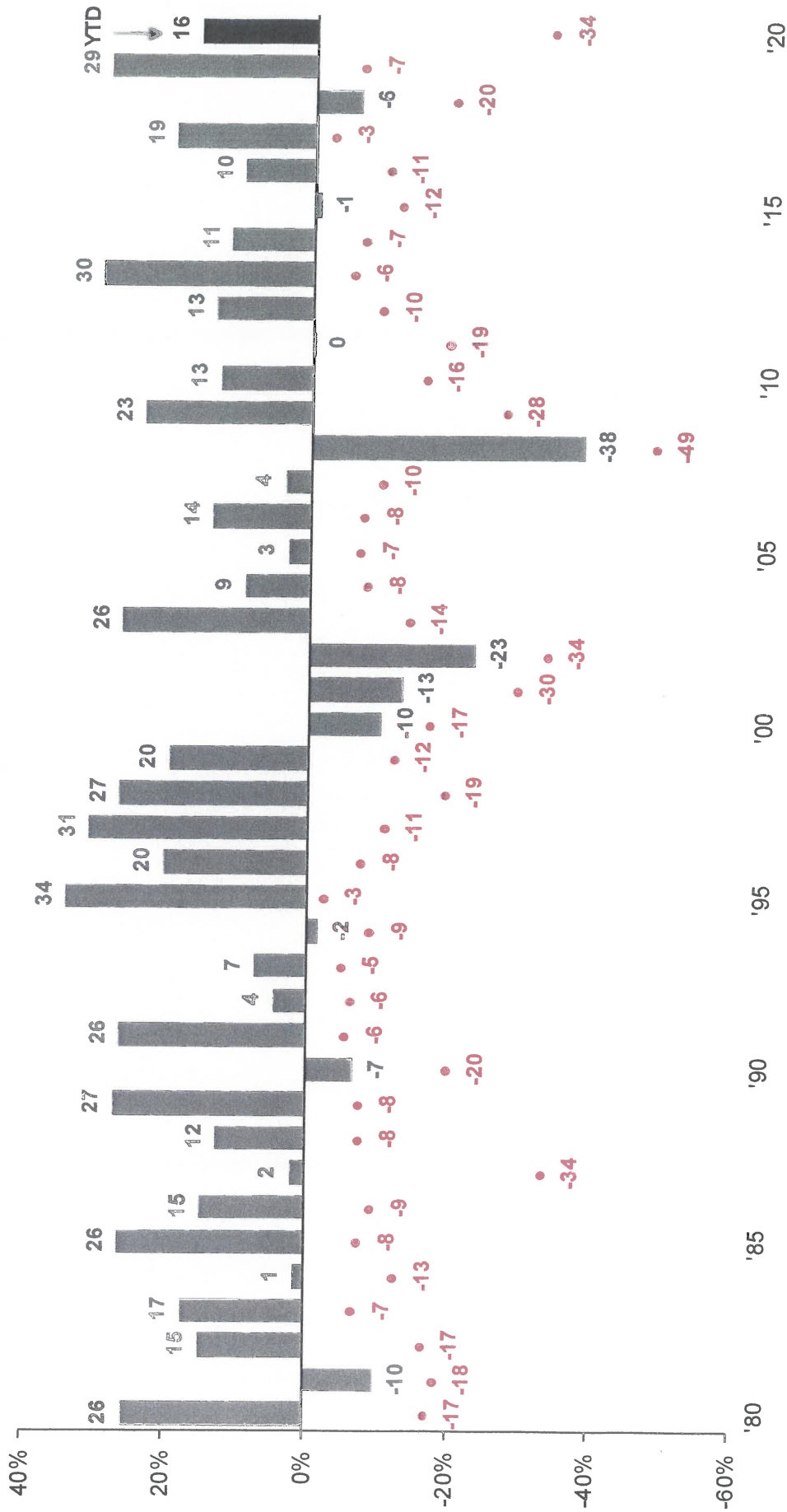


# Annual returns and intra-year declines

GTM - U.S.

## S&P 500 intra-year declines vs. calendar year returns

Despite average intra-year drops of 14.3%, annual returns positive in 31 of 41 years



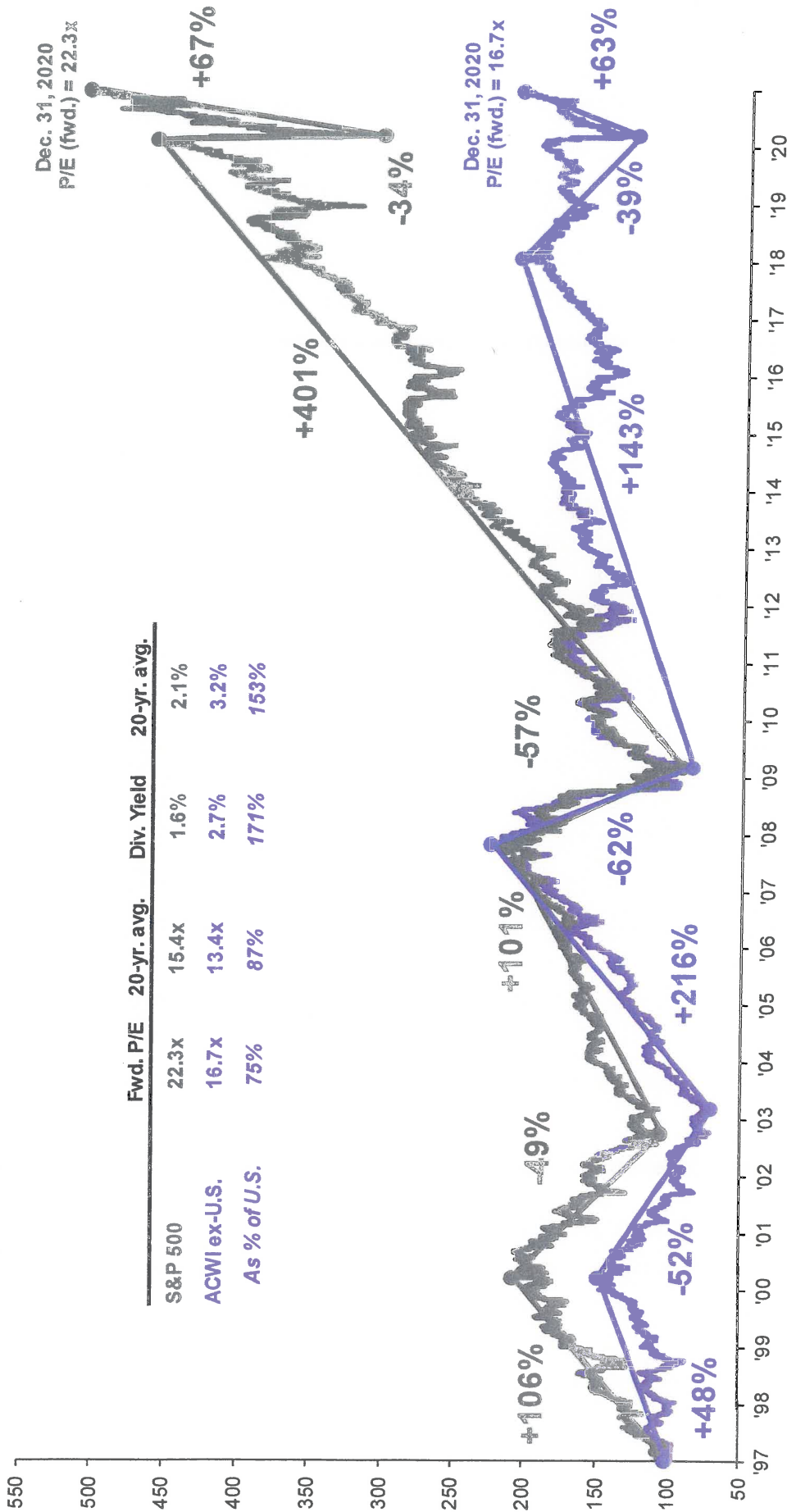
Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.  
Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2020, over which time period the average annual return was 9.0%.  
Guide to the Markets - U.S. Data are as of December 31, 2020.

# U.S. and international equities at inflection points

GTM - U.S.

## MSCI All Country World ex-U.S. and S&P 500 Indices

Dec. 1996 = 100, U.S. dollar, price return



Source: FactSet, MSCI, Standard & Poor's, J.P. Morgan Asset Management. Forward price-to-earnings ratio is a bottom-up calculation based on the most recent index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Returns are cumulative and based on price movement only, and do not include the reinvestment of dividends. Dividend yield is calculated as consensus estimates of dividends for the next 12 months, divided by most recent price, as provided by FactSet Market Aggregates. Past performance is not a reliable indicator of current and future results. *Guide to the Markets - U.S.* Data are as of December 31, 2020.

City of Galveston  
Employee Retirement Fund  
Market Value Update  
January 22, 2021

| Manager Type | Style               | Name                                | Market Value 12/31/2020 | Total % of Class | Total % of Portfolio | Market Value 1/22/2021 | Total % of Class | Total % of Portfolio |
|--------------|---------------------|-------------------------------------|-------------------------|------------------|----------------------|------------------------|------------------|----------------------|
| Equity       | Large Cap Blend     | iShares Core S&P 500 ETF            | \$9,927,564             | 24.6%            | 15.8%                | \$10,163,462           | 24.4%            | 15.8%                |
| Equity       | Large Cap Blend     | iShares MSCI USA Min Vol ETF        | \$9,285,916             | 23.0%            | 14.7%                | \$9,266,764            | 22.2%            | 14.4%                |
| Equity       | Mid Cap Blend       | Vanguard Mid Cap Index Fund         | \$10,965,611            | 27.2%            | 17.4%                | \$11,327,647           | 27.2%            | 17.6%                |
| Equity       | Small Cap Blend     | iShares Core S&P Small-Cap ETF      | \$5,378,356             | 13.3%            | 8.5%                 | \$5,920,288            | 14.2%            | 9.2%                 |
| Equity       | Foreign Lg Blend    | iShares Core MSCI EAFE ETF          | \$3,087,701             | 7.7%             | 4.9%                 | \$3,181,552            | 7.6%             | 4.9%                 |
| Equity       | Diversified EM      | iShares Core MSCI Emerg. Mkts ETF   | \$1,677,251             | 4.2%             | 2.7%                 | \$1,807,290            | 4.3%             | 2.8%                 |
|              |                     | <b>Total Equity</b>                 | <b>\$40,322,400</b>     | <b>100%</b>      | <b>64.1%</b>         | <b>\$41,667,003</b>    | <b>100%</b>      | <b>64.7%</b>         |
| Fixed        | Interm-Term Bond    | Baird Aggregate Bond Fund           | \$3,498,599             | 22.0%            | 5.5%                 | \$3,474,819            | 22.0%            | 5.4%                 |
| Fixed        | Interm-Term Bond    | Metropolitan West Total Return Bond | \$3,886,085             | 24.4%            | 6.2%                 | \$3,861,754            | 24.4%            | 6.0%                 |
| Fixed        | Interm-Term Bond    | TIAA-CREF Bond Fund                 | \$3,418,727             | 21.5%            | 5.4%                 | \$3,390,888            | 21.4%            | 5.3%                 |
| Fixed        | World Bond          | Brandywine Global Opp               | \$2,341,391             | 14.7%            | 3.7%                 | \$2,315,856            | 14.6%            | 3.6%                 |
| Fixed        | Multisector Bond    | PIMCO Income Fund                   | \$2,773,128             | 17.4%            | 4.4%                 | \$2,782,288            | 17.6%            | 4.3%                 |
|              |                     | <b>Total Fixed</b>                  | <b>\$15,917,930</b>     | <b>100%</b>      | <b>25.3%</b>         | <b>\$15,825,604</b>    | <b>100%</b>      | <b>24.5%</b>         |
| Other        | Allo 50%-70% Equity | FPA Crescent                        | \$2,940,441             | 55.0%            | 4.7%                 | \$3,044,260            | 55.4%            | 4.7%                 |
| Other        | Long-Short Equity   | Salient Tactical Growth             | \$2,404,504             | 45.0%            | 3.8%                 | \$2,450,083            | 44.6%            | 3.8%                 |
|              |                     | <b>Total Alternatives</b>           | <b>\$5,344,945</b>      | <b>100%</b>      | <b>8.5%</b>          | <b>\$5,494,343</b>     | <b>100%</b>      | <b>8.5%</b>          |
| Cash         | Money Market        | Cash Account                        | \$284,344               | 19.4%            | 0.4%                 | \$406,337              | 26.8%            | 0.6%                 |
| Cash         | Money Market        | Investment Account Cash             | \$1,180,548             | 80.6%            | 1.9%                 | \$1,111,691            | 73.2%            | 1.7%                 |
| Cash         | Money Market        | Restricted Cash Account             | \$210                   | 0.0%             | 0.0%                 | \$210                  | 0.0%             | 0.0%                 |
|              |                     | <b>Total Cash &amp; Equivalents</b> | <b>\$1,465,103</b>      | <b>100%</b>      | <b>2.3%</b>          | <b>\$1,518,238</b>     | <b>100%</b>      | <b>2.4%</b>          |
|              |                     | <b>Composite Total</b>              | <b>\$63,050,377</b>     |                  | <b>100%</b>          | <b>\$64,505,187</b>    |                  | <b>100%</b>          |

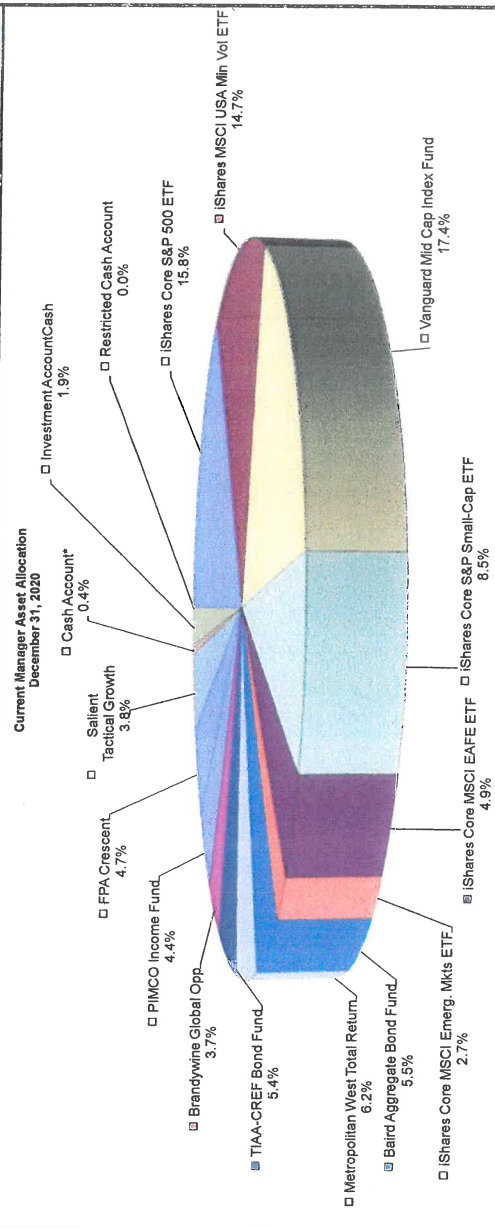
**P18** This investment evaluation is directed only to the client for whose account the evaluation was created. The underlying data has been obtained from sources considered to be reliable: the information is believed to be accurate, but there is no assurance that it is so. This evaluation is for informational purposes only and is not intended to be an offer, solicitation or recommendation with respect to the purchase or sale of any security or a recommendation of the services supplied by any money management organization.



# CITY OF GALVESTON EMPLOYEE RETIREMENT FUND

December 31, 2020

| Manager                             | Style                       | Market Value        | Total % of Class | Total % of Portfolio |
|-------------------------------------|-----------------------------|---------------------|------------------|----------------------|
| iShares Core S&P 500 ETF            | Large Cap Blend             | \$9,927,564         | 24.6%            | 15.8%                |
| iShares MSCI USA Min Vol ETF        | Large Cap Blend             | \$9,285,916         | 23.0%            | 14.7%                |
| Vanguard Mid Cap Index Fund         | Mid Cap Blend               | \$10,965,611        | 27.2%            | 17.4%                |
| iShares Core S&P Small-Cap ETF      | Small Cap Blend             | \$5,378,356         | 13.3%            | 8.5%                 |
| iShares Core MSCI EAFE ETF          | Foreign Large Blend         | \$3,087,701         | 7.7%             | 4.9%                 |
| iShares Core MSCI Emerg. Mkts ETF   | Diversified Emerg. Mkts     | \$1,677,251         | 4.2%             | 2.7%                 |
| <b>Total Equity</b>                 |                             | <b>\$40,322,400</b> | <b>100%</b>      | <b>64.0%</b>         |
| Baird Aggregate Bond Fund           | Intermediate Core Bond      | \$3,498,599         | 22.0%            | 5.5%                 |
| Metropolitan West Total Return Bond | Intermediate Core-Plus Bond | \$3,886,085         | 24.4%            | 6.2%                 |
| TIAA-CREF Bond Fund                 | Intermediate Core-Plus Bond | \$3,418,727         | 21.5%            | 5.4%                 |
| Brandywine Global Opp               | World Bond                  | \$2,341,391         | 14.7%            | 3.7%                 |
| PIMCO Income Fund                   | Multisector Bond            | \$2,773,128         | 17.4%            | 4.4%                 |
| <b>Total Fixed Income</b>           |                             | <b>\$15,917,930</b> | <b>100%</b>      | <b>25.2%</b>         |
| FPA Crescent                        | Allo 50%-70% Equity         | \$2,940,441         | 55.0%            | 4.7%                 |
| Salient Tactical Growth             | Long-Short Equity           | \$2,404,504         | 45.0%            | 3.8%                 |
| <b>Total Alternative</b>            |                             | <b>\$5,344,945</b>  | <b>100%</b>      | <b>8.5%</b>          |
| Cash Account*                       | Money Market                | \$284,344           | 19.4%            | 0.4%                 |
| Investment Account Cash             | Money Market                | \$1,180,548         | 80.6%            | 1.9%                 |
| Restricted Cash Account             | Money Market                | \$210               | 0.0%             | 0.0%                 |
| <b>Total Cash &amp; Equivalents</b> |                             | <b>\$1,465,103</b>  | <b>100%</b>      | <b>2.3%</b>          |
| <b>Composite Total</b>              |                             | <b>\$63,050,377</b> |                  | <b>100%</b>          |



\* Not included in performance.

# City of Galveston Employee Retirement Fund

## ESTIMATED ANNUAL EXPENSE ANALYSIS

December 31, 2020

| THE QUANTITATIVE<br>MANAGER ACCESS GROUP |                 |                |             |                 |             |                                              |                                             |                                                                     |                             |                               |
|------------------------------------------|-----------------|----------------|-------------|-----------------|-------------|----------------------------------------------|---------------------------------------------|---------------------------------------------------------------------|-----------------------------|-------------------------------|
| MANAGER                                  | MARKET<br>VALUE | MANAGER<br>FEE | TOTAL<br>\$ | ADVISORY<br>FEE | TOTAL<br>\$ | COMBINED<br>ESTIMATED<br>ANNUAL<br>FEE<br>\$ | COMBINED<br>ESTIMATED<br>ANNUAL<br>FEE<br>% | AVERAGE<br>MORNINGSTAR<br>EXPENSE<br>RATIO BY STYLE<br>AS OF 6/2020 | MORNINGSTAR<br>STYLE        |                               |
| iShares Core S&P 500 ETF                 | 9,927,564       | 0.03%          | 2,978       | 0.14%           | 13,899      | 16,877                                       | 0.17%                                       | 0.92%                                                               | Large Cap Blend             |                               |
| iShares MSCI USA Min Vol ETF             | 9,285,916       | 0.15%          | 13,929      | 0.14%           | 13,000      | 26,929                                       | 0.29%                                       | 0.92%                                                               | Large Cap Blend             |                               |
| Vanguard Mid Cap Index Fund              | 10,965,611      | 0.04%          | 4,386       | 0.14%           | 15,352      | 19,738                                       | 0.18%                                       | 1.04%                                                               | Mid Cap Blend               |                               |
| iShares Core S&P Small-Cap ETF           | 5,378,356       | 0.06%          | 3,227       | 0.14%           | 7,530       | 10,757                                       | 0.20%                                       | 1.11%                                                               | Small Cap Blend             |                               |
| iShares Core MSCI EAFE ETF               | 3,087,701       | 0.07%          | 2,161       | 0.14%           | 4,323       | 6,484                                        | 0.21%                                       | 0.99%                                                               | Foreign Large Blend         |                               |
| iShares Core MSCI Emerg. Mkts ETF        | 1,677,251       | 0.11%          | 1,845       | 0.14%           | 2,348       | 4,193                                        | 0.25%                                       | 1.32%                                                               | Diversified Emerging Mkts.  |                               |
| Baird Aggregate Bond Fund                | 3,498,599       | 0.25%          | 8,746       | 0.14%           | 4,898       | 13,645                                       | 0.39%                                       | 0.66%                                                               | Intermediate Core Bond      |                               |
| Metropolitan West Total Return Bond      | 3,886,085       | 0.35%          | 13,601      | 0.14%           | 5,441       | 19,042                                       | 0.49%                                       | 0.80%                                                               | Intermediate Core-Plus Bond |                               |
| TIAA-CREF Bond Fund                      | 3,418,727       | 0.28%          | 9,572       | 0.14%           | 4,786       | 14,359                                       | 0.42%                                       | 0.80%                                                               | Intermediate Core-Plus Bond |                               |
| Brandywine Global Opp                    | 2,341,391       | 0.50%          | 11,707      | 0.14%           | 3,278       | 14,985                                       | 0.64%                                       | 0.96%                                                               | World Bond                  |                               |
| PIMCO Income Fund                        | 2,773,128       | 0.50%          | 13,866      | 0.14%           | 3,882       | 17,748                                       | 0.64%                                       | 1.07%                                                               | Multisector Bond            |                               |
| FPA Crescent                             | 2,940,441       | 1.00%          | 29,404      | 0.14%           | 4,117       | 33,521                                       | 1.14%                                       | 1.10%                                                               | Allocation 50% - 70% Equity |                               |
| Salient Tactical Growth                  | 2,404,504       | 1.15%          | 27,652      | 0.14%           | 3,366       | 31,018                                       | 1.29%                                       | 2.13%                                                               | Long-Short Equity           |                               |
| Investment Account Cash                  | 1,180,548       | 0.00%          | 0           | 0.14%           | 1,653       | 1,653                                        | 0.14%                                       | 0.46%                                                               | Money Market - Taxable      |                               |
| Restricted Cash Account                  | 210             | 0.00%          | 0           | 0.14%           | 0           | 0                                            | 0.14%                                       | 0.46%                                                               | Money Market - Taxable      |                               |
| Cash Account                             | 284,344         | 0.00%          | 0           | 0.14%           | 398         | 398                                          | 0.14%                                       | 0.46%                                                               | Money Market - Taxable      |                               |
| TOTAL                                    |                 | \$63,050,377   |             | \$143,076       |             | \$88,271                                     |                                             | \$231,346                                                           |                             | (for reference purposes only) |
|                                          |                 |                |             | 0.23%           |             | 0.14%                                        |                                             | 0.37%                                                               |                             |                               |

This investment evaluation is directed only to the client for whose account the evaluation was created. The underlying data has been obtained from sources considered to be reliable; the information is believed to be accurate, but there is no assurance that it is so. This evaluation is for informational purposes only and is not intended to be an offer, solicitation or recommendation with respect to the purchase or sale of any security or a recommendation of the services supplied by any money management organization. Past performance is not an indication, nor a guarantee of future results.



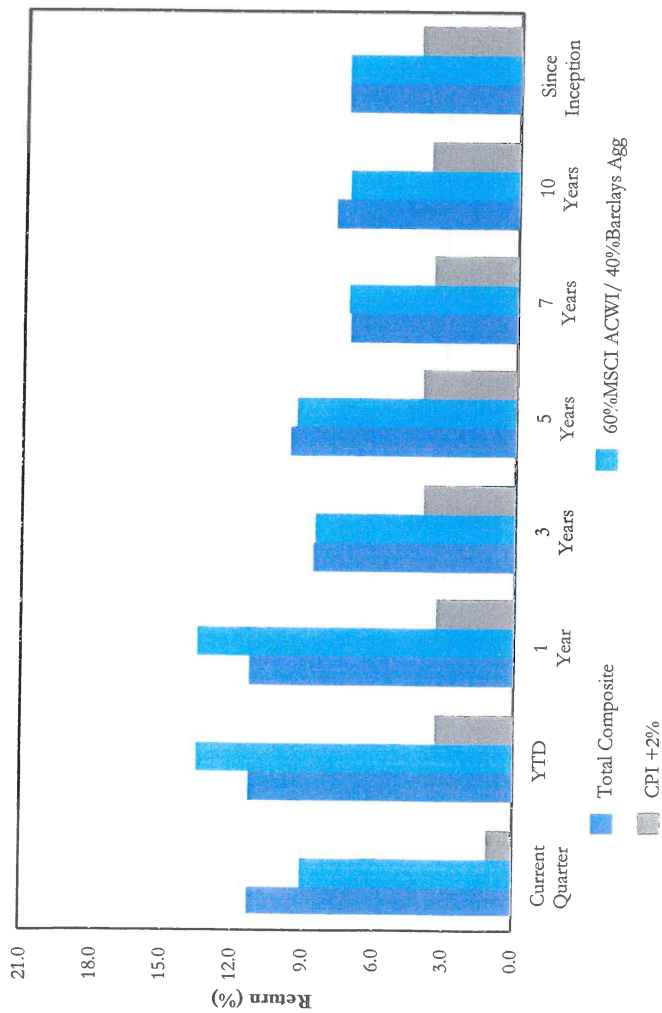
Executive Summary Table

|                                | Allocation           |     | Performance(%)  |       |        |         |         |         |          |                 |                |
|--------------------------------|----------------------|-----|-----------------|-------|--------|---------|---------|---------|----------|-----------------|----------------|
|                                | Market Value (\$000) | %   | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Inception | Inception Date |
| Total Composite                | 62,766               | 100 | 11.27           | 11.28 | 11.28  | 8.61    | 9.64    | 7.13    | 7.78     | 7.29            | 10/01/1992     |
| 60%MSCI ACWI/ 40%Barclays Agg  |                      |     | 9.04            | 13.50 | 13.50  | 8.59    | 9.37    | 7.20    | 7.25     | 7.31            |                |
| CPI +2%                        |                      |     | 1.10            | 3.29  | 3.29   | 3.86    | 3.97    | 3.60    | 3.77     | 4.26            |                |
| iShares Core S&P 500 ETF       | 9,928                | 16  | 12.19           | 18.33 | 18.33  | 14.06   | 15.19   |         |          | 15.19           | 01/01/2016     |
| S&P 500 Total Return           |                      |     | 12.15           | 18.40 | 18.40  | 14.18   | 15.22   |         |          | 15.20           |                |
| iShares MSCI USA Min Vol ETF   | 9,286                | 15  | 6.99            | 5.58  | 5.58   | 10.96   | 12.42   |         |          | 12.42           | 01/01/2016     |
| S&P 500 Total Return           |                      |     | 12.15           | 18.40 | 18.40  | 14.18   | 15.22   |         |          | 15.20           |                |
| Vanguard Mid Cap Index         | 10,966               | 17  | 18.02           | 18.26 | 18.26  | 12.04   | 13.29   | 11.14   |          | 13.78           | 10/01/2012     |
| Russell Midcap                 |                      |     | 19.91           | 17.10 | 17.10  | 11.61   | 13.40   | 10.96   |          | 13.62           |                |
| iShares S&P Small Cap          | 5,378                | 9   | 31.22           | 11.23 | 11.23  | 7.72    |         |         |          | 11.29           | 10/01/2016     |
| S&P 600 SC                     |                      |     | 31.31           | 11.29 | 11.29  | 7.74    |         |         |          | 11.24           |                |
| iShares MSCI EAFE ETF          | 3,088                | 5   | 15.66           | 8.19  | 8.19   | 4.44    |         |         |          | 6.01            | 09/01/2017     |
| MSCI AC World ex US Net        |                      |     | 17.01           | 10.65 | 10.65  | 4.88    |         |         |          | 6.50            |                |
| iShares MSCI Emerging Mkts ETF | 1,677                | 3   | 18.92           | 17.89 | 17.89  | 5.70    |         |         |          | 7.32            | 09/01/2017     |
| MSCI EM Net                    |                      |     | 19.70           | 18.31 | 18.31  | 6.17    |         |         |          | 7.70            |                |
| Baird Aggregate Bond Fund      | 3,499                | 6   | 1.07            | 8.63  | 8.63   | 5.84    |         |         |          | 5.84            | 12/01/2017     |
| Barclays Aggregate             |                      |     | 0.67            | 7.51  | 7.51   | 5.34    |         |         |          | 5.34            |                |
| Met West Total Return Bond     | 3,886                | 6   | 1.20            | 9.11  | 9.11   | 6.04    | 4.81    |         |          | 4.02            | 07/01/2014     |
| Barclays Aggregate             |                      |     | 0.67            | 7.51  | 7.51   | 5.34    | 4.44    |         |          | 3.79            |                |
| TIAA-CREF Bond Fund            | 3,419                | 5   | 1.73            | 7.86  | 7.86   | 5.60    |         |         |          | 5.33            | 12/01/2017     |
| Barclays Aggregate             |                      |     | 0.67            | 7.51  | 7.51   | 5.34    |         |         |          | 5.34            |                |
| Brandywine Global Opp          | 2,341                | 4   | 10.37           | 12.51 | 12.51  | 5.27    | 6.62    | 4.25    |          | 3.31            | 10/01/2012     |
| Citi World Govt Bond           |                      |     | 2.77            | 10.11 | 10.11  | 4.96    | 4.78    | 2.78    |          | 1.64            |                |
| MCO Income Instl               | 2,773                | 4   | 4.12            | 5.45  | 5.45   | 4.65    | 6.24    | 5.84    |          | 5.72            | 01/01/2013     |
| Barclays Aggregate             |                      |     | 0.67            | 7.51  | 7.51   | 5.34    | 4.44    | 4.09    |          | 3.30            |                |

## Executive Summary Table

|                         | Allocation           |   | Performance(%)  |       |        |         |         |         |          | Inception Date  |
|-------------------------|----------------------|---|-----------------|-------|--------|---------|---------|---------|----------|-----------------|
|                         | Market Value (\$000) | % | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Inception |
| FPA Crescent            | 2,940                | 5 | 18.23           | 12.18 | 12.18  | 7.62    | 8.69    |         |          | 6.82            |
| HFRI Equity Hedge Total |                      |   | 14.41           | 17.41 | 17.41  | 7.43    | 8.18    |         |          | 6.59            |
| Salient Tactical Growth | 2,405                | 4 | 3.66            | 8.03  | 8.03   |         |         |         |          | 4.74            |
| HFRI Equity Hedge Total |                      |   | 14.41           | 17.41 | 17.41  |         |         |         |          | 8.67            |

## Portfolio Performance (%)

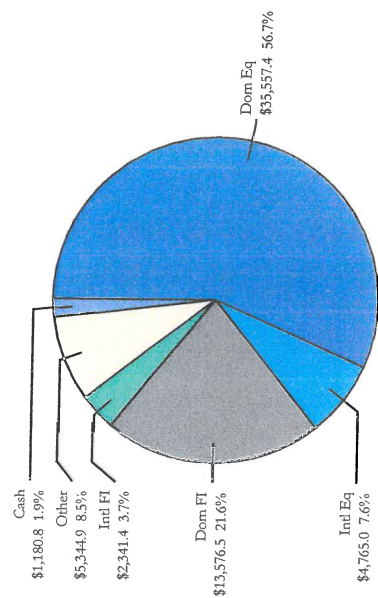


|                               | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Inception |
|-------------------------------|-----------------|-------|--------|---------|---------|---------|----------|-----------------|
| Total Composite               | 11.27           | 11.28 | 11.28  | 8.61    | 9.64    | 7.13    | 7.29     | 10/01/1992      |
| 60%MSCI ACWI/ 40%Barclays Agg | 9.04            | 13.50 | 13.50  | 8.59    | 9.37    | 7.20    | 7.25     | 10/01/1992      |
| CPI +2%                       | 1.10            | 3.29  | 3.29   | 3.86    | 3.97    | 3.60    | 3.77     | 10/01/1992      |

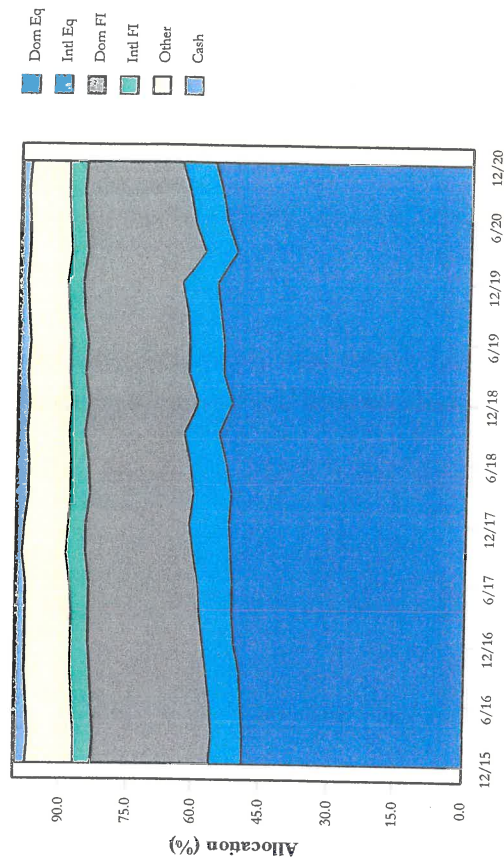
## Asset Growth (\$000)

|                        | Current Quarter | YTD    | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Inception |
|------------------------|-----------------|--------|--------|---------|---------|---------|----------|-----------------|
| Total Composite        | 56,545          | 56,830 | 56,830 | 51,188  | 42,663  | 43,810  | 36,771   | 17,015          |
| Beginning Market Value | -150            | -435   | -435   | -2,362  | -3,739  | -6,017  | -9,601   | -25,195         |
| Net Contributions      | 6,371           | 6,371  | 6,371  | 13,940  | 23,842  | 24,973  | 35,597   | 70,946          |
| Gain/Loss              | 62,766          | 62,766 | 62,766 | 62,766  | 62,766  | 62,766  | 62,766   | 62,766          |
| Ending Market Value    | 62,766          | 62,766 | 62,766 | 62,766  | 62,766  | 62,766  | 62,766   | 62,766          |

## Asset Allocation (\$000)

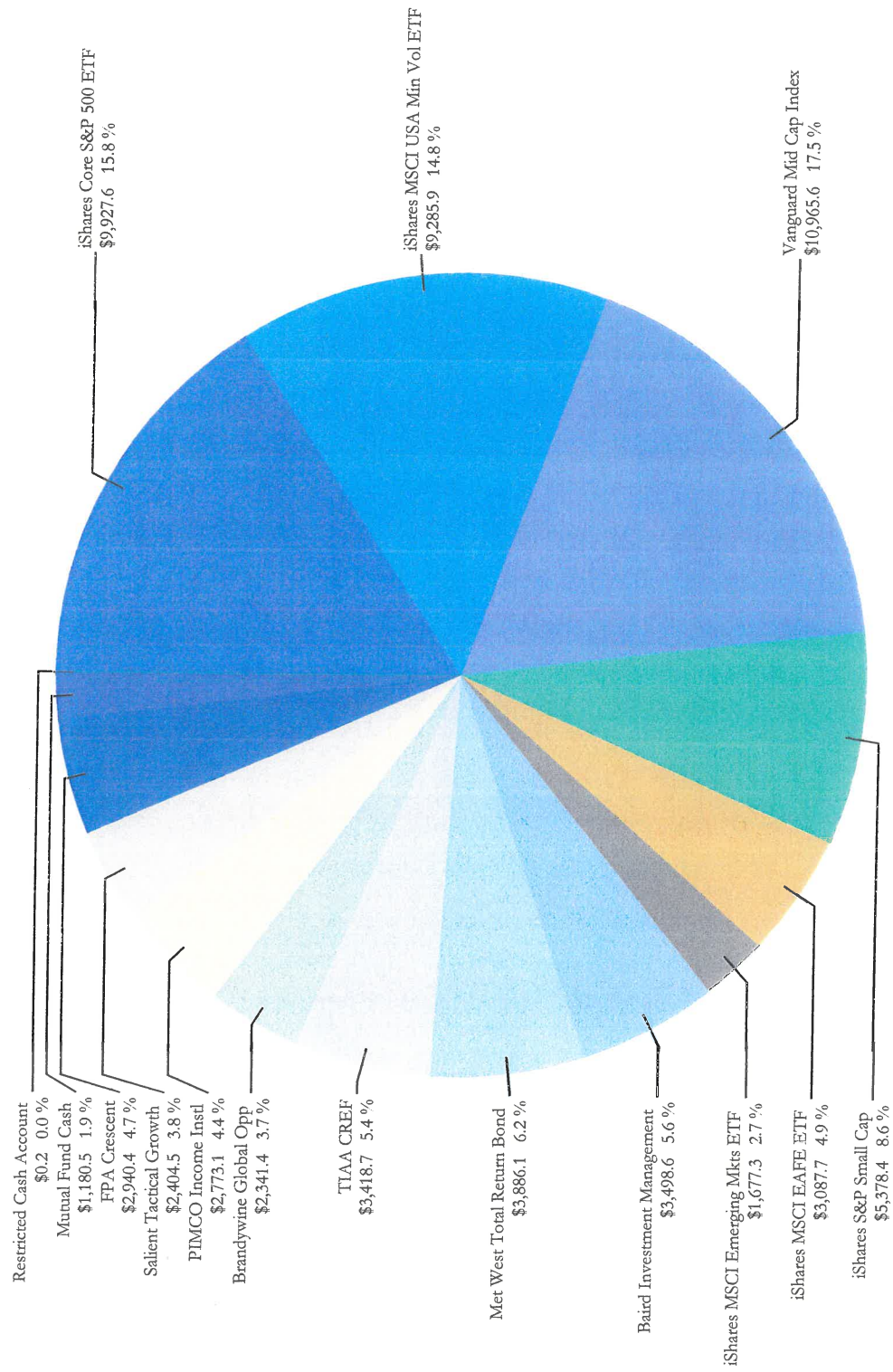


## Allocation Over Time



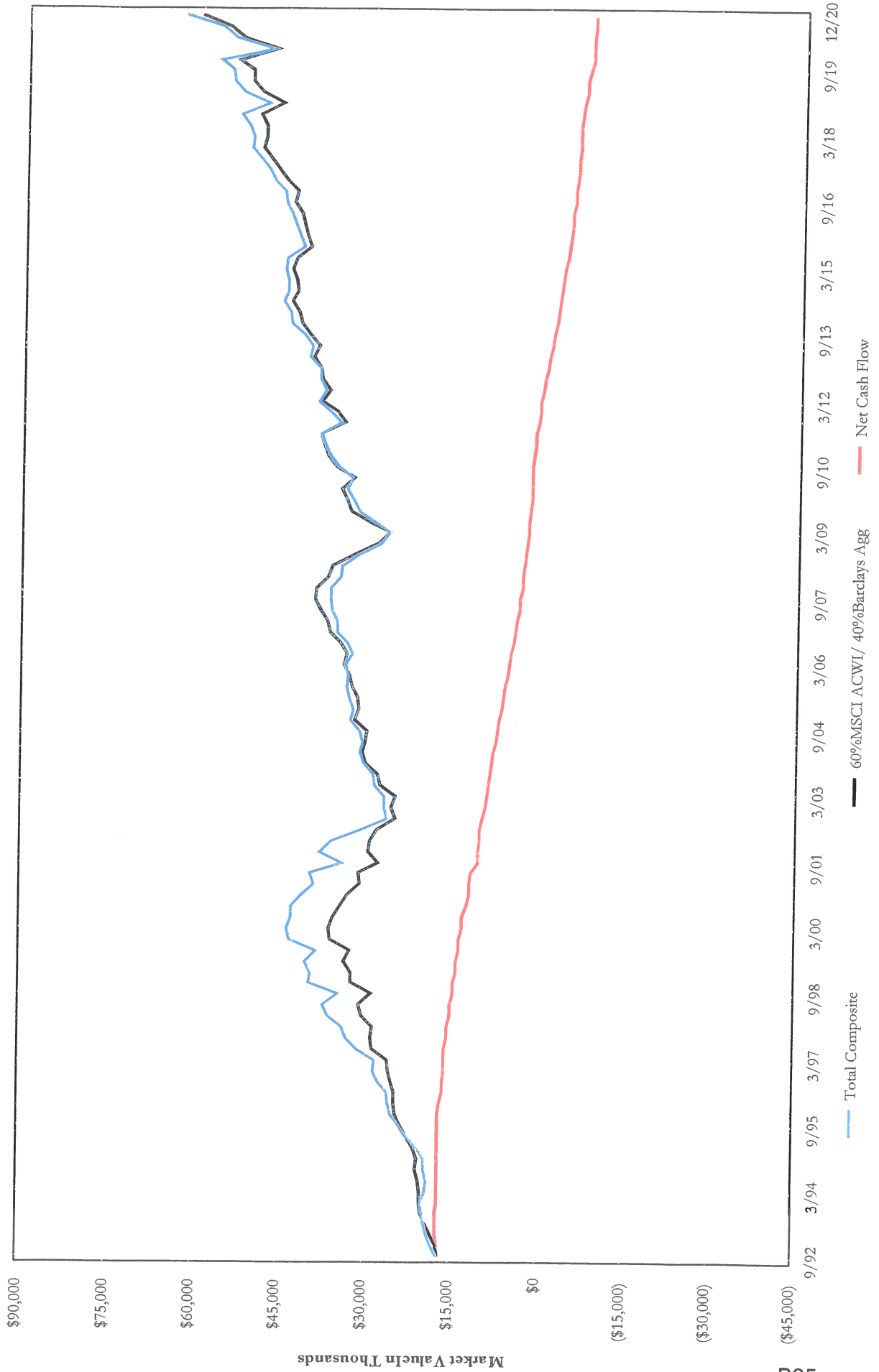


## Allocation By Manager (\$000)





Sources of Portfolio Growth



## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Sep-1992       | -                                    | -                           | -                                  | 17,015                            | N/A     | 100.00     |
| Dec-1992       | 17,015                               | -                           | 804                                | 17,819                            | 4.73    | 104.73     |
| Mar-1993       | 17,819                               | 22                          | 731                                | 18,572                            | 4.10    | 109.02     |
| Jun-1993       | 18,572                               | -                           | 431                                | 19,003                            | 2.32    | 111.55     |
| Sep-1993       | 19,003                               | -                           | 483                                | 19,486                            | 2.54    | 114.39     |
| Dec-1993       | 19,486                               | -100                        | 386                                | 19,772                            | 1.98    | 116.65     |
| Mar-1994       | 19,772                               | -18                         | -610                               | 19,144                            | -3.09   | 113.05     |
| Jun-1994       | 19,144                               | -                           | -174                               | 18,969                            | -0.91   | 112.02     |
| Sep-1994       | 18,969                               | -                           | 308                                | 19,277                            | 1.62    | 113.83     |
| Dec-1994       | 19,277                               | -                           | 83                                 | 19,360                            | 0.43    | 114.32     |
| Mar-1995       | 19,360                               | -                           | 1,132                              | 20,493                            | 5.85    | 121.01     |
| Jun-1995       | 20,493                               | -                           | 2,008                              | 22,501                            | 9.80    | 132.87     |
| Sep-1995       | 22,501                               | -                           | 1,148                              | 23,649                            | 5.10    | 139.65     |
| Dec-1995       | 23,649                               | -100                        | 1,660                              | 25,209                            | 7.03    | 149.46     |
| Mar-1996       | 25,209                               | -100                        | 437                                | 25,546                            | 1.74    | 152.06     |
| Jun-1996       | 25,546                               | -500                        | 742                                | 25,788                            | 2.95    | 156.55     |
| Sep-1996       | 25,788                               | -                           | 1,494                              | 27,282                            | 5.79    | 165.61     |
| Dec-1996       | 27,282                               | -300                        | 1,400                              | 28,383                            | 5.14    | 174.13     |
| Mar-1997       | 28,383                               | -                           | -232                               | 28,151                            | -0.82   | 172.70     |
| Jun-1997       | 28,151                               | -                           | 3,116                              | 31,267                            | 11.07   | 191.82     |
| Sep-1997       | 31,267                               | -500                        | 2,515                              | 33,282                            | 8.15    | 207.45     |
| Dec-1997       | 33,282                               | -                           | 685                                | 33,967                            | 2.06    | 211.72     |
| Mar-1998       | 33,967                               | -500                        | 2,987                              | 36,454                            | 8.90    | 230.57     |
| Jun-1998       | 36,454                               | -                           | 755                                | 37,209                            | 2.07    | 235.34     |
| Sep-1998       | 37,209                               | -500                        | -2,130                             | 34,579                            | -5.79   | 221.71     |
| Dec-1998       | 34,579                               | -                           | 5,095                              | 39,674                            | 14.74   | 254.39     |
| Mar-1999       | 39,674                               | -502                        | 424                                | 39,596                            | 1.08    | 257.14     |
| Jun-1999       | 39,596                               | -                           | 928                                | 40,524                            | 2.34    | 263.16     |
| Sep-1999       | 40,524                               | -500                        | -1,484                             | 38,540                            | -3.70   | 253.42     |
| Dec-1999       | 38,540                               | -                           | 4,710                              | 43,250                            | 12.22   | 284.39     |
| Mar-2000       | 43,250                               | -500                        | 832                                | 43,582                            | 1.94    | 289.91     |
| Jun-2000       | 43,582                               | -                           | -572                               | 43,010                            | -1.31   | 286.11     |
| Sep-2000       | 43,010                               | -500                        | 301                                | 42,811                            | 0.71    | 288.14     |

## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Dec-2000       | 42,811                               | -480                        | -1,169                             | 41,161                            | -2.75   | 280.22     |
| Mar-2001       | 41,161                               | -                           | -2,269                             | 38,892                            | -5.51   | 264.78     |
| Jun-2001       | 38,892                               | -440                        | 1,366                              | 39,817                            | 3.53    | 274.12     |
| Sep-2001       | 39,817                               | -1,062                      | -4,578                             | 34,178                            | -11.64  | 242.21     |
| Dec-2001       | 34,178                               | -5                          | 3,831                              | 38,004                            | 11.21   | 269.37     |
| Mar-2002       | 38,004                               | -397                        | -1,414                             | 36,193                            | -3.73   | 259.32     |
| Jun-2002       | 36,193                               | -                           | -5,215                             | 30,978                            | -14.41  | 221.95     |
| Sep-2002       | 30,978                               | -500                        | -4,103                             | 26,375                            | -13.43  | 192.14     |
| Dec-2002       | 26,375                               | -500                        | 1,076                              | 26,951                            | 4.09    | 200.00     |
| Mar-2003       | 26,951                               | -32                         | -145                               | 26,774                            | -0.54   | 198.92     |
| Jun-2003       | 26,774                               | -244                        | 2,109                              | 28,639                            | 7.91    | 214.66     |
| Sep-2003       | 28,639                               | -305                        | 516                                | 28,850                            | 1.81    | 218.54     |
| Dec-2003       | 28,850                               | -306                        | 2,083                              | 30,626                            | 7.26    | 234.41     |
| Mar-2004       | 30,626                               | -301                        | 891                                | 31,216                            | 2.92    | 241.25     |
| Jun-2004       | 31,216                               | -401                        | -132                               | 30,683                            | -0.41   | 240.25     |
| Sep-2004       | 30,683                               | -301                        | 788                                | 31,170                            | 2.60    | 246.49     |
| Dec-2004       | 31,170                               | -301                        | 2,007                              | 32,875                            | 6.48    | 262.47     |
| Mar-2005       | 32,875                               | -336                        | -176                               | 32,363                            | -0.55   | 261.02     |
| Jun-2005       | 32,363                               | -317                        | 1,024                              | 33,070                            | 3.10    | 269.11     |
| Sep-2005       | 33,070                               | -317                        | 927                                | 33,680                            | 2.81    | 276.68     |
| Dec-2005       | 33,680                               | -317                        | 80                                 | 33,443                            | 0.25    | 277.37     |
| Mar-2006       | 33,443                               | -317                        | 719                                | 33,844                            | 2.16    | 283.36     |
| Jun-2006       | 33,844                               | -317                        | -773                               | 32,754                            | -2.30   | 276.84     |
| Sep-2006       | 32,754                               | -317                        | 1,327                              | 33,764                            | 4.08    | 288.14     |
| Dec-2006       | 33,764                               | -317                        | 1,813                              | 35,260                            | 5.40    | 303.69     |
| Mar-2007       | 35,260                               | -317                        | 335                                | 35,278                            | 0.96    | 306.59     |
| Jun-2007       | 35,278                               | -317                        | 1,323                              | 36,284                            | 3.76    | 318.12     |
| Sep-2007       | 36,284                               | -200                        | 533                                | 36,616                            | 1.48    | 322.83     |
| Dec-2007       | 36,616                               | -272                        | 257                                | 36,602                            | 0.70    | 325.10     |
| Mar-2008       | 36,602                               | -197                        | -1,454                             | 34,952                            | -3.98   | 312.16     |
| Jun-2008       | 34,952                               | -197                        | -153                               | 34,602                            | -0.45   | 310.76     |
| Sep-2008       | 34,602                               | -197                        | -2,658                             | 31,747                            | -7.72   | 286.77     |
| Dec-2008       | 31,747                               | -197                        | -3,659                             | 27,891                            | -11.54  | 253.67     |

## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Mar-2009       | 27,891                               | -197                        | -1,300                             | 26,395                            | -4.66   | 241.85     |
| Jun-2009       | 26,395                               | -196                        | 2,627                              | 28,826                            | 9.99    | 266.01     |
| Sep-2009       | 28,826                               | -196                        | 3,086                              | 31,716                            | 10.75   | 294.60     |
| Dec-2009       | 31,716                               | -131                        | 1,090                              | 32,675                            | 3.45    | 304.77     |
| Mar-2010       | 32,675                               | -                           | 1,222                              | 33,897                            | 3.74    | 316.17     |
| Jun-2010       | 33,897                               | -                           | -1,059                             | 32,838                            | -3.12   | 306.29     |
| Sep-2010       | 32,838                               | -                           | 2,485                              | 35,323                            | 7.57    | 329.47     |
| Dec-2010       | 35,323                               | -250                        | 1,697                              | 36,771                            | 4.82    | 345.35     |
| Mar-2011       | 36,771                               | -349                        | 1,372                              | 37,794                            | 3.76    | 358.32     |
| Jun-2011       | 37,794                               | -                           | 696                                | 38,489                            | 1.84    | 364.91     |
| Sep-2011       | 38,489                               | -500                        | -2,753                             | 35,236                            | -7.20   | 338.63     |
| Dec-2011       | 35,236                               | -250                        | 2,111                              | 37,098                            | 5.99    | 358.92     |
| Mar-2012       | 37,098                               | -                           | 1,904                              | 39,001                            | 5.13    | 377.34     |
| Jun-2012       | 39,001                               | -400                        | -907                               | 37,694                            | -2.34   | 368.49     |
| Sep-2012       | 37,694                               | -280                        | 1,411                              | 38,826                            | 3.75    | 382.31     |
| Dec-2012       | 38,826                               | -402                        | 438                                | 38,862                            | 1.14    | 386.67     |
| Mar-2013       | 38,862                               | -308                        | 2,234                              | 40,788                            | 5.77    | 408.97     |
| Jun-2013       | 40,788                               | -450                        | -70                                | 40,268                            | -0.18   | 408.24     |
| Sep-2013       | 40,268                               | -355                        | 1,747                              | 41,661                            | 4.37    | 426.06     |
| Dec-2013       | 41,661                               | -290                        | 2,440                              | 43,810                            | 5.88    | 451.13     |
| Mar-2014       | 43,810                               | -235                        | 483                                | 44,058                            | 1.11    | 456.15     |
| Jun-2014       | 44,058                               | -250                        | 1,577                              | 45,386                            | 3.34    | 471.38     |
| Sep-2014       | 45,386                               | -350                        | -546                               | 44,490                            | -1.22   | 465.62     |
| Dec-2014       | 44,490                               | -275                        | 370                                | 44,586                            | 0.83    | 469.51     |
| Mar-2015       | 44,586                               | -244                        | 708                                | 45,049                            | 1.59    | 476.97     |
| Jun-2015       | 45,049                               | -360                        | 112                                | 44,801                            | 0.24    | 478.09     |
| Sep-2015       | 44,801                               | -313                        | -2,684                             | 41,804                            | -6.02   | 449.33     |
| Dec-2015       | 41,804                               | -250                        | 1,109                              | 42,663                            | 2.65    | 461.23     |
| Mar-2016       | 42,663                               | -154                        | 934                                | 43,443                            | 2.20    | 471.38     |
| Jun-2016       | 43,443                               | -180                        | 814                                | 44,077                            | 1.88    | 480.24     |
| Sep-2016       | 44,077                               | -295                        | 1,189                              | 44,972                            | 2.70    | 493.20     |
| Dec-2016       | 44,972                               | -132                        | 513                                | 45,353                            | 1.15    | 498.86     |
| Mar-2017       | 45,353                               | -232                        | 1,870                              | 46,991                            | 4.13    | 519.46     |



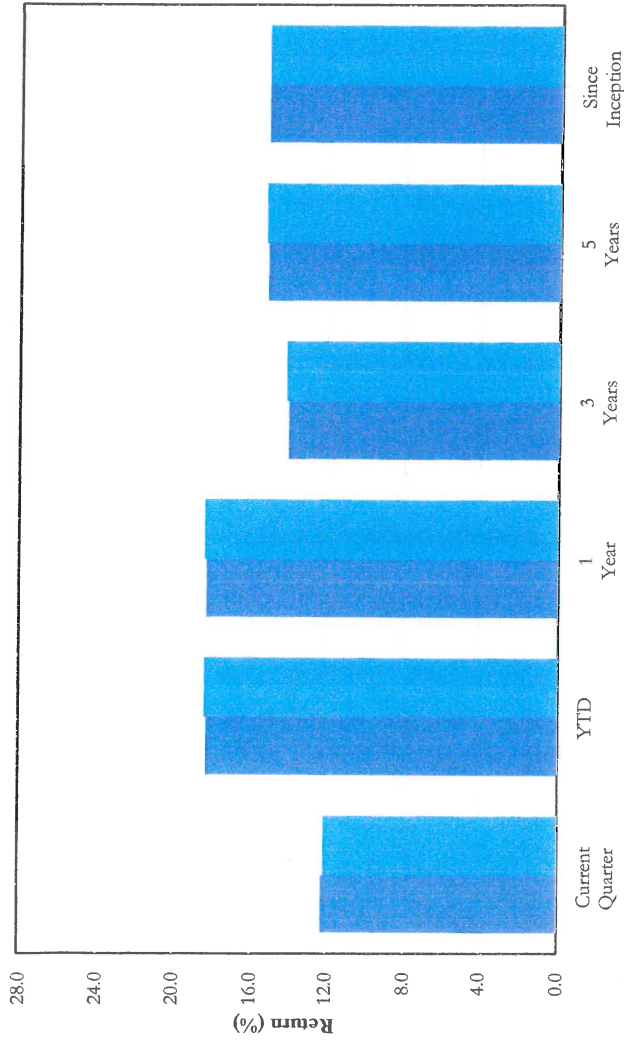
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return       | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------------|---------------|
| Jun-2017       | 46,991                               | -160                        | 1,266                              | 48,096                            | 2.70          | 533.46        |
| Sep-2017       | 48,096                               | -50                         | 1,509                              | 49,555                            | 3.13          | 550.17        |
| Dec-2017       | 49,555                               | -174                        | 1,807                              | 51,188                            | 3.65          | 570.27        |
| Mar-2018       | 51,188                               | -64                         | -142                               | 50,982                            | -0.28         | 568.69        |
| Jun-2018       | 50,982                               | 1                           | 629                                | 51,611                            | 1.23          | 575.71        |
| Sep-2018       | 51,611                               | -375                        | 1,890                              | 53,127                            | 3.67          | 596.85        |
| Dec-2018       | 53,127                               | -250                        | -4,688                             | 48,188                            | -8.85         | 544.04        |
| Mar-2019       | 48,188                               | -285                        | 4,639                              | 52,543                            | 9.63          | 596.46        |
| Jun-2019       | 52,543                               | -                           | 1,853                              | 54,395                            | 3.53          | 617.49        |
| Sep-2019       | 54,395                               | -460                        | 613                                | 54,548                            | 1.13          | 624.49        |
| Dec-2019       | 54,548                               | -494                        | 2,776                              | 56,830                            | 5.13          | 656.52        |
| Mar-2020       | 56,830                               | -                           | -9,332                             | 47,498                            | -16.42        | 548.71        |
| Jun-2020       | 47,498                               | -50                         | 6,600                              | 54,048                            | 13.91         | 625.02        |
| Sep-2020       | 54,048                               | -235                        | 2,732                              | 56,545                            | 5.05          | 656.59        |
| Dec-2020       | 56,545                               | -150                        | 6,371                              | 62,766                            | 11.27         | 730.59        |
|                | <b>17,015</b>                        | <b>-25,195</b>              | <b>70,946</b>                      | <b>62,766</b>                     | <b>630.59</b> | <b>730.59</b> |

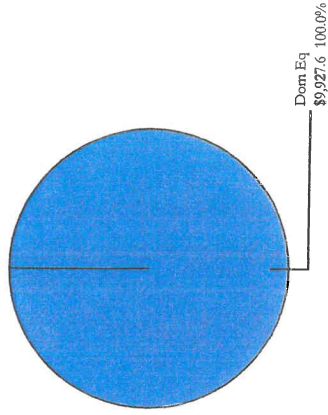
# Galveston Employees Retirement - iShares Core S&P 500 ETF

as of December 31, 2020

## Portfolio Performance (%)

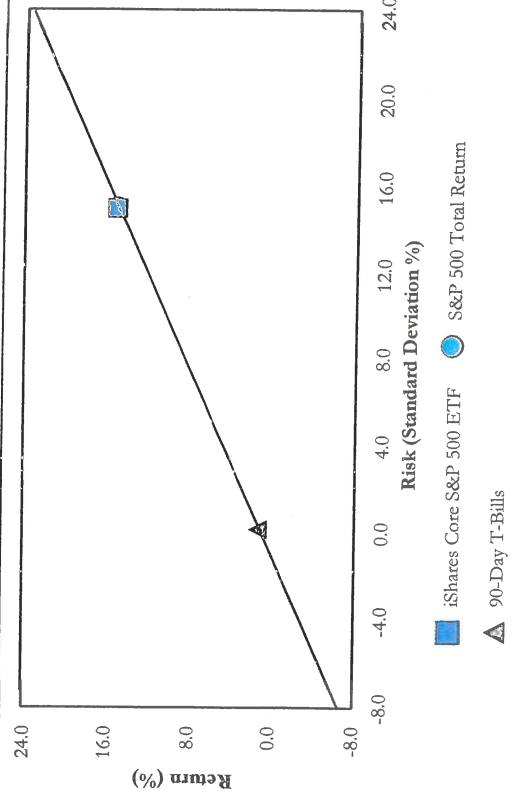


## Asset Allocation (\$000)



## Portfolio Characteristics vs. S&P 500 Total Return Since Inception

|                          | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|--------------------------|------|-------|-----------|--------------|----------------|
| iShares Core S&P 500 ETF | 0.99 | 0.06  | 1.00      | 0.94         | 01/01/2016     |



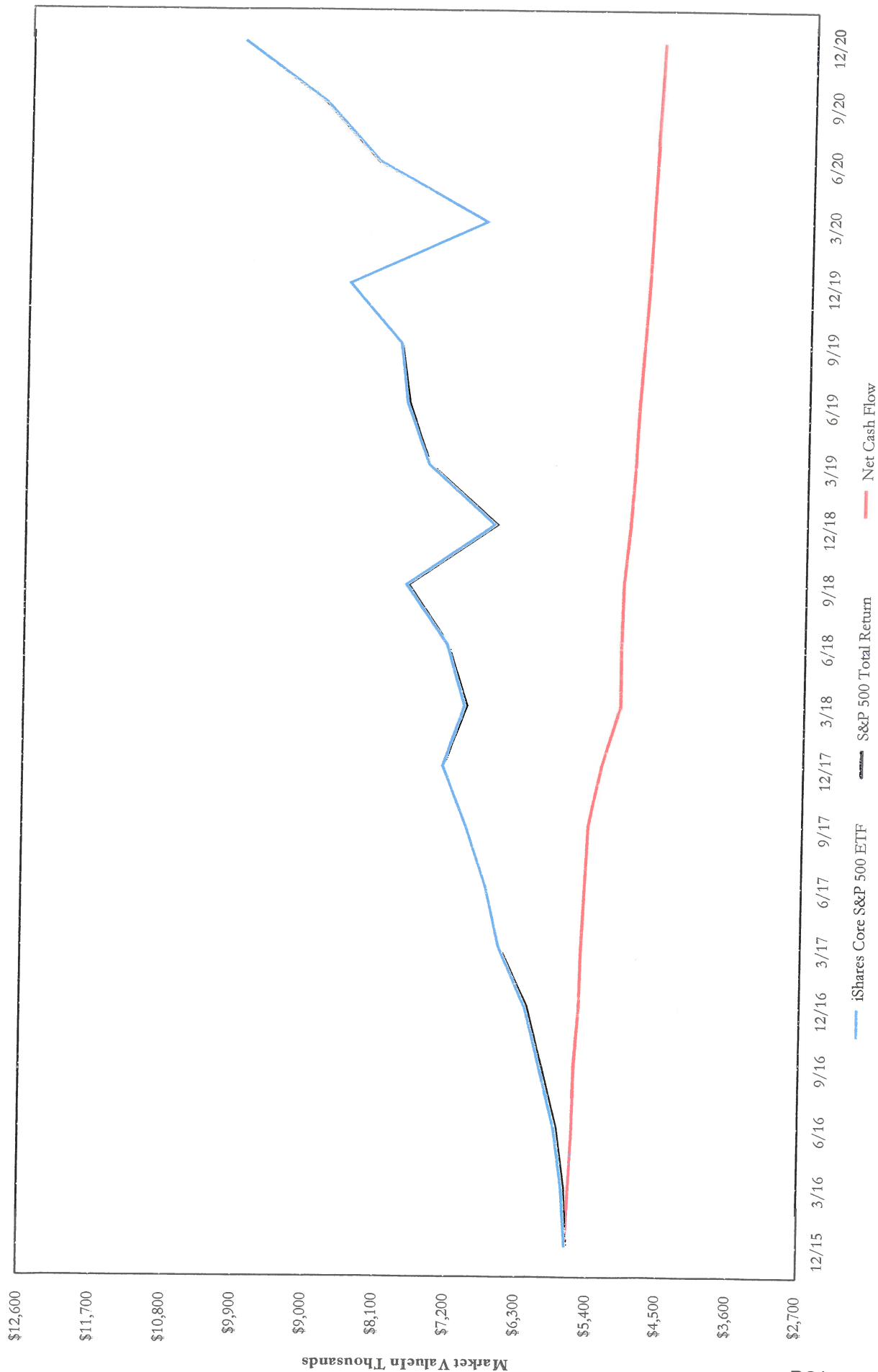
## Asset Growth (\$000)

|                          | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | Since Inception | Inception Date |
|--------------------------|-----------------|-------|--------|---------|---------|-----------------|----------------|
| iShares Core S&P 500 ETF | 8,887           | 8,548 | 8,548  | 7,295   | 5,654   | 5,654           | 01/01/2016     |
| Beginning Market Value   | -43             | -156  | -156   | -664    | -1,049  | -1,049          |                |
| Net Contributions        | 1,083           | 1,535 | 1,535  | 3,297   | 5,322   | 5,322           |                |
| Gain/Loss                | 9,928           | 9,928 | 9,928  | 9,928   | 9,928   | 9,928           |                |
| Ending Market Value      |                 |       |        |         |         |                 |                |

P30

Actual inception 12/7/2015

Sources of Portfolio Growth

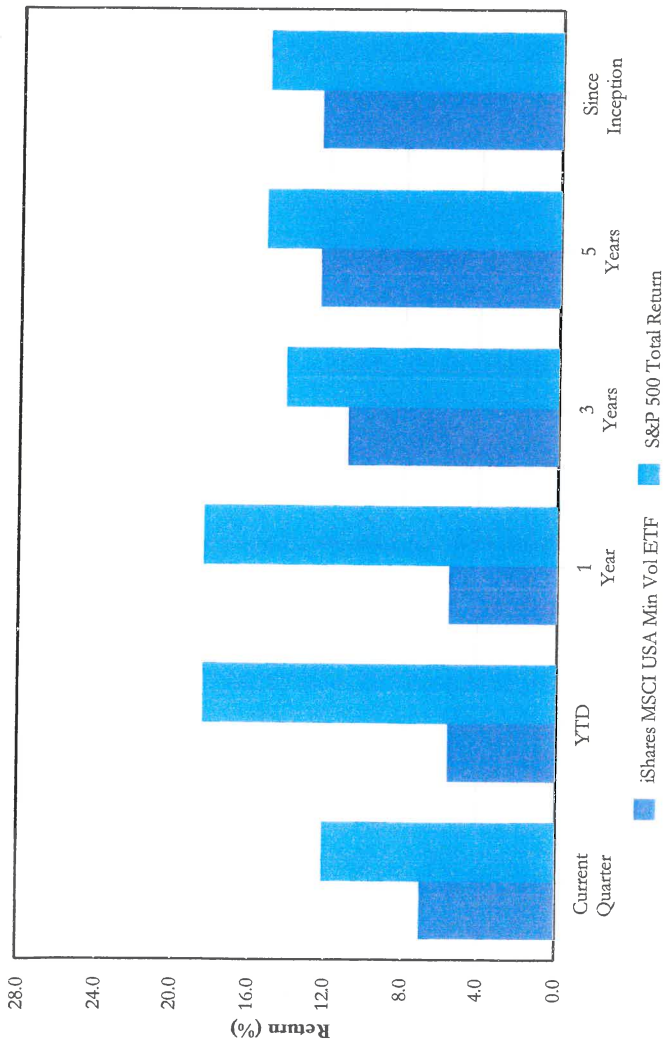


## Sources of Portfolio Growth

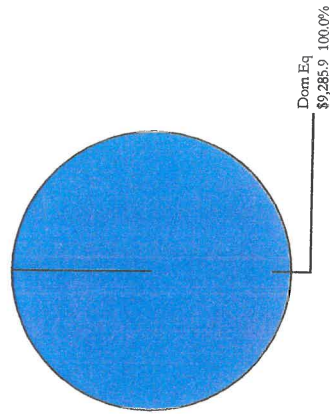
| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return       | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------------|---------------|
| Dec-2015       | -                                    | -                           | -                                  | 5,654                             | N/A           | 100.00        |
| Mar-2016       | 5,654                                | -36                         | 85                                 | 5,704                             | 1.51          | 101.51        |
| Jun-2016       | 5,704                                | -28                         | 134                                | 5,810                             | 2.35          | 103.89        |
| Sep-2016       | 5,810                                | -30                         | 225                                | 6,005                             | 3.88          | 107.92        |
| Dec-2016       | 6,005                                | -36                         | 241                                | 6,210                             | 4.02          | 112.26        |
| Mar-2017       | 6,210                                | -28                         | 367                                | 6,549                             | 5.92          | 118.90        |
| Jun-2017       | 6,549                                | -31                         | 200                                | 6,718                             | 3.06          | 122.54        |
| Sep-2017       | 6,718                                | -35                         | 298                                | 6,981                             | 4.44          | 127.98        |
| Dec-2017       | 6,981                                | -160                        | 474                                | 7,295                             | 6.80          | 136.68        |
| Mar-2018       | 7,295                                | -224                        | -54                                | 7,018                             | -0.83         | 135.55        |
| Jun-2018       | 7,018                                | -                           | 237                                | 7,255                             | 3.38          | 140.13        |
| Sep-2018       | 7,255                                | -34                         | 554                                | 7,775                             | 7.67          | 150.88        |
| Dec-2018       | 7,775                                | -72                         | -1,041                             | 6,663                             | -13.46        | 130.58        |
| Mar-2019       | 6,663                                | -38                         | 901                                | 7,525                             | 13.55         | 148.27        |
| Jun-2019       | 7,525                                | -47                         | 316                                | 7,795                             | 4.22          | 154.52        |
| Sep-2019       | 7,795                                | -39                         | 139                                | 7,895                             | 1.78          | 157.27        |
| Dec-2019       | 7,895                                | -54                         | 708                                | 8,548                             | 8.97          | 171.38        |
| Mar-2020       | 8,548                                | -40                         | -1,674                             | 6,834                             | -19.59        | 137.82        |
| Jun-2020       | 6,834                                | -33                         | 1,390                              | 8,190                             | 20.34         | 165.85        |
| Sep-2020       | 8,190                                | -40                         | 737                                | 8,887                             | 8.99          | 180.76        |
| Dec-2020       | 8,887                                | -43                         | 1,083                              | 9,928                             | 12.19         | 202.80        |
|                | <b>5,654</b>                         | <b>-1,049</b>               | <b>5,322</b>                       | <b>9,928</b>                      | <b>102.80</b> | <b>202.80</b> |



## Portfolio Performance (%)

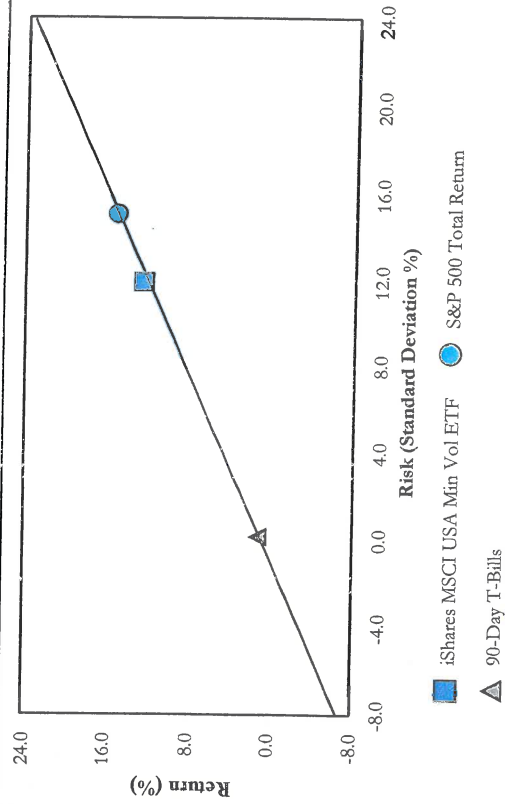


## Asset Allocation (\$000)



## Portfolio Characteristics vs. S&amp;P 500 Total Return Since Inception

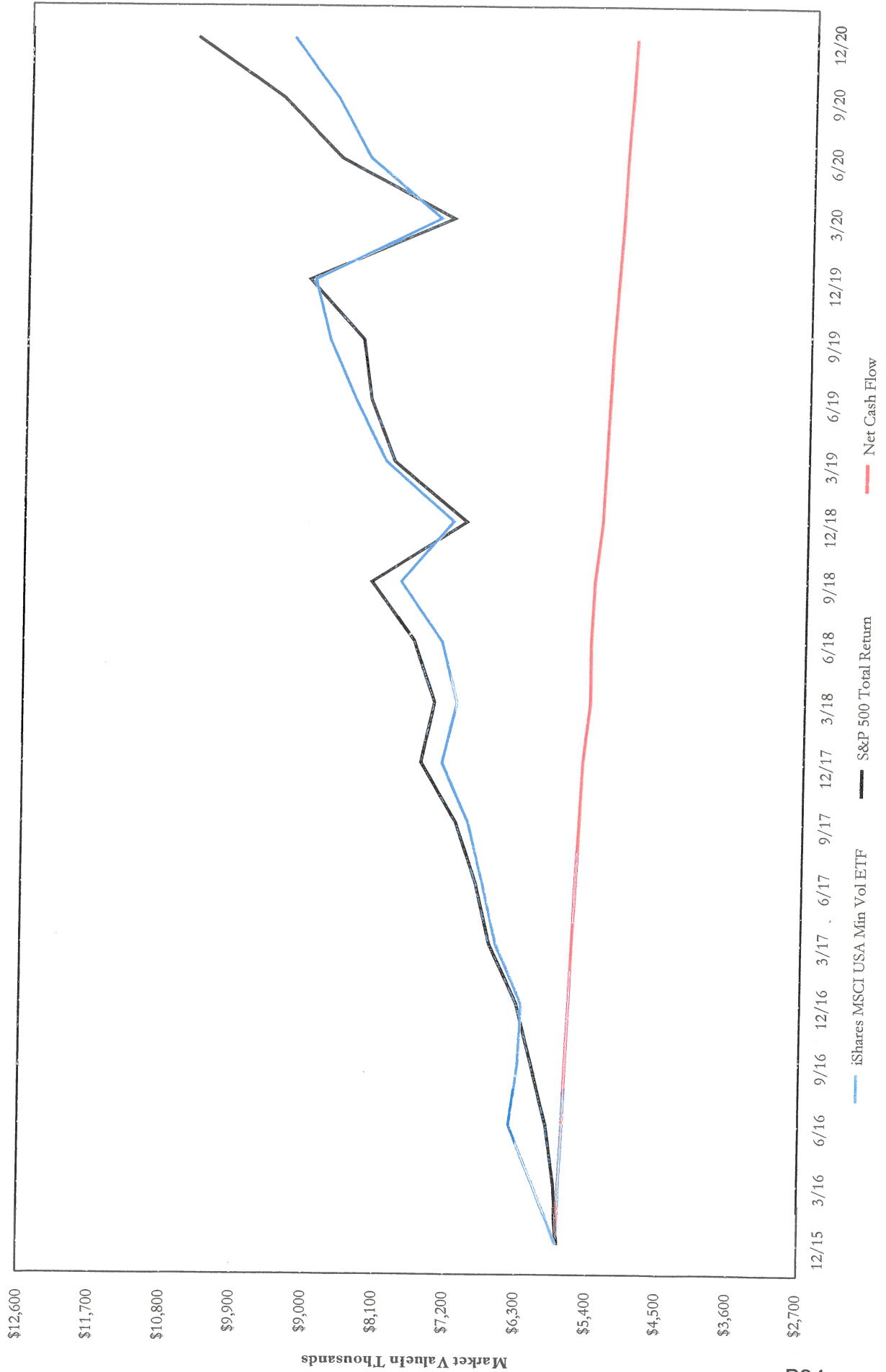
|                              | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|------------------------------|------|-------|-----------|--------------|----------------|
| iShares MSCI USA Min Vol ETF | 0.72 | 1.40  | 0.83      | 0.95         | 01/01/2016     |



## Asset Growth (\$000)

|                              | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | Since Inception | Inception Date |
|------------------------------|-----------------|-------|--------|---------|---------|-----------------|----------------|
| iShares MSCI USA Min Vol ETF | 8,718           | 8,974 | 8,974  | 7,284   | 5,771   | 5,771           | 01/01/2016     |
| Beginning Market Value       | -41             | -168  | -168   | -554    | -821    | -821            |                |
| Net Contributions            | 609             | 480   | 480    | 2,556   | 4,336   | 4,336           |                |
| Gain/Loss                    | 9,286           | 9,286 | 9,286  | 9,286   | 9,286   | 9,286           |                |
| Ending Market Value          |                 |       |        |         |         |                 |                |

Sources of Portfolio Growth



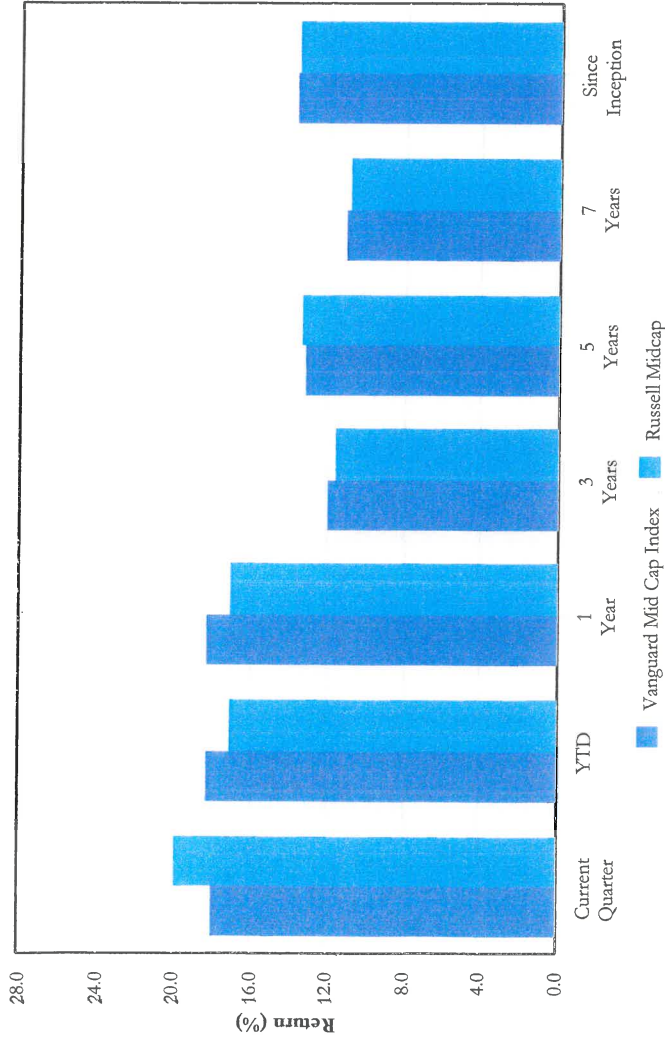
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Dec-2015       | -                                    | -                           | -                                  | 5,771                             | N/A          | 100.00        |
| Mar-2016       | 5,771                                | -29                         | 320                                | 6,062                             | 5.55         | 105.55        |
| Jun-2016       | 6,062                                | -33                         | 348                                | 6,377                             | 5.73         | 111.60        |
| Sep-2016       | 6,377                                | -34                         | -74                                | 6,269                             | -1.16        | 110.30        |
| Dec-2016       | 6,269                                | -43                         | 14                                 | 6,240                             | 0.23         | 110.56        |
| Mar-2017       | 6,240                                | -29                         | 374                                | 6,585                             | 5.99         | 117.18        |
| Jun-2017       | 6,585                                | -36                         | 203                                | 6,752                             | 3.08         | 120.79        |
| Sep-2017       | 6,752                                | -30                         | 225                                | 6,947                             | 3.33         | 124.81        |
| Dec-2017       | 6,947                                | -34                         | 371                                | 7,284                             | 5.34         | 131.47        |
| Mar-2018       | 7,284                                | -97                         | -83                                | 7,104                             | -1.17        | 129.93        |
| Jun-2018       | 7,104                                | -                           | 208                                | 7,312                             | 2.93         | 133.74        |
| Sep-2018       | 7,312                                | -40                         | 565                                | 7,838                             | 7.77         | 144.14        |
| Dec-2018       | 7,838                                | -76                         | -589                               | 7,173                             | -7.56        | 133.23        |
| Mar-2019       | 7,173                                | -37                         | 908                                | 8,044                             | 12.66        | 150.11        |
| Jun-2019       | 8,044                                | -45                         | 445                                | 8,445                             | 5.55         | 158.43        |
| Sep-2019       | 8,445                                | -39                         | 363                                | 8,769                             | 4.30         | 165.25        |
| Dec-2019       | 8,769                                | -52                         | 258                                | 8,974                             | 2.94         | 170.11        |
| Mar-2020       | 8,974                                | -43                         | -1,543                             | 7,389                             | -17.19       | 140.87        |
| Jun-2020       | 7,389                                | -41                         | 947                                | 8,294                             | 12.81        | 158.92        |
| Sep-2020       | 8,294                                | -43                         | 467                                | 8,718                             | 5.63         | 167.86        |
| Dec-2020       | 8,718                                | -41                         | 609                                | 9,286                             | 6.99         | 179.60        |
|                | <b>5,771</b>                         | <b>-821</b>                 | <b>4,336</b>                       | <b>9,286</b>                      | <b>79.60</b> | <b>179.60</b> |

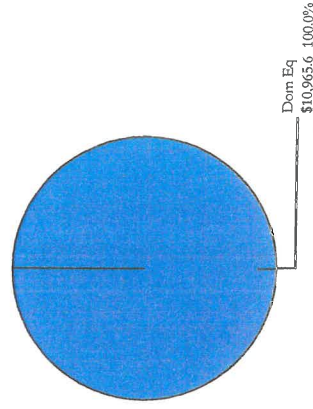
# Galveston Employees Retirement - Vanguard Mid Cap Index

as of December 31, 2020

## Portfolio Performance (%)

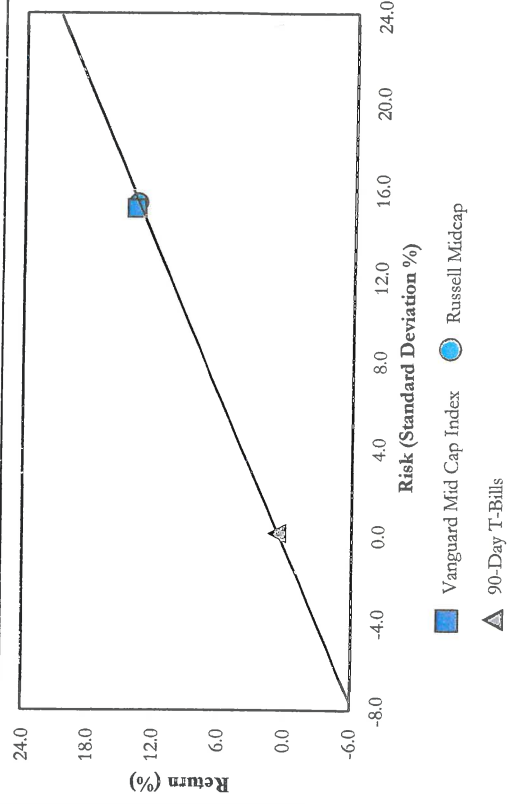


## Asset Allocation (\$000)



## Portfolio Characteristics vs. Russell Midcap Since Inception

|                        | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|------------------------|------|-------|-----------|--------------|----------------|
| Vanguard Mid Cap Index | 0.98 | 0.33  | 0.99      | 0.88         | 10/01/2012     |



## Asset Growth (\$000)

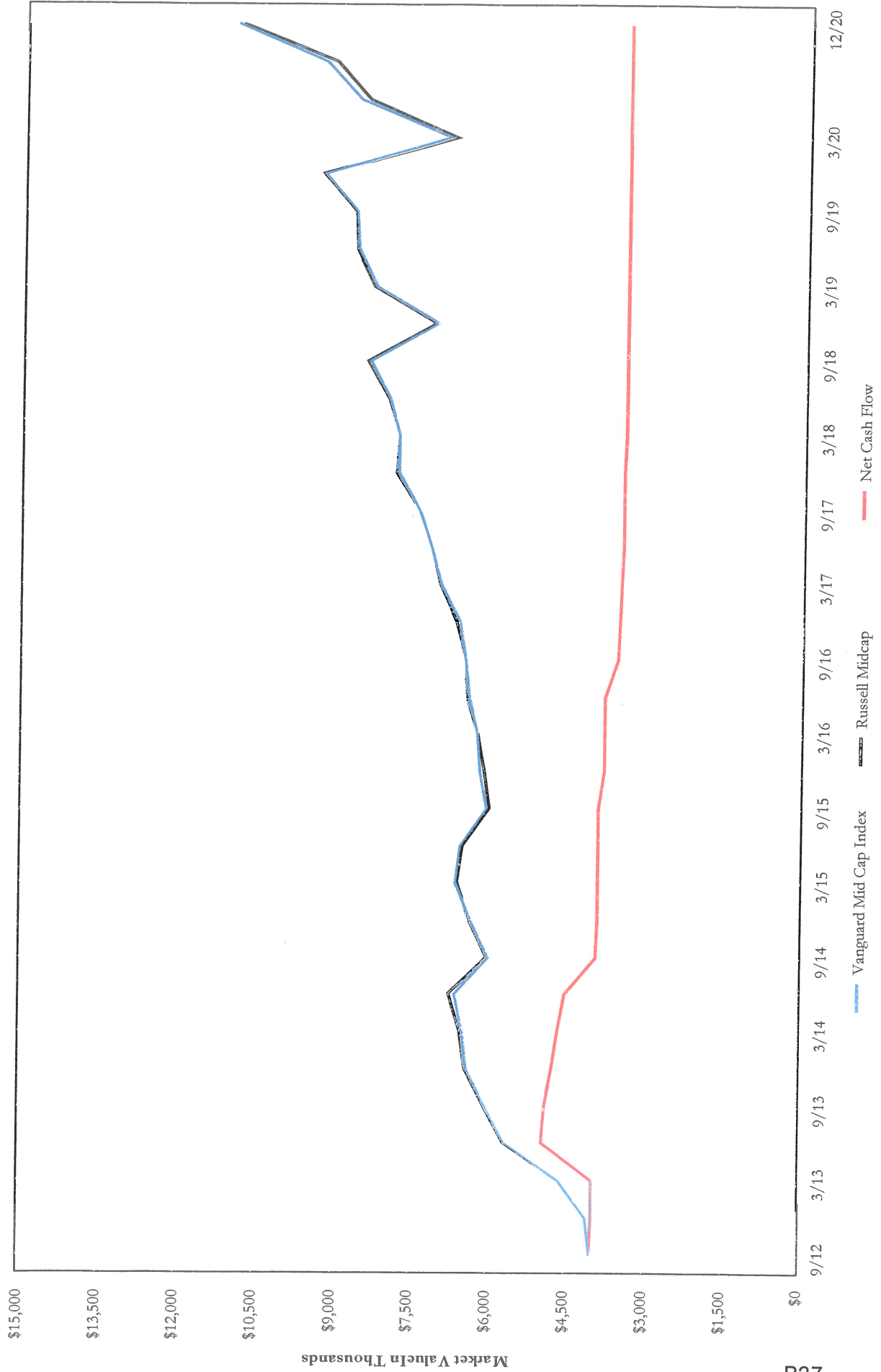
|                        | Current Quarter | YTD    | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date |
|------------------------|-----------------|--------|--------|---------|---------|---------|-----------------|----------------|
| Vanguard Mid Cap Index | 9,291           | 9,272  | 9,272  | 7,807   | 6,190   | 6,416   | 4,003           | 10/01/2012     |
| Beginning Market Value | -               | -      | -      | -       | -       | -       | -               |                |
| Net Contributions      | 1,674           | 1,693  | 1,693  | 3,170   | 5,124   | 5,861   | 7,527           |                |
| Gain/Loss              | 10,966          | 10,966 | 10,966 | 10,966  | 10,966  | 10,966  | 10,966          |                |
| Ending Market Value    | 10,966          | 10,966 | 10,966 | 10,966  | 10,966  | 10,966  | 10,966          |                |

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Actual inception 8/31/2012



Sources of Portfolio Growth



## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Sep-2012       | -                                    | -                           | -                                  | 4,003                             | N/A     | 100.00     |
| Dec-2012       | 4,003                                | -35                         | 113                                | 4,081                             | 2.85    | 102.85     |
| Mar-2013       | 4,081                                | -                           | 526                                | 4,607                             | 12.90   | 116.12     |
| Jun-2013       | 4,607                                | 973                         | 81                                 | 5,661                             | 1.95    | 118.39     |
| Sep-2013       | 5,661                                | -65                         | 432                                | 6,029                             | 7.68    | 127.48     |
| Dec-2013       | 6,029                                | -125                        | 512                                | 6,416                             | 8.63    | 138.48     |
| Mar-2014       | 6,416                                | -115                        | 204                                | 6,505                             | 3.27    | 143.00     |
| Jun-2014       | 6,505                                | -125                        | 288                                | 6,668                             | 4.51    | 149.45     |
| Sep-2014       | 6,668                                | -600                        | -69                                | 5,999                             | -1.15   | 147.74     |
| Dec-2014       | 5,999                                | -25                         | 396                                | 6,370                             | 6.63    | 157.53     |
| Mar-2015       | 6,370                                | -                           | 273                                | 6,643                             | 4.28    | 164.28     |
| Jun-2015       | 6,643                                | -                           | -77                                | 6,566                             | -1.16   | 162.37     |
| Sep-2015       | 6,566                                | -                           | -489                               | 6,077                             | -7.45   | 150.27     |
| Dec-2015       | 6,077                                | -98                         | 211                                | 6,190                             | 3.44    | 155.45     |
| Mar-2016       | 6,190                                | -                           | 73                                 | 6,263                             | 1.19    | 157.29     |
| Jun-2016       | 6,263                                | -                           | 145                                | 6,409                             | 2.32    | 160.94     |
| Sep-2016       | 6,409                                | -258                        | 332                                | 6,483                             | 5.19    | 169.29     |
| Dec-2016       | 6,483                                | -23                         | 137                                | 6,598                             | 2.13    | 172.89     |
| Mar-2017       | 6,598                                | -27                         | 408                                | 6,978                             | 6.19    | 183.59     |
| Jun-2017       | 6,978                                | -17                         | 194                                | 7,156                             | 2.79    | 188.71     |
| Sep-2017       | 7,156                                | -                           | 246                                | 7,402                             | 3.44    | 195.20     |
| Dec-2017       | 7,402                                | -14                         | 419                                | 7,807                             | 5.66    | 206.25     |
| Mar-2018       | 7,807                                | -11                         | -                                  | 7,796                             | 0.00    | 206.25     |
| Jun-2018       | 7,796                                | -                           | 200                                | 7,996                             | 2.57    | 211.54     |
| Sep-2018       | 7,996                                | -                           | 374                                | 8,370                             | 4.68    | 221.44     |
| Dec-2018       | 8,370                                | -                           | -1,294                             | 7,076                             | -15.47  | 187.19     |
| Mar-2019       | 7,076                                | -                           | 1,188                              | 8,263                             | 16.78   | 218.61     |
| Jun-2019       | 8,263                                | -                           | 361                                | 8,624                             | 4.36    | 228.15     |
| Sep-2019       | 8,624                                | -                           | 52                                 | 8,676                             | 0.60    | 229.53     |
| Dec-2019       | 8,676                                | -                           | 596                                | 9,272                             | 6.87    | 245.30     |
| Mar-2020       | 9,272                                | -                           | -2,384                             | 6,889                             | -25.71  | 182.24     |
| Jun-2020       | 6,889                                | -                           | 1,720                              | 8,608                             | 24.96   | 227.74     |
| Sep-2020       | 8,608                                | -                           | 683                                | 9,291                             | 7.93    | 245.81     |

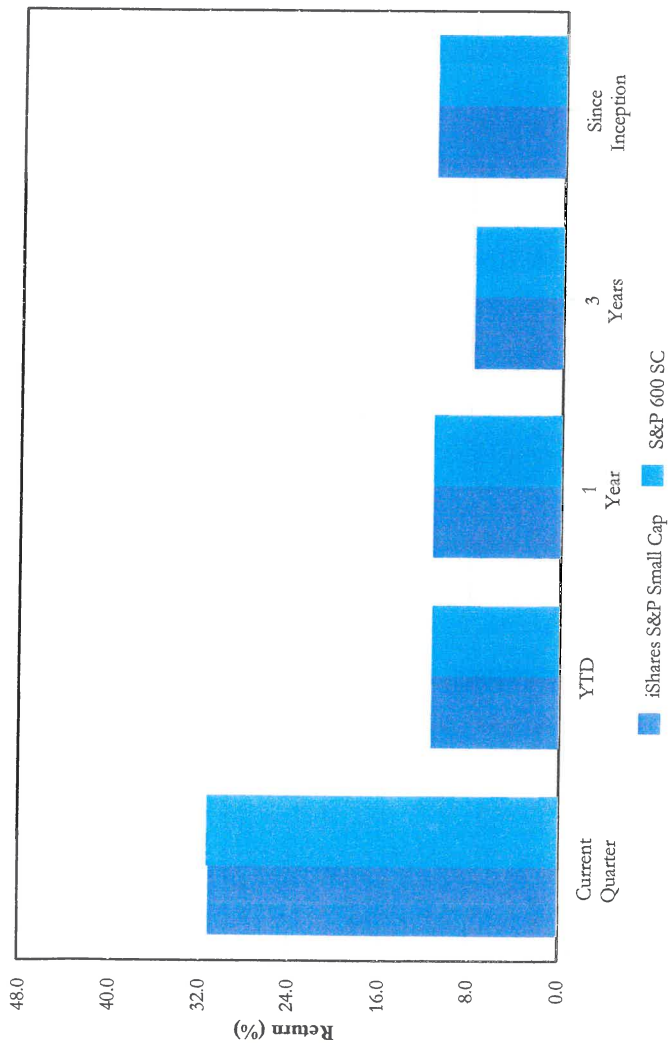
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return       | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------------|---------------|
| Dec-2020       | 9,291                                | -                           | 1,674                              | 10,966                            | 18.02         | 290.10        |
|                | <b>4,003</b>                         | <b>-564</b>                 | <b>7,527</b>                       | <b>10,966</b>                     | <b>190.10</b> | <b>290.10</b> |

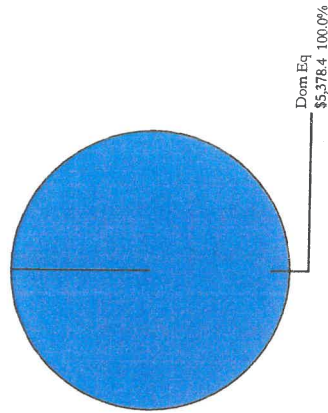
# Galveston Employees Retirement - iShares S&P Small Cap

as of December 31, 2020

## Portfolio Performance (%)

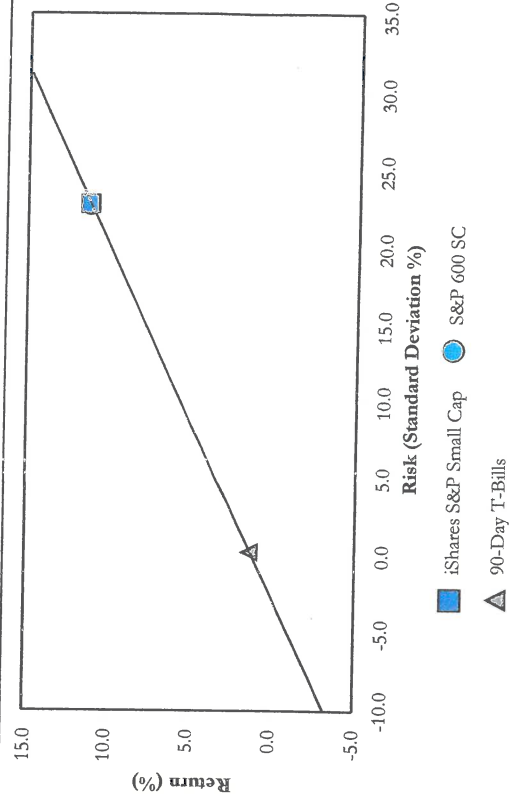


## Asset Allocation (\$000)



## Portfolio Characteristics vs. S&P 600 SC Since Inception

|                       | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|-----------------------|------|-------|-----------|--------------|----------------|
| iShares S&P Small Cap | 1.00 | 0.00  | 1.00      | 0.53         | 10/01/2016     |

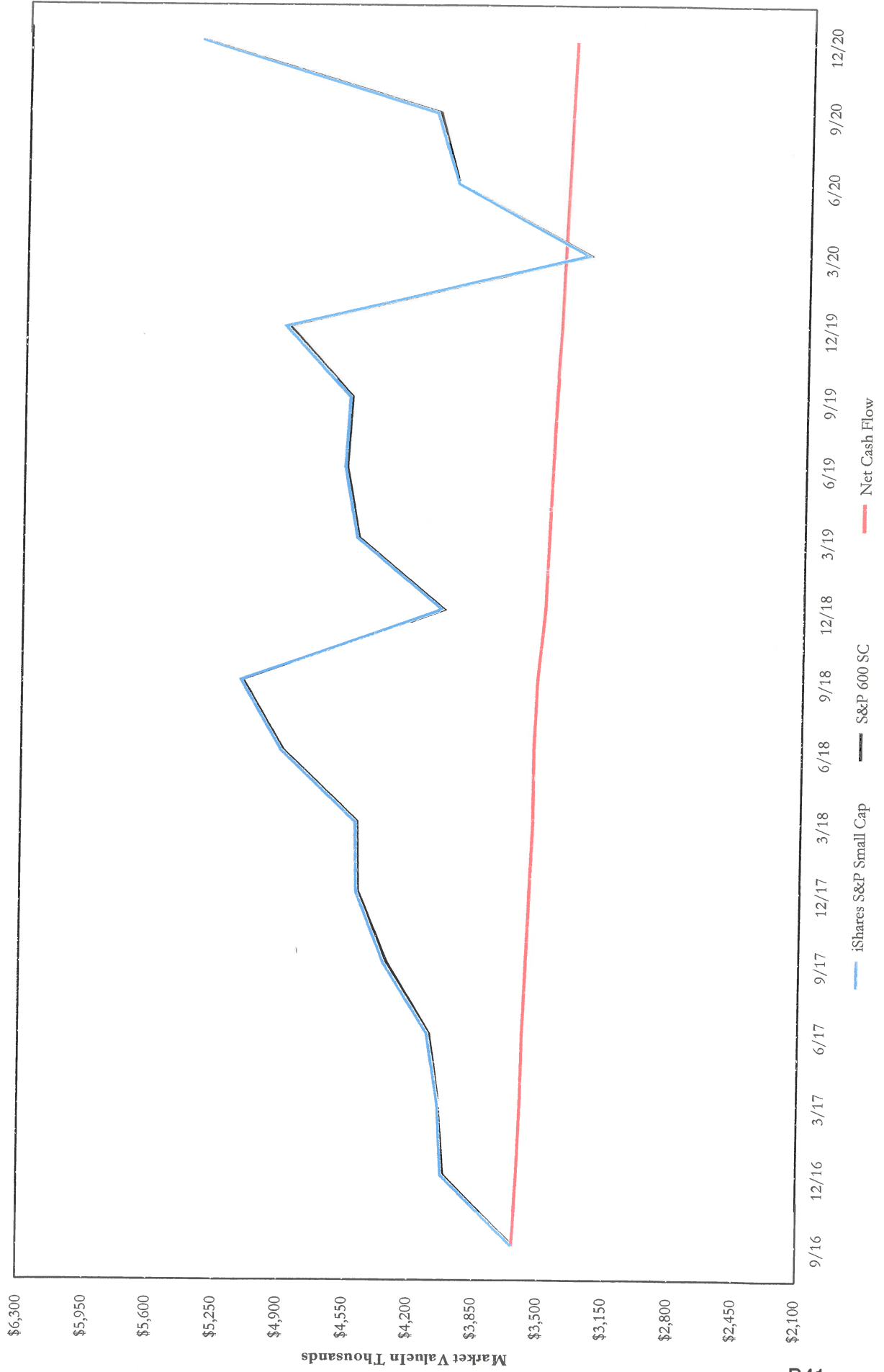


## Asset Growth (\$000)

|                        | Current Quarter | YTD   | 1 Year | 3 Years | Since Inception | Inception Date |
|------------------------|-----------------|-------|--------|---------|-----------------|----------------|
| iShares S&P Small Cap  | 4,110           | 4,907 | 4,907  | 4,495   | 3,633           | 10/01/2016     |
| Beginning Market Value | -14             | -60   | -60    | -195    | -271            |                |
| Net Contributions      | 1,283           | 531   | 531    | 1,078   | 2,017           |                |
| Gain/Loss              | 5,378           | 5,378 | 5,378  | 5,378   | 5,378           |                |
| Ending Market Value    |                 |       |        |         |                 |                |



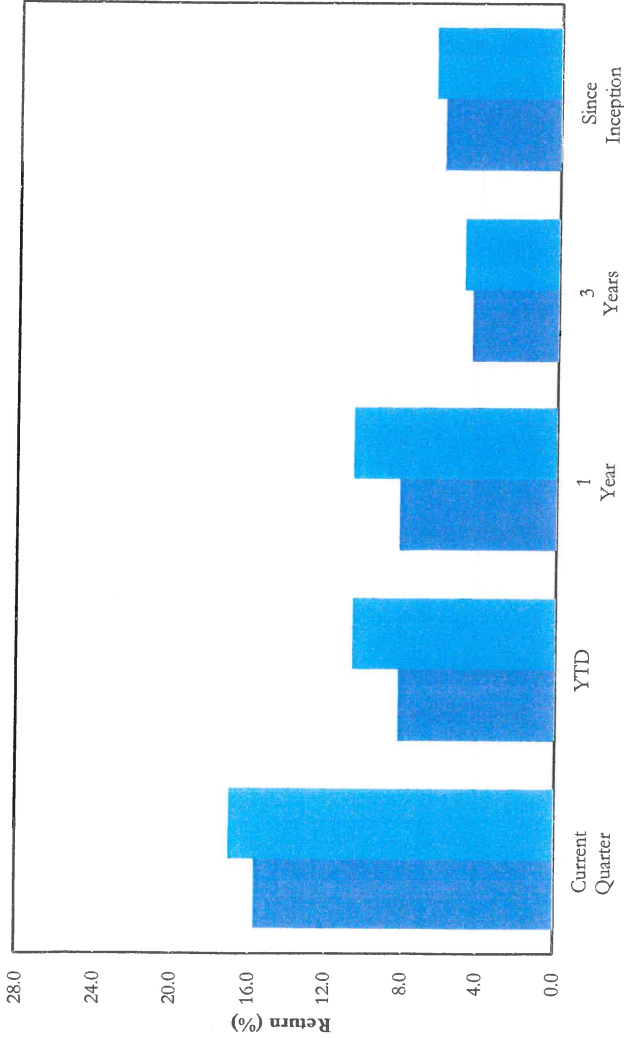
Sources of Portfolio Growth



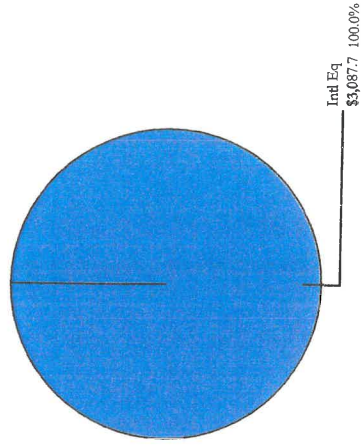
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Sep-2016       | -                                    | -                           | -                                  | 3,633                             | N/A          | 100.00        |
| Dec-2016       | 3,633                                | -23                         | 414                                | 4,024                             | 11.42        | 111.42        |
| Mar-2017       | 4,024                                | -13                         | 37                                 | 4,048                             | 0.91         | 112.43        |
| Jun-2017       | 4,048                                | -12                         | 68                                 | 4,103                             | 1.67         | 114.31        |
| Sep-2017       | 4,103                                | -13                         | 254                                | 4,344                             | 6.19         | 121.38        |
| Dec-2017       | 4,344                                | -16                         | 167                                | 4,495                             | 3.85         | 126.05        |
| Mar-2018       | 4,495                                | -14                         | 26                                 | 4,507                             | 0.57         | 126.77        |
| Jun-2018       | 4,507                                | -                           | 392                                | 4,899                             | 8.70         | 137.79        |
| Sep-2018       | 4,899                                | -14                         | 238                                | 5,122                             | 4.87         | 144.51        |
| Dec-2018       | 5,122                                | -36                         | -1,030                             | 4,057                             | -20.19       | 115.34        |
| Mar-2019       | 4,057                                | -15                         | 473                                | 4,515                             | 11.67        | 128.80        |
| Jun-2019       | 4,515                                | -15                         | 81                                 | 4,581                             | 1.80         | 131.11        |
| Sep-2019       | 4,581                                | -17                         | -9                                 | 4,556                             | -0.20        | 130.85        |
| Dec-2019       | 4,556                                | -24                         | 376                                | 4,907                             | 8.26         | 141.66        |
| Mar-2020       | 4,907                                | -15                         | -1,609                             | 3,284                             | -32.78       | 95.22         |
| Jun-2020       | 3,284                                | -14                         | 727                                | 3,997                             | 22.13        | 116.29        |
| Sep-2020       | 3,997                                | -17                         | 130                                | 4,110                             | 3.25         | 120.08        |
| Dec-2020       | 4,110                                | -14                         | 1,283                              | 5,378                             | 31.22        | 157.57        |
|                | <b>3,633</b>                         | <b>-271</b>                 | <b>2,017</b>                       | <b>5,378</b>                      | <b>57.57</b> | <b>157.57</b> |

## Portfolio Performance (%)

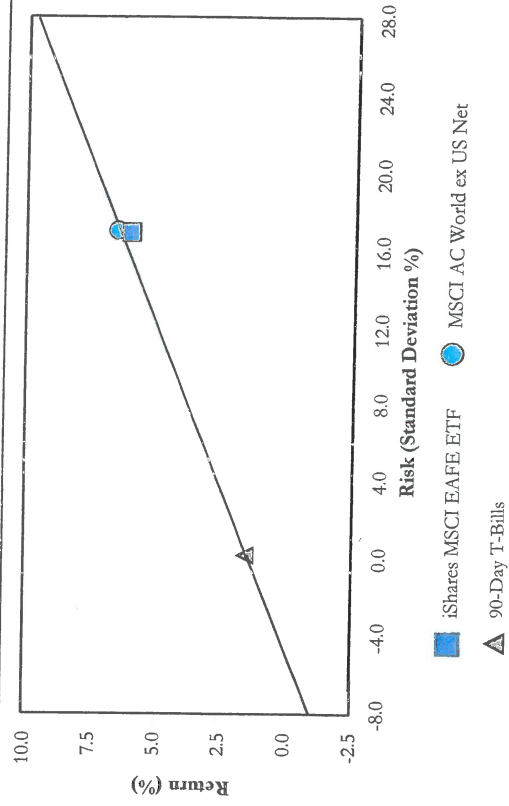


## Asset Allocation (\$000)



## Portfolio Characteristics vs. MSCI AC World ex US Net Since Inception

|                       | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|-----------------------|------|-------|-----------|--------------|----------------|
| iShares MSCI EAFE ETF | 0.98 | -0.31 | 0.97      | 0.34         | 09/01/2017     |



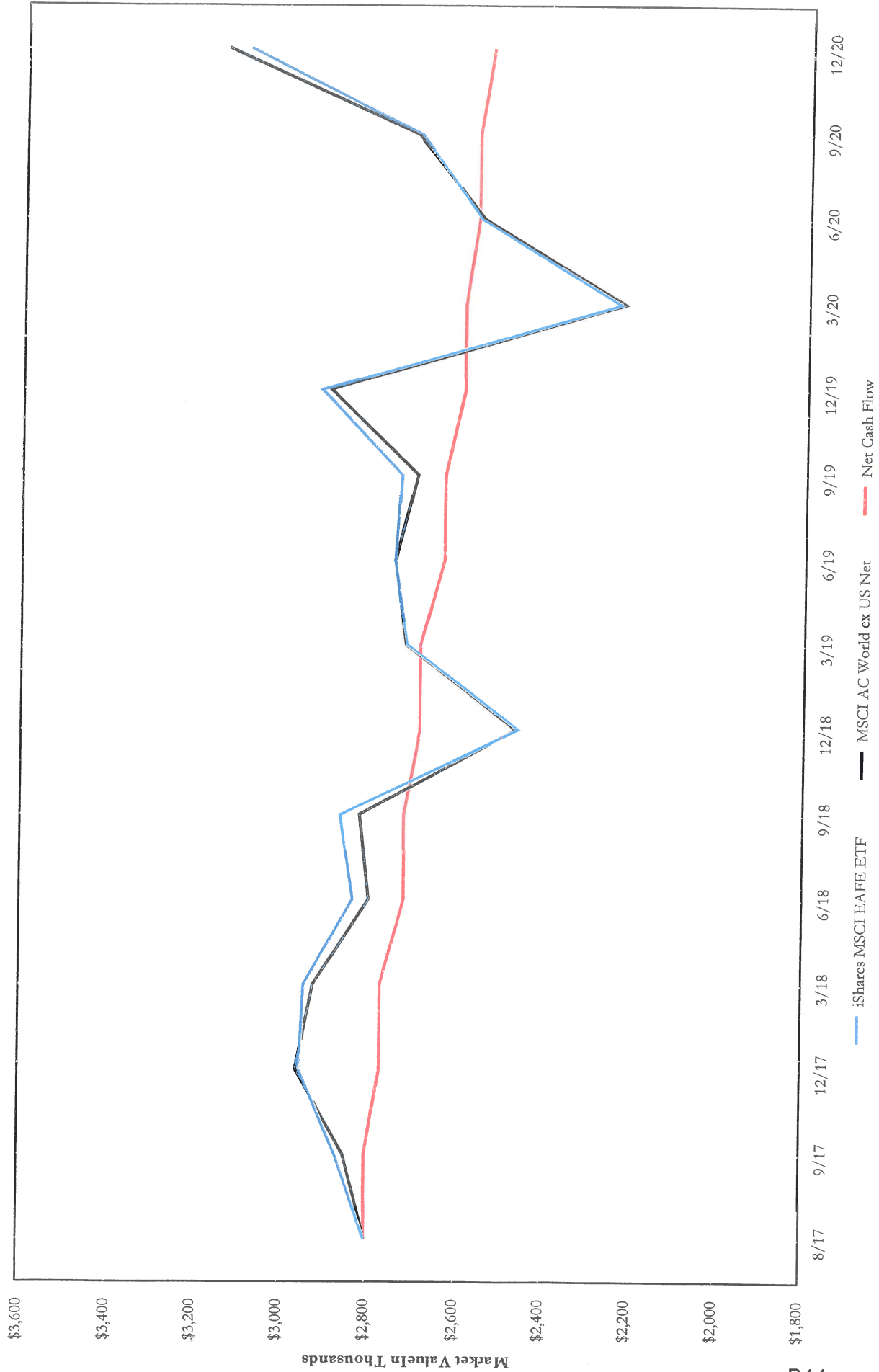
## Asset Growth (\$000)

|                        | Current Quarter | YTD   | 1 Year | 3 Years | Since Inception | Inception Date |
|------------------------|-----------------|-------|--------|---------|-----------------|----------------|
| iShares MSCI EAFE ETF  | 2,694           | 2,916 | 2,916  | 2,954   | 2,801           | 09/01/2017     |
| Beginning Market Value | -27             | -59   | -59    | -237    | -269            |                |
| Net Contributions      | 421             | 231   | 231    | 371     | 556             |                |
| Gain/Loss              | 3,088           | 3,088 | 3,088  | 3,088   | 3,088           |                |
| Ending Market Value    |                 |       |        |         |                 |                |

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Actual inception 8/9/2017

## Sources of Portfolio Growth

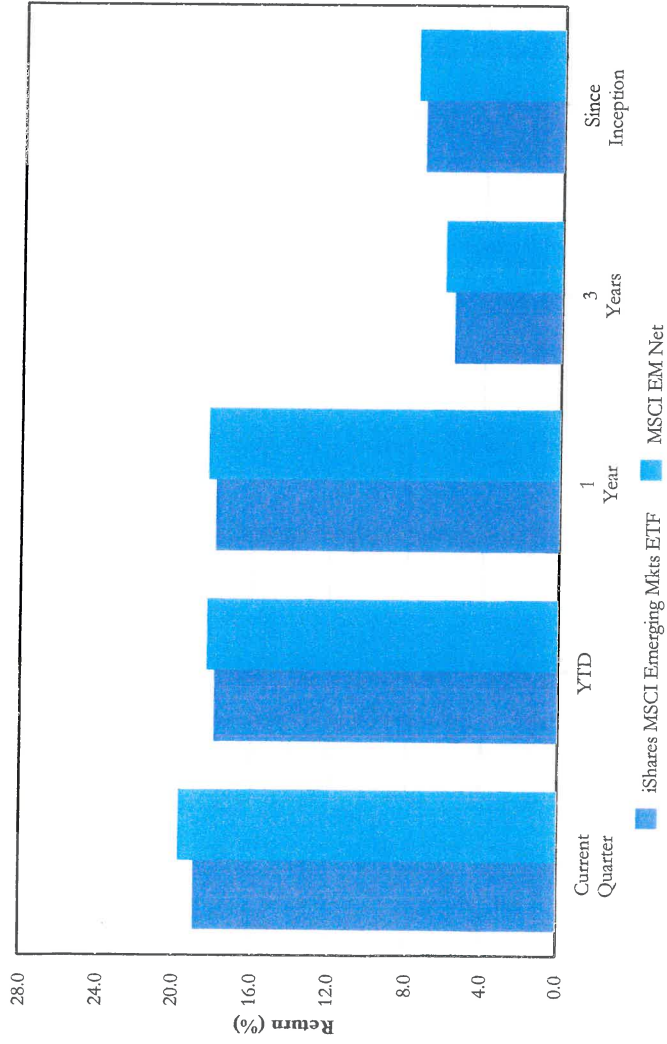




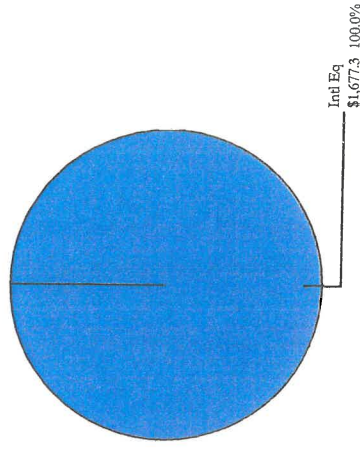
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Aug-2017       | -                                    | -                           | -                                  | 2,801                             | N/A          | 100.00        |
| Sep-2017       | 2,801                                | -                           | 67                                 | 2,868                             | 2.39         | 102.39        |
| Dec-2017       | 2,868                                | -33                         | 118                                | 2,954                             | 4.13         | 106.63        |
| Mar-2018       | 2,954                                | -                           | -9                                 | 2,944                             | -0.32        | 106.29        |
| Jun-2018       | 2,944                                | -51                         | -61                                | 2,832                             | -2.07        | 104.09        |
| Sep-2018       | 2,832                                | -                           | 32                                 | 2,864                             | 1.12         | 105.26        |
| Dec-2018       | 2,864                                | -34                         | -372                               | 2,458                             | -13.01       | 91.56         |
| Mar-2019       | 2,458                                | -                           | 258                                | 2,716                             | 10.49        | 101.17        |
| Jun-2019       | 2,716                                | -53                         | 82                                 | 2,744                             | 3.04         | 104.24        |
| Sep-2019       | 2,744                                | -                           | -15                                | 2,729                             | -0.54        | 103.68        |
| Dec-2019       | 2,729                                | -39                         | 226                                | 2,916                             | 8.29         | 112.28        |
| Mar-2020       | 2,916                                | -                           | -686                               | 2,230                             | -23.53       | 85.86         |
| Jun-2020       | 2,230                                | -31                         | 356                                | 2,555                             | 15.99        | 99.59         |
| Sep-2020       | 2,555                                | -                           | 139                                | 2,694                             | 5.46         | 105.03        |
| Dec-2020       | 2,694                                | -27                         | 421                                | 3,088                             | 15.66        | 121.47        |
|                | <b>2,801</b>                         | <b>-269</b>                 | <b>556</b>                         | <b>3,088</b>                      | <b>21.47</b> | <b>121.47</b> |

## Portfolio Performance (%)

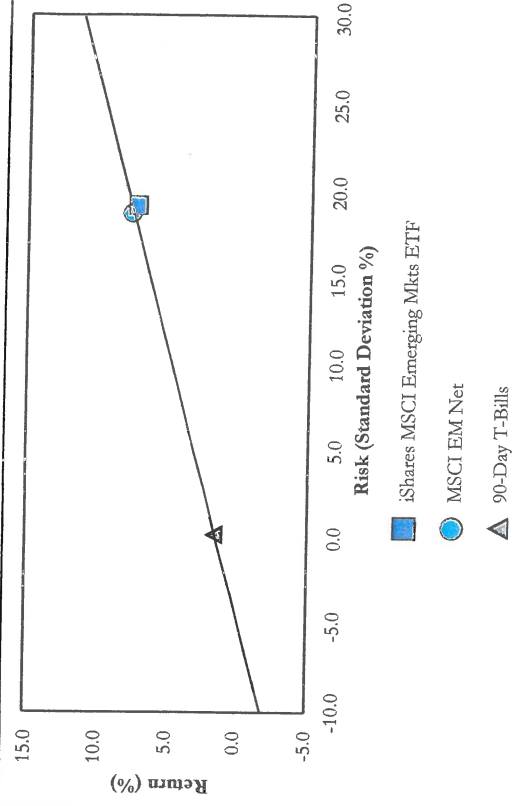


## Asset Allocation (\$000)



## Portfolio Characteristics vs. MSCI EM Net Since Inception

|                                | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|--------------------------------|------|-------|-----------|--------------|----------------|
| iShares MSCI Emerging Mkts ETF | 1.01 | -0.31 | 0.97      | 0.39         | 09/01/2017     |

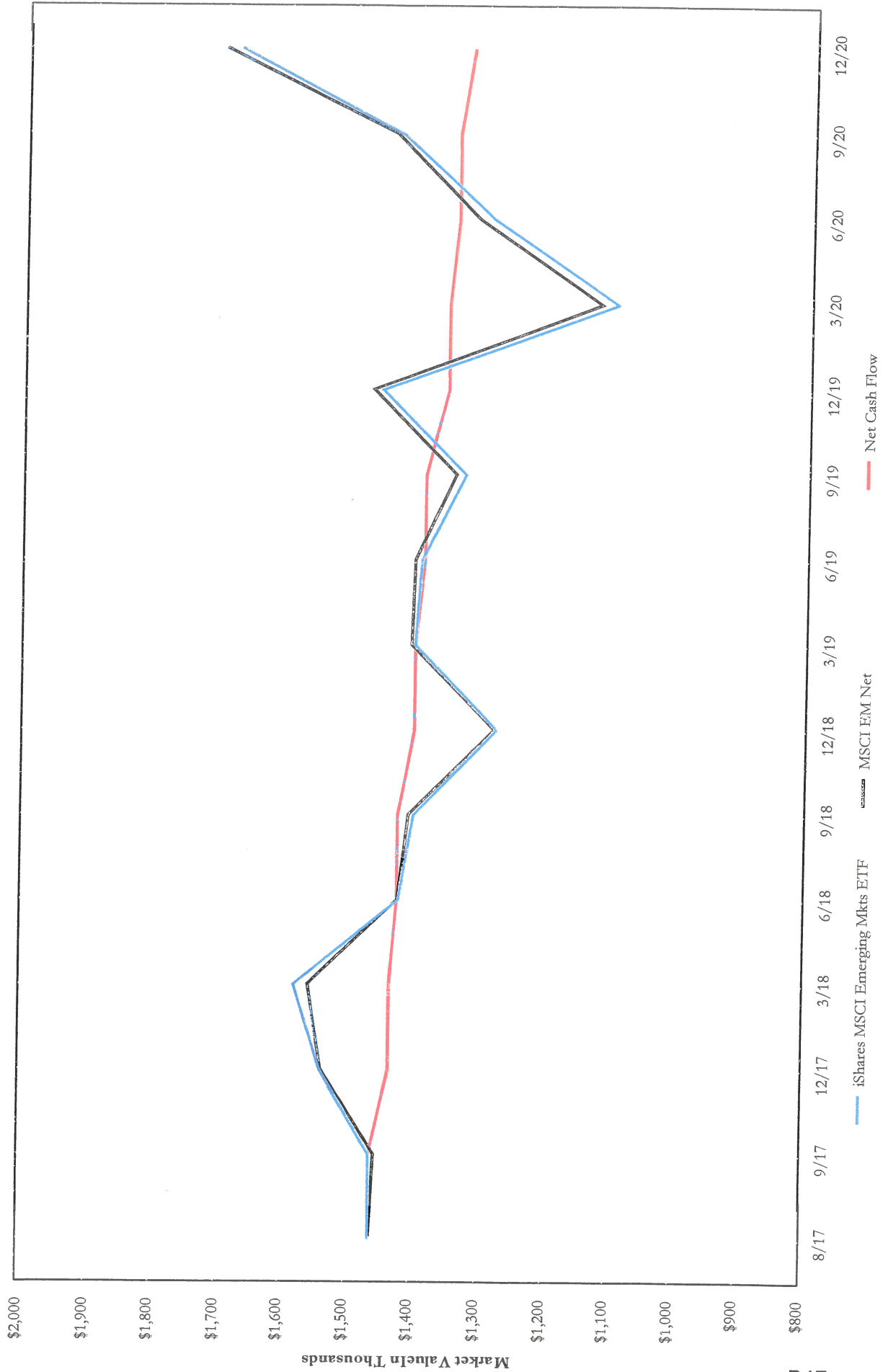


## Asset Growth (\$000)

|                                | Current Quarter | YTD   | 1 Year | 3 Years | Since Inception | Inception Date |
|--------------------------------|-----------------|-------|--------|---------|-----------------|----------------|
| iShares MSCI Emerging Mkts ETF | 1,427           | 1,453 | 1,453  | 1,538   | 1,460           | 09/01/2017     |
| Beginning Market Value         | -20             | -31   | -31    | -112    | -139            |                |
| Net Contributions              | 269             | 255   | 255    | 251     | 356             |                |
| Gain/Loss                      | 1,677           | 1,677 | 1,677  | 1,677   | 1,677           |                |
| Ending Market Value            |                 |       |        |         |                 |                |

Actual inception 8/4/2017

Sources of Portfolio Growth



## Sources of Portfolio Growth

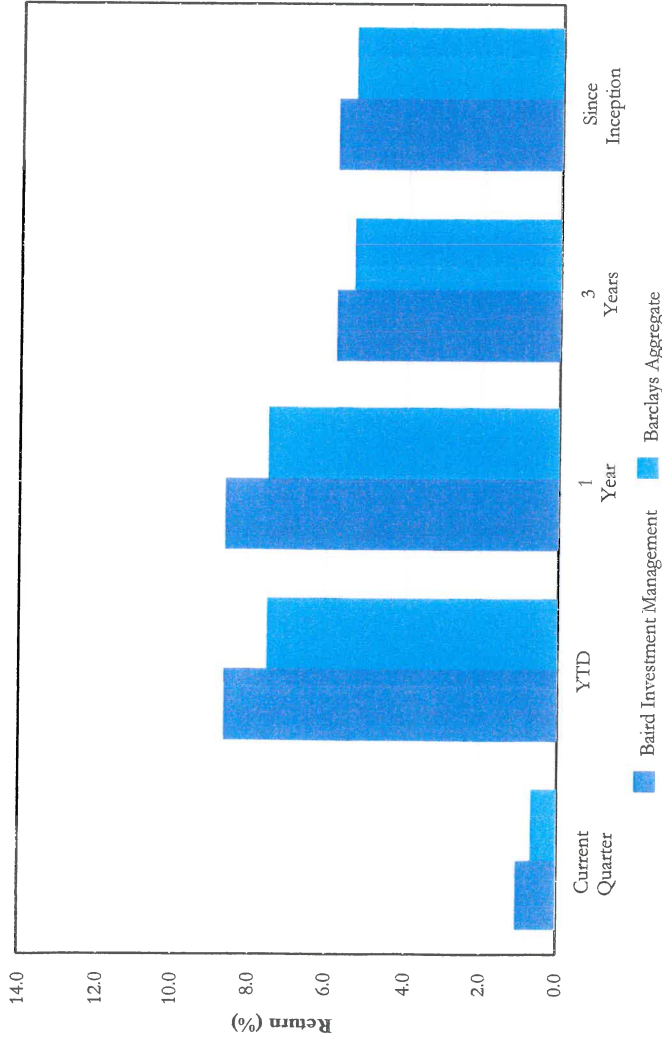
| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Aug-2017       | -                                    | -                           | -                                  | 1,460                             | N/A          | 100.00        |
| Sep-2017       | 1,460                                | -                           | -                                  | 1,460                             | 0.02         | 100.02        |
| Dec-2017       | 1,460                                | -26                         | 104                                | 1,538                             | 7.14         | 107.16        |
| Mar-2018       | 1,538                                | -                           | 41                                 | 1,579                             | 2.64         | 109.99        |
| Jun-2018       | 1,579                                | -12                         | -147                               | 1,420                             | -9.33        | 99.72         |
| Sep-2018       | 1,420                                | -                           | -20                                | 1,400                             | -1.39        | 98.34         |
| Dec-2018       | 1,400                                | -23                         | -102                               | 1,275                             | -7.29        | 91.16         |
| Mar-2019       | 1,275                                | -                           | 123                                | 1,398                             | 9.67         | 99.98         |
| Jun-2019       | 1,398                                | -13                         | 6                                  | 1,391                             | 0.44         | 100.42        |
| Sep-2019       | 1,391                                | -                           | -65                                | 1,325                             | -4.70        | 95.70         |
| Dec-2019       | 1,325                                | -32                         | 161                                | 1,453                             | 12.18        | 107.36        |
| Mar-2020       | 1,453                                | -                           | -359                               | 1,094                             | -24.72       | 80.82         |
| Jun-2020       | 1,094                                | -12                         | 205                                | 1,287                             | 18.72        | 95.95         |
| Sep-2020       | 1,287                                | -                           | 141                                | 1,427                             | 10.92        | 106.43        |
| Dec-2020       | 1,427                                | -20                         | 269                                | 1,677                             | 18.92        | 126.57        |
|                | <b>1,460</b>                         | <b>-139</b>                 | <b>356</b>                         | <b>1,677</b>                      | <b>26.57</b> | <b>126.57</b> |



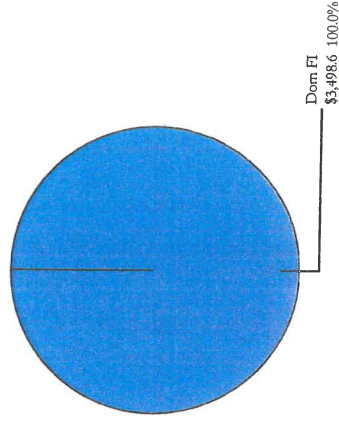
# Galveston Employees Retirement - Baird Investment Management

as of December 31, 2020

## Portfolio Performance (%)

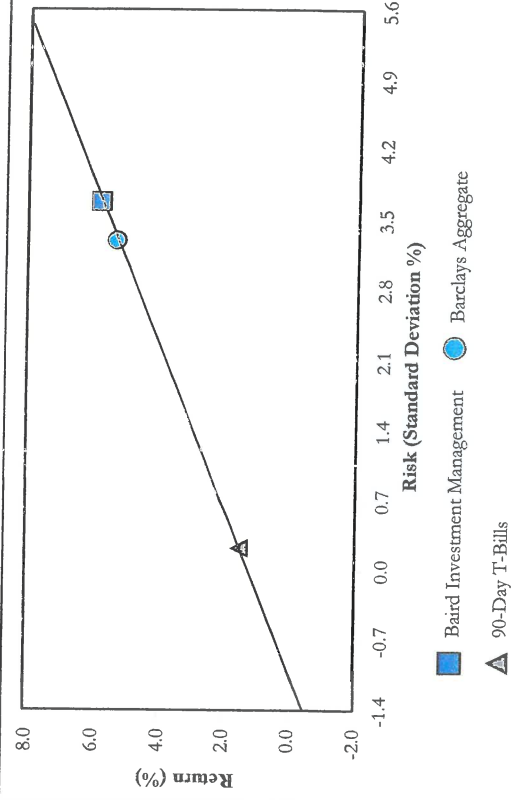


## Asset Allocation (\$000)



## Portfolio Characteristics vs. Barclays Aggregate Since Inception

|                             | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|-----------------------------|------|-------|-----------|--------------|----------------|
| Baird Investment Management | 1.07 | 0.12  | 0.91      | 1.14         | 12/01/2017     |

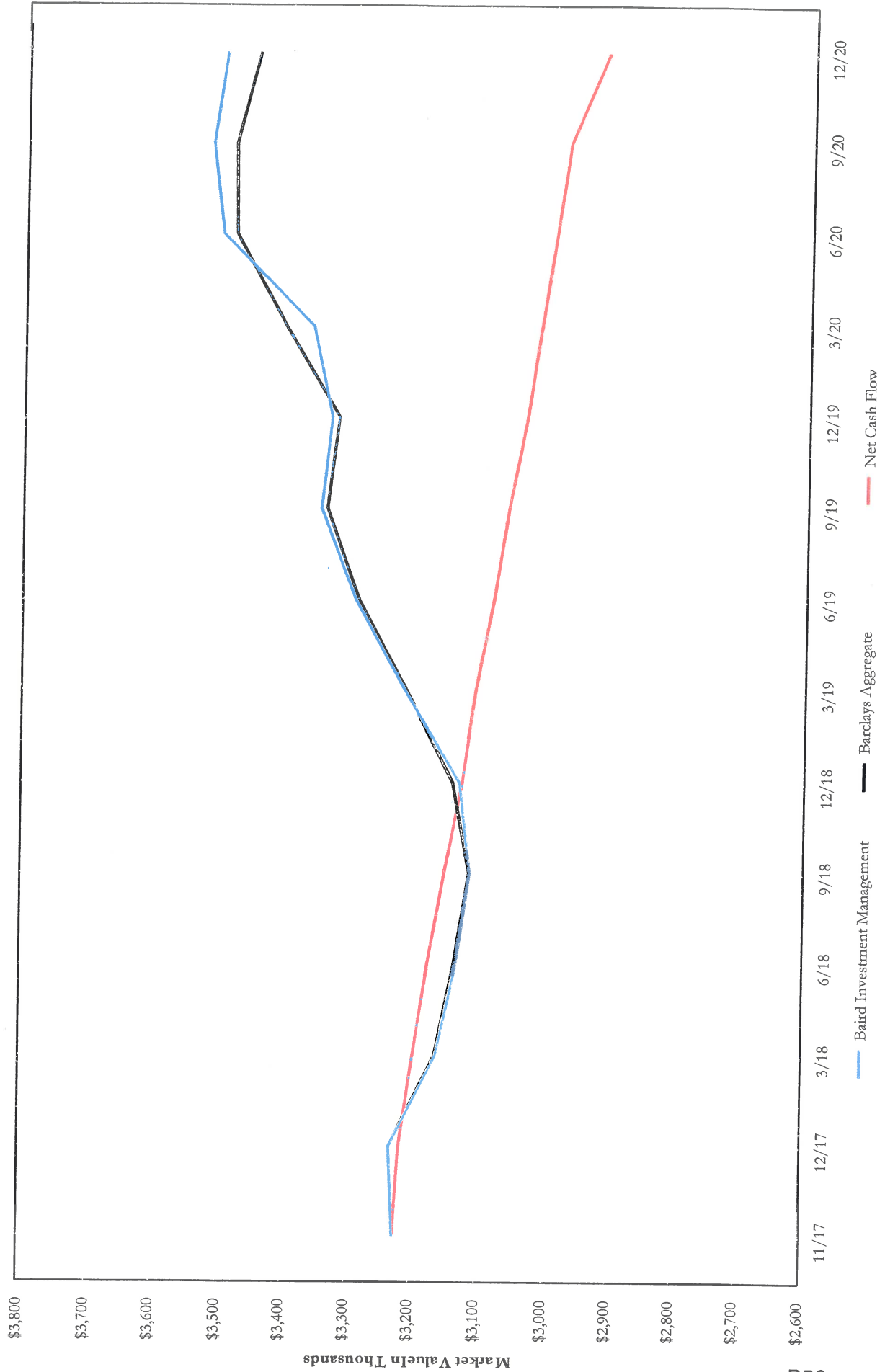


## Asset Growth (\$000)

|                             | Current Quarter | YTD   | 1 Year | 3 Years | Since Inception | Inception Date |
|-----------------------------|-----------------|-------|--------|---------|-----------------|----------------|
| Baird Investment Management | 3,519           | 3,332 | 3,332  | 3,231   | 3,225           | 12/01/2017     |
| Beginning Market Value      | -58             | -119  | -119   | -300    | -309            |                |
| Net Contributions           | 37              | 285   | 285    | 568     | 583             |                |
| Gain/Loss                   | 3,499           | 3,499 | 3,499  | 3,499   | 3,499           |                |
| Ending Market Value         |                 |       |        |         |                 |                |

Actual inception 11/20/2017

Sources of Portfolio Growth



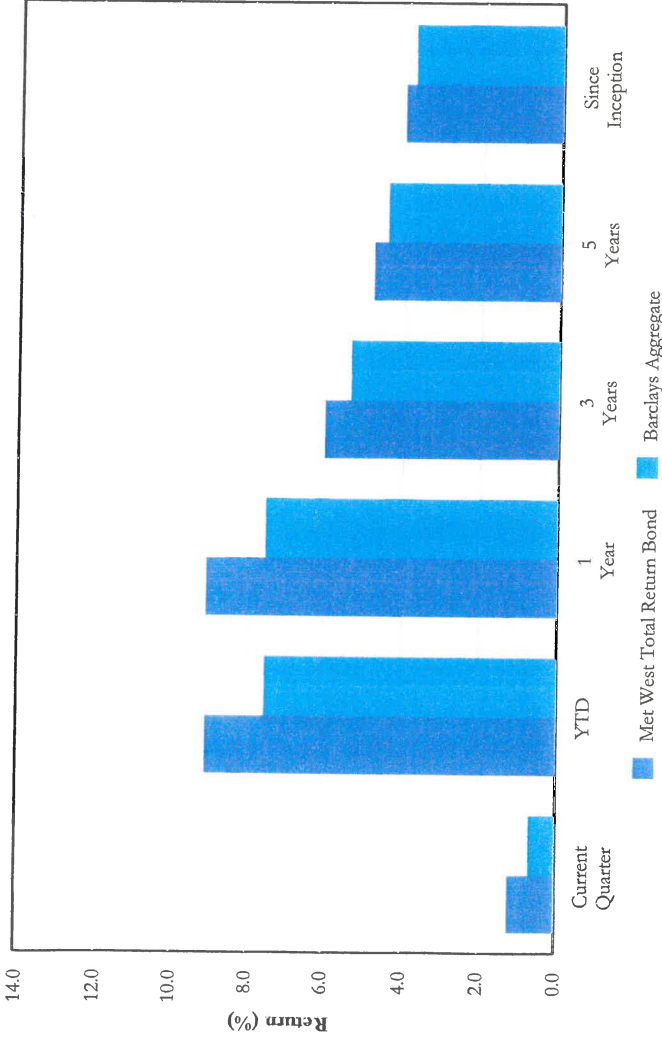
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Nov-2017       | -                                    | -                           | -                                  | 3,225                             | N/A          | 100.00        |
| Dec-2017       | 3,225                                | -9                          | 15                                 | 3,231                             | 0.47         | 100.47        |
| Mar-2018       | 3,231                                | -19                         | -49                                | 3,163                             | -1.52        | 98.94         |
| Jun-2018       | 3,163                                | -22                         | -8                                 | 3,133                             | -0.24        | 98.70         |
| Sep-2018       | 3,133                                | -23                         | 2                                  | 3,112                             | 0.07         | 98.77         |
| Dec-2018       | 3,112                                | -26                         | 43                                 | 3,130                             | 1.41         | 100.16        |
| Mar-2019       | 3,130                                | -20                         | 103                                | 3,213                             | 3.32         | 103.48        |
| Jun-2019       | 3,213                                | -24                         | 101                                | 3,291                             | 3.16         | 106.75        |
| Sep-2019       | 3,291                                | -23                         | 79                                 | 3,347                             | 2.41         | 109.33        |
| Dec-2019       | 3,347                                | -25                         | 10                                 | 3,332                             | 0.30         | 109.65        |
| Mar-2020       | 3,332                                | -20                         | 50                                 | 3,362                             | 1.49         | 111.29        |
| Jun-2020       | 3,362                                | -21                         | 161                                | 3,502                             | 4.79         | 116.62        |
| Sep-2020       | 3,502                                | -19                         | 37                                 | 3,519                             | 1.06         | 117.85        |
| Dec-2020       | 3,519                                | -58                         | 37                                 | 3,499                             | 1.07         | 119.11        |
|                | <b>3,225</b>                         | <b>-309</b>                 | <b>583</b>                         | <b>3,499</b>                      | <b>19.11</b> | <b>119.11</b> |

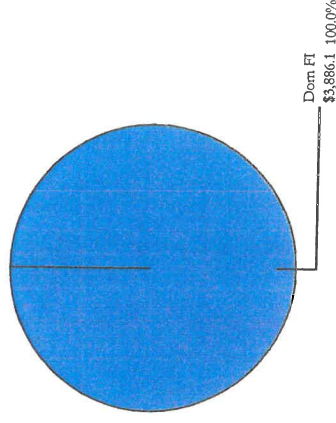
# Galveston Employees Retirement - Met West Total Return Bond

as of December 31, 2020

## Portfolio Performance (%)

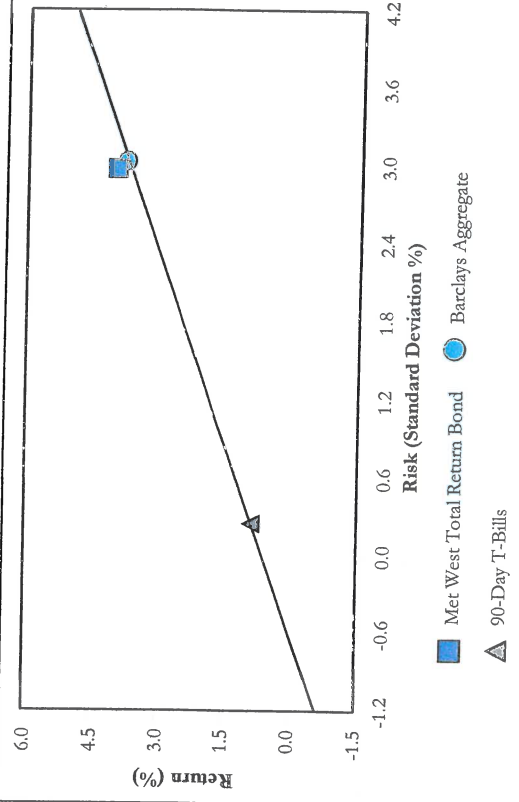


## Asset Allocation (\$000)



## Portfolio Characteristics vs. Barclays Aggregate Since Inception

|                            | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|----------------------------|------|-------|-----------|--------------|----------------|
| Met West Total Return Bond | 0.96 | 0.37  | 0.96      | 1.05         | 07/01/2014     |



## Asset Growth (\$000)

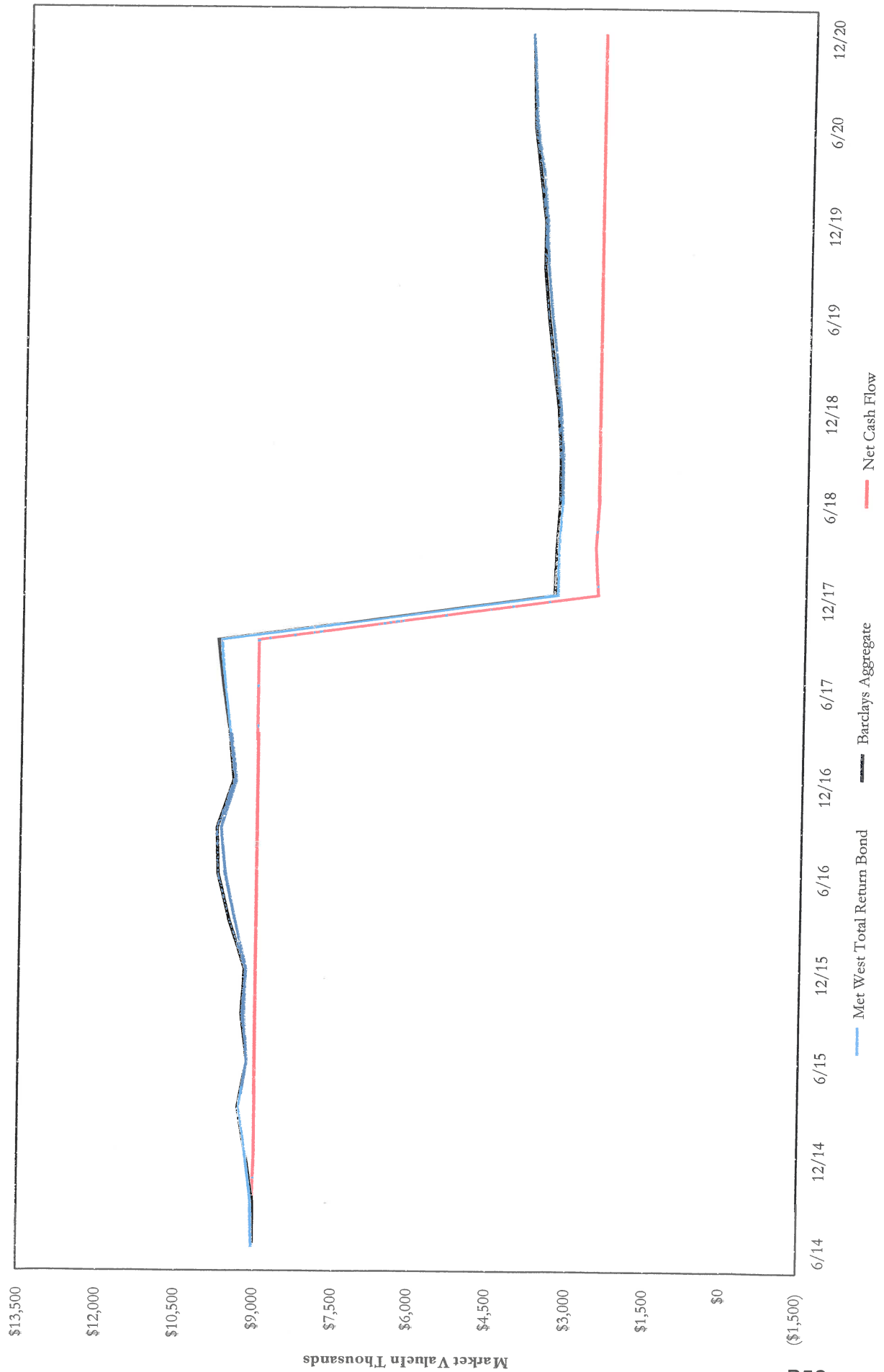
|                            | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | Since Inception | Inception Date |
|----------------------------|-----------------|-------|--------|---------|---------|-----------------|----------------|
| Met West Total Return Bond | 3,840           | 3,561 | 3,561  | 3,272   | 9,183   | 9,014           | 07/01/2014     |
| Beginning Market Value     | -               | -     | -      | -       | -6,464  | -6,489          |                |
| Net Contributions          | 46              | 325   | 325    | 627     | 1,167   | 1,361           |                |
| Gain/Loss                  | 3,886           | 3,886 | 3,886  | 3,886   | 3,886   | 3,886           |                |
| Ending Market Value        |                 |       |        |         |         |                 |                |

P52

Actual inception 5/16/2014



Sources of Portfolio Growth



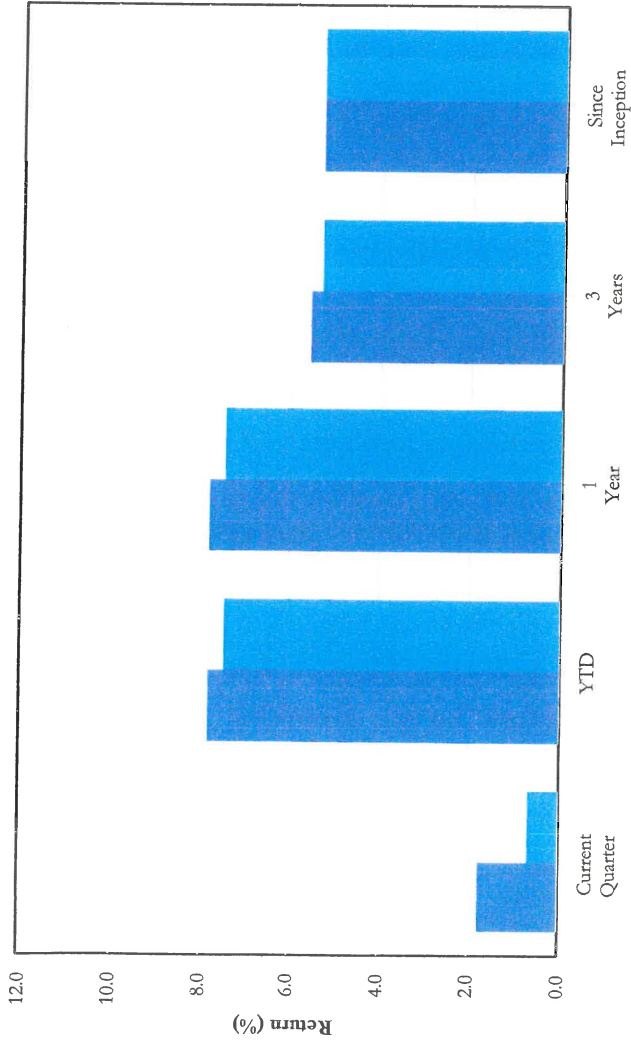
# Galveston Employees Retirement - Met West Total Return Bond

as of December 31, 2020

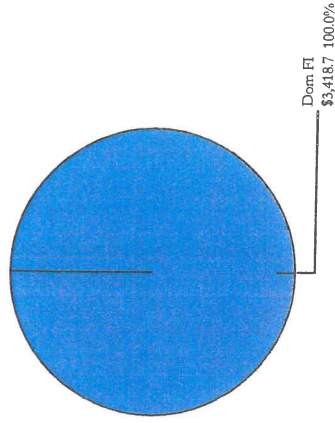
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Jun-2014       | -                                    | -                           | -                                  | 9,014                             | N/A          | 100.00        |
| Sep-2014       | 9,014                                | -                           | 28                                 | 9,042                             | 0.31         | 100.31        |
| Dec-2014       | 9,042                                | -25                         | 140                                | 9,157                             | 1.55         | 101.87        |
| Mar-2015       | 9,157                                | -                           | 128                                | 9,285                             | 1.40         | 103.29        |
| Jun-2015       | 9,285                                | -                           | -124                               | 9,160                             | -1.34        | 101.91        |
| Sep-2015       | 9,160                                | -                           | 60                                 | 9,220                             | 0.65         | 102.57        |
| Dec-2015       | 9,220                                | -                           | -37                                | 9,183                             | -0.40        | 102.16        |
| Mar-2016       | 9,183                                | -                           | 223                                | 9,406                             | 2.43         | 104.64        |
| Jun-2016       | 9,406                                | -                           | 187                                | 9,593                             | 1.98         | 106.72        |
| Sep-2016       | 9,593                                | -                           | 71                                 | 9,664                             | 0.74         | 107.51        |
| Dec-2016       | 9,664                                | -                           | -258                               | 9,407                             | -2.67        | 104.64        |
| Mar-2017       | 9,407                                | -                           | 87                                 | 9,494                             | 0.93         | 105.61        |
| Jun-2017       | 9,494                                | -                           | 117                                | 9,611                             | 1.23         | 106.92        |
| Sep-2017       | 9,611                                | -                           | 84                                 | 9,694                             | 0.87         | 107.85        |
| Dec-2017       | 9,694                                | -6,451                      | 29                                 | 3,272                             | 0.51         | 108.39        |
| Mar-2018       | 3,272                                | 42                          | -41                                | 3,272                             | -1.26        | 107.02        |
| Jun-2018       | 3,272                                | -54                         | -4                                 | 3,214                             | -0.12        | 106.90        |
| Sep-2018       | 3,214                                | -                           | 1                                  | 3,216                             | 0.04         | 106.94        |
| Dec-2018       | 3,216                                | -                           | 49                                 | 3,265                             | 1.53         | 108.57        |
| Mar-2019       | 3,265                                | -                           | 104                                | 3,369                             | 3.20         | 112.04        |
| Jun-2019       | 3,369                                | -                           | 108                                | 3,477                             | 3.20         | 115.63        |
| Sep-2019       | 3,477                                | -                           | 78                                 | 3,555                             | 2.24         | 118.22        |
| Dec-2019       | 3,555                                | -                           | 7                                  | 3,561                             | 0.19         | 118.44        |
| Mar-2020       | 3,561                                | -                           | 83                                 | 3,644                             | 2.32         | 121.19        |
| Jun-2020       | 3,644                                | -                           | 148                                | 3,792                             | 4.07         | 126.12        |
| Sep-2020       | 3,792                                | -                           | 48                                 | 3,840                             | 1.26         | 127.70        |
| Dec-2020       | 3,840                                | -                           | 46                                 | 3,886                             | 1.20         | 129.23        |
|                | <b>9,014</b>                         | <b>-6,489</b>               | <b>1,361</b>                       | <b>3,886</b>                      | <b>29.23</b> | <b>129.23</b> |

## Portfolio Performance (%)

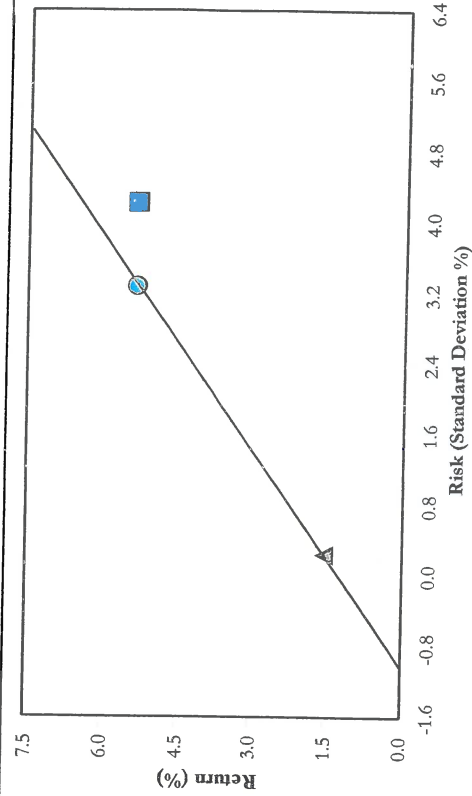


## Asset Allocation (\$000)



## Portfolio Characteristics vs. Barclays Aggregate Since Inception

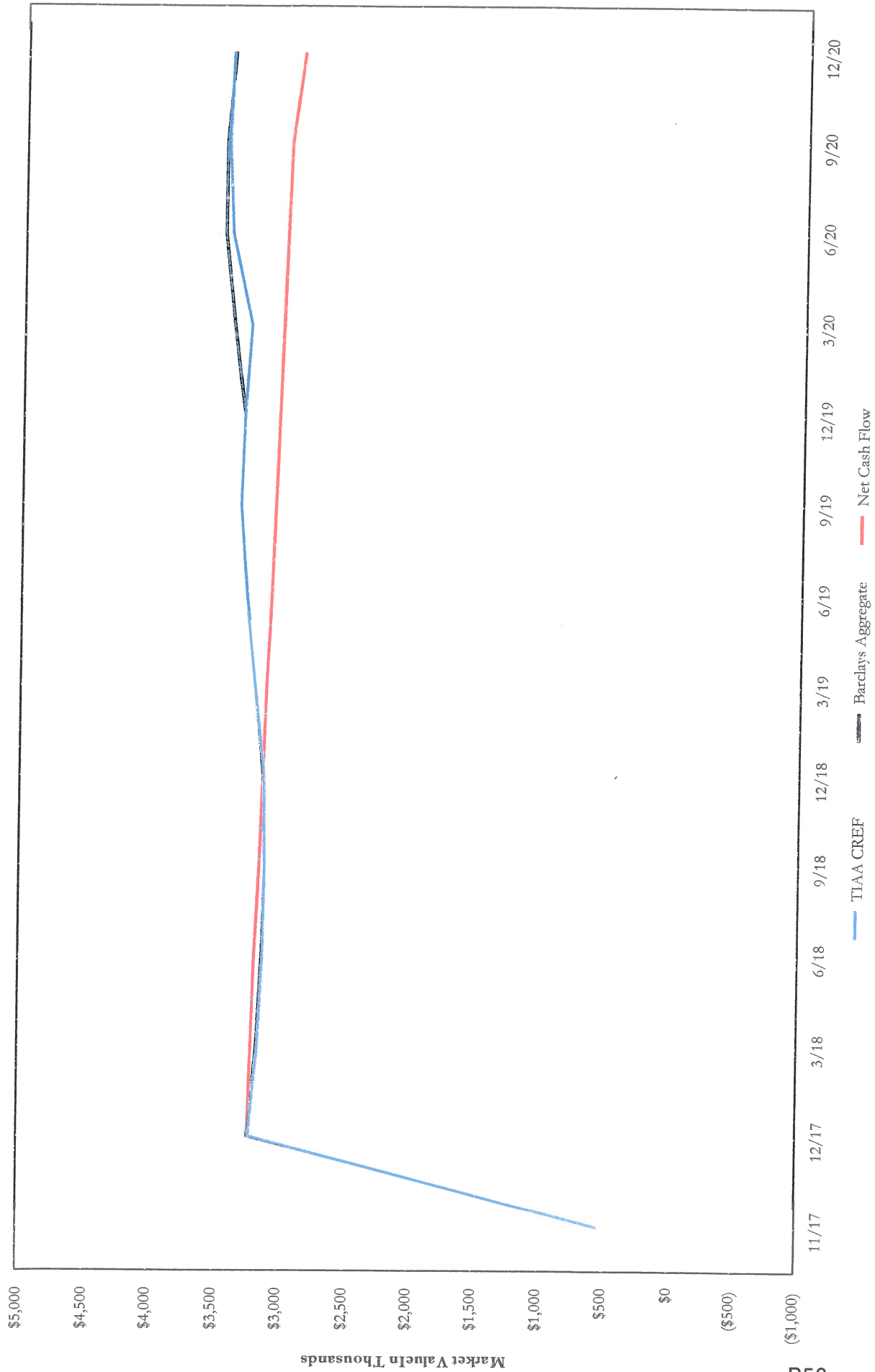
|           | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|-----------|------|-------|-----------|--------------|----------------|
| TIAA CREF | 1.06 | -0.29 | 0.69      | 0.89         | 12/01/2017     |



## Asset Growth (\$000)

|                        | Current Quarter | YTD   | 1 Year | 3 Years | Since Inception | Inception Date |
|------------------------|-----------------|-------|--------|---------|-----------------|----------------|
| TIAA CREF              | 3,441           | 3,309 | 3,309  | 3,220   | 530             | 12/01/2017     |
| Beginning Market Value | -81             | -147  | -147   | -339    | 2,359           |                |
| Net Contributions      | 59              | 257   | 257    | 538     | 530             |                |
| Gain/Loss              | 3,419           | 3,419 | 3,419  | 3,419   | 3,419           |                |
| Ending Market Value    |                 |       |        |         |                 |                |

Sources of Portfolio Growth

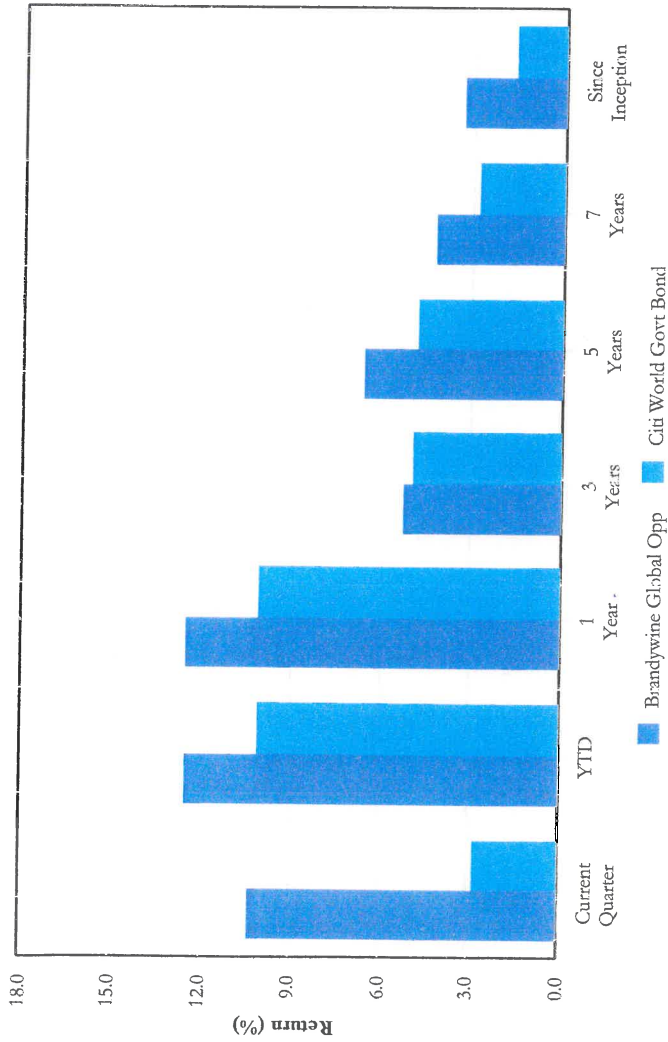




## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Nov-2017       | -                                    | -                           | -                                  | 530                               | N/A          | 100.00        |
| Dec-2017       | 530                                  | 2,698                       | -8                                 | 3,220                             | -0.31        | 99.69         |
| Mar-2018       | 3,220                                | -22                         | -43                                | 3,155                             | -1.33        | 98.37         |
| Jun-2018       | 3,155                                | -24                         | -10                                | 3,121                             | -0.31        | 98.06         |
| Sep-2018       | 3,121                                | -25                         | 11                                 | 3,103                             | 0.35         | 98.40         |
| Dec-2018       | 3,103                                | -25                         | 35                                 | 3,117                             | 1.13         | 99.52         |
| Mar-2019       | 3,117                                | -26                         | 107                                | 3,193                             | 3.44         | 102.94        |
| Jun-2019       | 3,193                                | -25                         | 99                                 | 3,272                             | 3.12         | 106.15        |
| Sep-2019       | 3,272                                | -22                         | 74                                 | 3,325                             | 2.28         | 108.57        |
| Dec-2019       | 3,325                                | -24                         | 8                                  | 3,309                             | 0.23         | 108.83        |
| Mar-2020       | 3,309                                | -23                         | -30                                | 3,256                             | -0.91        | 107.83        |
| Jun-2020       | 3,256                                | -23                         | 183                                | 3,416                             | 5.64         | 113.92        |
| Sep-2020       | 3,416                                | -20                         | 44                                 | 3,441                             | 1.29         | 115.39        |
| Dec-2020       | 3,441                                | -81                         | 59                                 | 3,419                             | 1.73         | 117.38        |
|                | <b>530</b>                           | <b>2,359</b>                | <b>530</b>                         | <b>3,419</b>                      | <b>17.38</b> | <b>117.38</b> |

## Portfolio Performance (%)

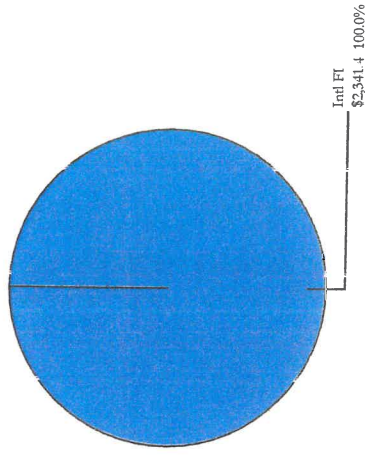


|                       | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date |
|-----------------------|-----------------|-------|--------|---------|---------|---------|-----------------|----------------|
| Brandywine Global Opp | 10.11           | 12.51 | 12.51  | 5.27    | 6.62    | 4.25    | 3.31            | 10/01/2012     |
| Citi World Govt Bond  | 2.77            | 10.11 | 10.11  | 4.96    | 4.78    | 2.78    | 1.64            | 10/01/2012     |

## Asset Growth (\$000)

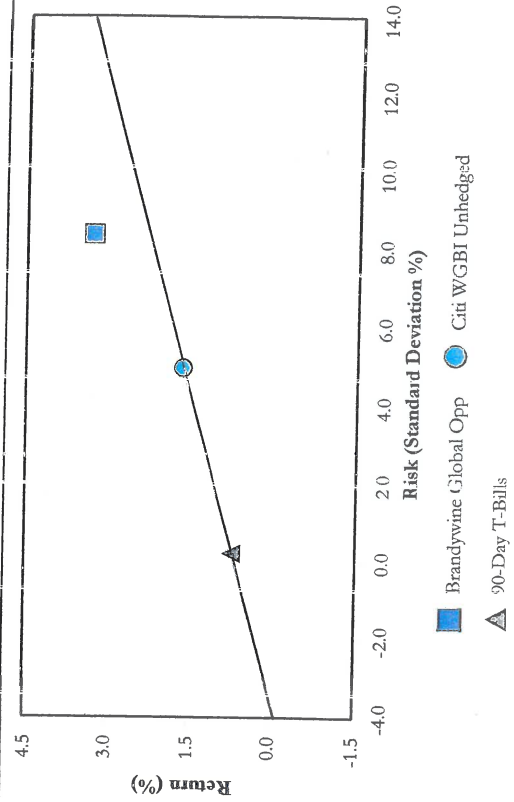
|                        | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date |
|------------------------|-----------------|-------|--------|---------|---------|---------|-----------------|----------------|
| Brandywine Global Opp  | 2,121           | 2,081 | 2,081  | 2,017   | 1,786   | 1,838   | 720             | 10/01/2012     |
| Beginning Market Value | -               | -     | -      | -11     | -96     | -96     | 1,089           |                |
| Net Contributions      | 220             | 260   | 260    | 335     | 651     | 599     | 533             |                |
| Gain/Loss              | 2,341           | 2,341 | 2,341  | 2,341   | 2,341   | 2,341   | 2,341           |                |
| Ending Market Value    | 2,341           | 2,341 | 2,341  | 2,341   | 2,341   | 2,341   | 2,341           |                |

## Asset Allocation (\$000)

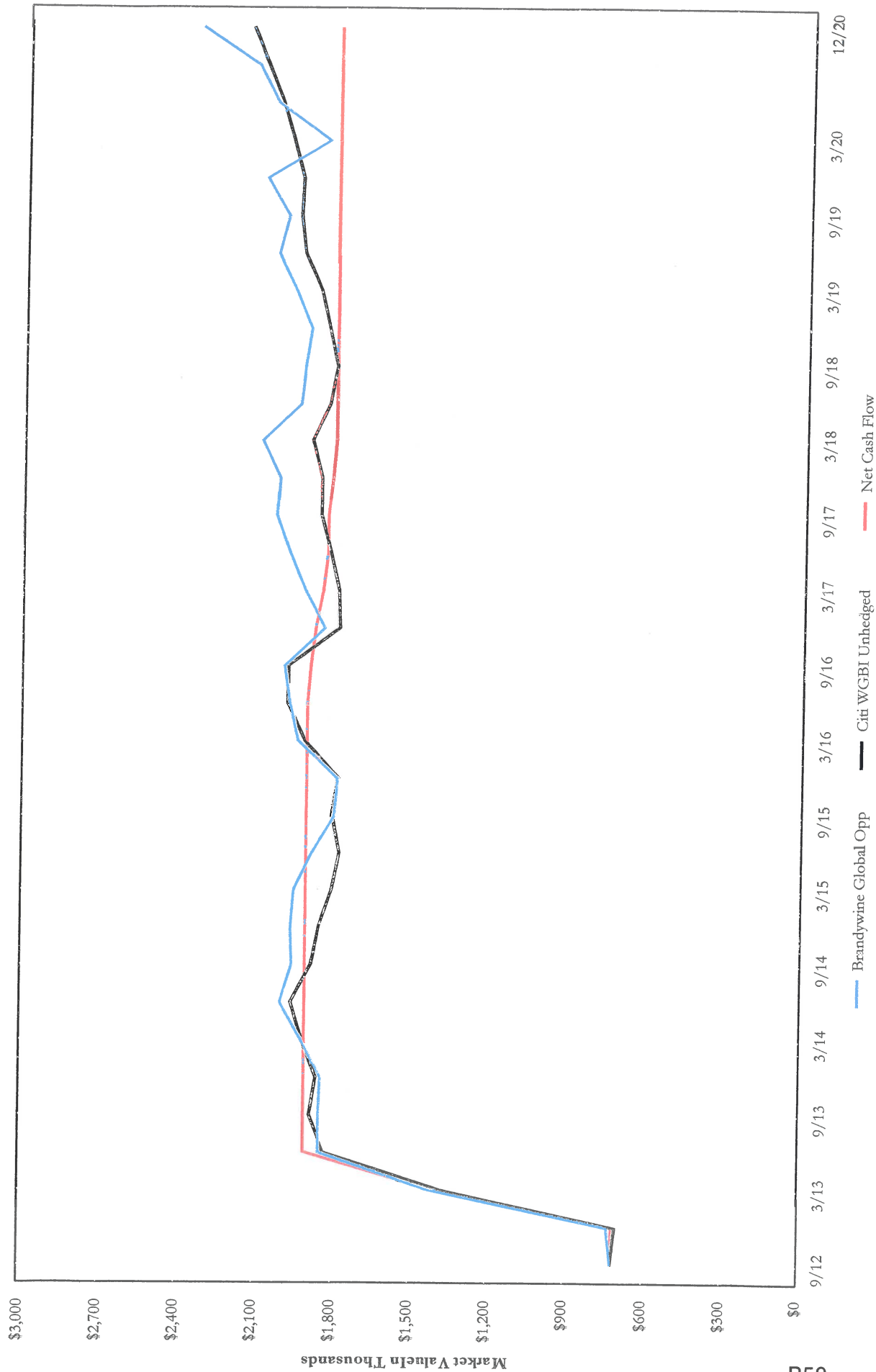


## Portfolio Characteristics vs. Citi WGBI Unhedged Since Inception

|                       | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|-----------------------|------|-------|-----------|--------------|----------------|
| Brandywine Global Opp | 1.12 | 1.66  | 0.45      | 0.34         | 10/01/2012     |



Sources of Portfolio Growth



## Sources of Portfolio Growth

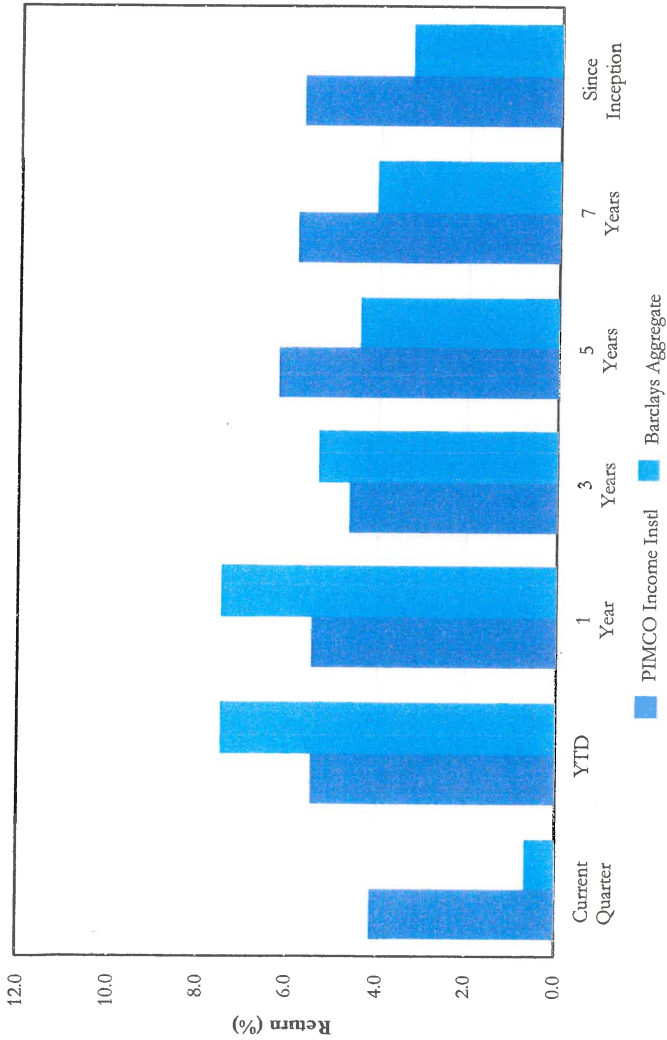
| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Sep-2012       | -                                    | -                           | -                                  | 720                               | N/A     | 100.00     |
| Dec-2012       | 720                                  | -4                          | 20                                 | 735                               | 2.75    | 102.75     |
| Mar-2013       | 735                                  | 696                         | -6                                 | 1,426                             | -0.91   | 101.82     |
| Jun-2013       | 1,426                                | 492                         | -71                                | 1,847                             | -3.52   | 98.23      |
| Sep-2013       | 1,847                                | -                           | -                                  | 1,848                             | 0.03    | 98.26      |
| Dec-2013       | 1,848                                | -                           | -9                                 | 1,838                             | -0.50   | 97.76      |
| Mar-2014       | 1,838                                | -                           | 75                                 | 1,914                             | 4.09    | 101.76     |
| Jun-2014       | 1,914                                | -                           | 81                                 | 1,995                             | 4.24    | 106.08     |
| Sep-2014       | 1,995                                | -                           | -39                                | 1,956                             | -1.94   | 104.02     |
| Dec-2014       | 1,956                                | -                           | 2                                  | 1,958                             | 0.12    | 104.15     |
| Mar-2015       | 1,958                                | -                           | -11                                | 1,948                             | -0.54   | 103.58     |
| Jun-2015       | 1,948                                | -                           | -63                                | 1,884                             | -3.25   | 100.22     |
| Sep-2015       | 1,884                                | -                           | -84                                | 1,800                             | -4.48   | 95.73      |
| Dec-2015       | 1,800                                | -                           | -14                                | 1,786                             | -0.80   | 94.97      |
| Mar-2016       | 1,786                                | -                           | 150                                | 1,936                             | 8.40    | 102.94     |
| Jun-2016       | 1,936                                | -                           | 35                                 | 1,971                             | 1.83    | 104.82     |
| Sep-2016       | 1,971                                | -8                          | 28                                 | 1,991                             | 1.42    | 106.31     |
| Dec-2016       | 1,991                                | -21                         | -128                               | 1,843                             | -6.43   | 99.47      |
| Mar-2017       | 1,843                                | -26                         | 97                                 | 1,914                             | 5.28    | 104.73     |
| Jun-2017       | 1,914                                | -17                         | 78                                 | 1,975                             | 4.10    | 109.02     |
| Sep-2017       | 1,975                                | -                           | 53                                 | 2,028                             | 2.68    | 111.94     |
| Dec-2017       | 2,028                                | -14                         | 3                                  | 2,017                             | 0.17    | 112.13     |
| Mar-2018       | 2,017                                | -11                         | 79                                 | 2,086                             | 3.94    | 116.55     |
| Jun-2018       | 2,086                                | -                           | -142                               | 1,944                             | -6.79   | 108.64     |
| Sep-2018       | 1,944                                | -                           | -17                                | 1,927                             | -0.88   | 107.69     |
| Dec-2018       | 1,927                                | -                           | -21                                | 1,907                             | -1.07   | 106.54     |
| Mar-2019       | 1,907                                | -                           | 56                                 | 1,963                             | 2.93    | 109.66     |
| Jun-2019       | 1,963                                | -                           | 70                                 | 2,033                             | 3.59    | 113.60     |
| Sep-2019       | 2,033                                | -                           | -36                                | 1,997                             | -1.79   | 111.56     |
| Dec-2019       | 1,997                                | -                           | 84                                 | 2,081                             | 4.22    | 116.27     |
| Mar-2020       | 2,081                                | -                           | -236                               | 1,844                             | -11.36  | 103.05     |
| Jun-2020       | 1,844                                | -                           | 198                                | 2,043                             | 10.76   | 114.14     |
| Sep-2020       | 2,043                                | -                           | 79                                 | 2,121                             | 3.84    | 118.53     |



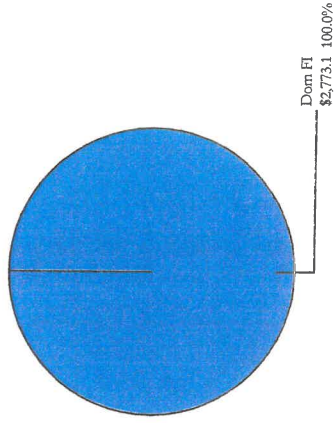
## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Dec-2020       | 2,121                                | -                           | 220                                | 2,341                             | 10.37   | 130.82     |
|                | 720                                  | 1,089                       | 533                                | 2,341                             | 30.82   | 130.82     |

## Portfolio Performance (%)

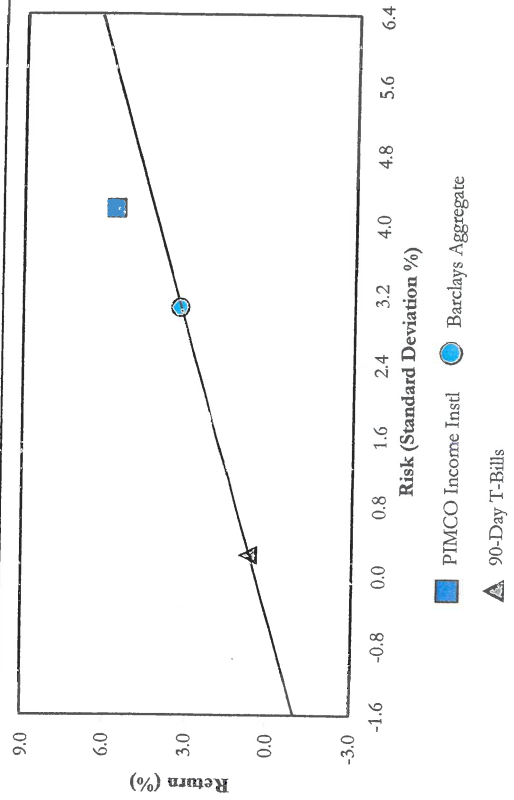


## Asset Allocation (\$000)



## Portfolio Characteristics vs. Barclays Aggregate Since Inception

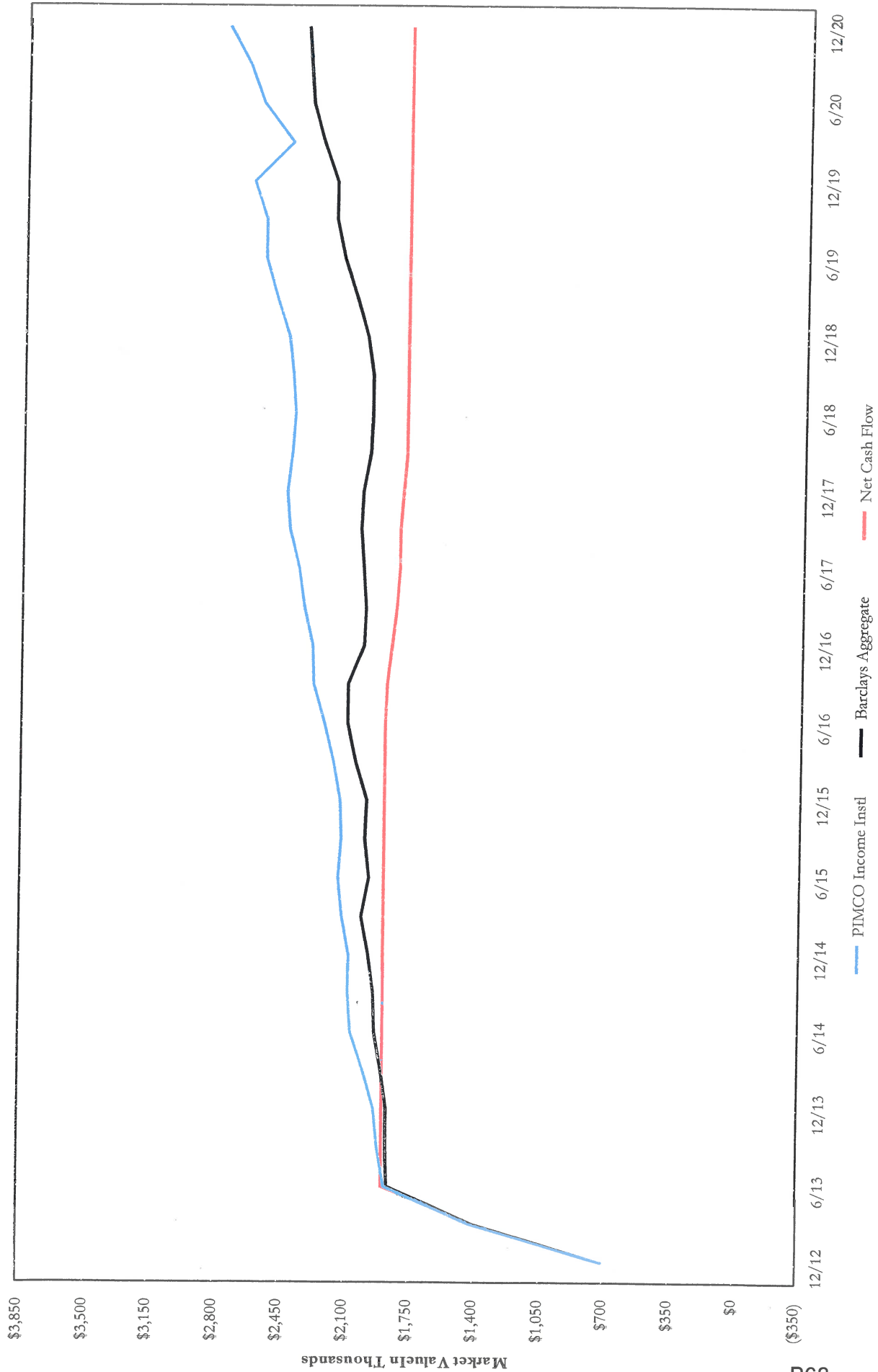
|                    | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|--------------------|------|-------|-----------|--------------|----------------|
| PIMCO Income Instl | 0.44 | 4.28  | 0.10      | 1.16         | 01/01/2013     |



## Asset Growth (\$000)

|                        | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date |
|------------------------|-----------------|-------|--------|---------|---------|---------|-----------------|----------------|
| PIMCO Income Instl     | 2,663           | 2,630 | 2,630  | 2,434   | 2,138   | 1,944   | 701             | 01/01/2013     |
| Beginning Market Value | -               | -     | -      | -15     | -100    | -100    | 1,096           |                |
| Net Contributions      | 110             | 143   | 143    | 354     | 735     | 928     | 976             |                |
| Gain/Loss              | 2,773           | 2,773 | 2,773  | 2,773   | 2,773   | 2,773   | 2,773           |                |
| Ending Market Value    |                 |       |        |         |         |         |                 |                |

Sources of Portfolio Growth



## Sources of Portfolio Growth

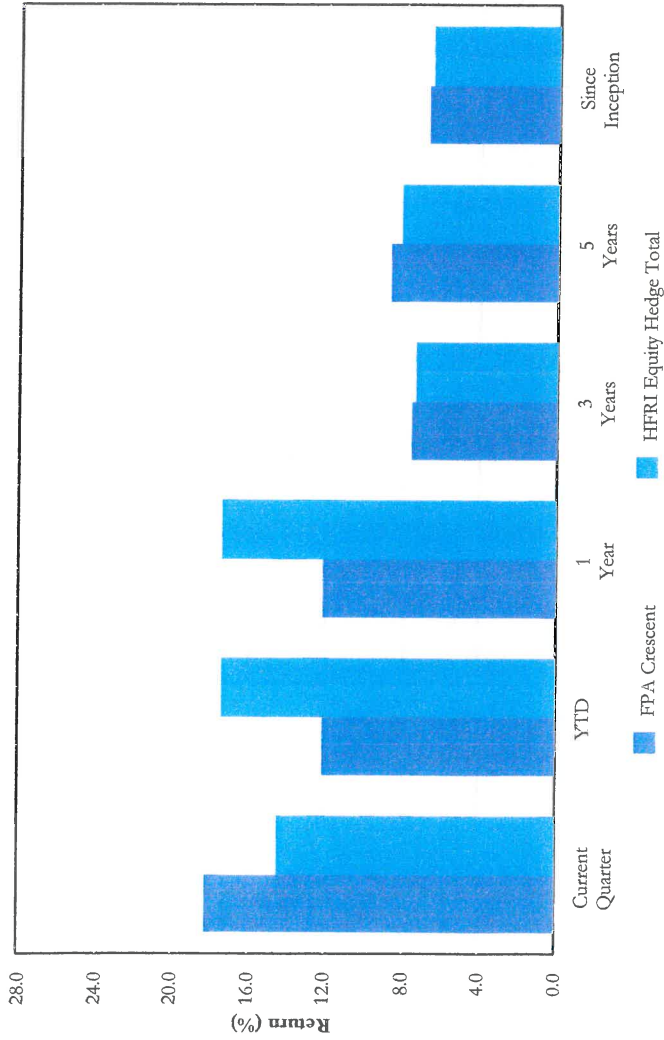
| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
| Dec-2012       | -                                    | -                           | -                                  | 701                               | N/A     | 100.00     |
| Mar-2013       | 701                                  | 700                         | 25                                 | 1,426                             | 3.08    | 103.08     |
| Jun-2013       | 1,426                                | 495                         | -39                                | 1,883                             | -1.55   | 101.48     |
| Sep-2013       | 1,883                                | -                           | 34                                 | 1,916                             | 1.79    | 103.29     |
| Dec-2013       | 1,916                                | -                           | 28                                 | 1,944                             | 1.48    | 104.82     |
| Mar-2014       | 1,944                                | -                           | 61                                 | 2,005                             | 3.11    | 108.08     |
| Jun-2014       | 2,005                                | -                           | 65                                 | 2,070                             | 3.25    | 111.60     |
| Sep-2014       | 2,070                                | -                           | 16                                 | 2,086                             | 0.76    | 112.44     |
| Dec-2014       | 2,086                                | -                           | -2                                 | 2,084                             | -0.11   | 112.32     |
| Mar-2015       | 2,084                                | -                           | 41                                 | 2,125                             | 1.96    | 114.53     |
| Jun-2015       | 2,125                                | -                           | 21                                 | 2,146                             | 1.00    | 115.67     |
| Sep-2015       | 2,146                                | -                           | -18                                | 2,128                             | -0.85   | 114.69     |
| Dec-2015       | 2,128                                | -                           | 10                                 | 2,138                             | 0.48    | 115.25     |
| Mar-2016       | 2,138                                | -                           | 39                                 | 2,177                             | 1.82    | 117.34     |
| Jun-2016       | 2,177                                | -                           | 53                                 | 2,230                             | 2.44    | 120.21     |
| Sep-2016       | 2,230                                | -8                          | 63                                 | 2,285                             | 2.81    | 123.59     |
| Dec-2016       | 2,285                                | -21                         | 32                                 | 2,296                             | 1.39    | 125.31     |
| Mar-2017       | 2,296                                | -26                         | 66                                 | 2,336                             | 2.88    | 128.92     |
| Jun-2017       | 2,336                                | -17                         | 53                                 | 2,372                             | 2.27    | 131.85     |
| Sep-2017       | 2,372                                | -                           | 50                                 | 2,422                             | 2.10    | 134.62     |
| Dec-2017       | 2,422                                | -14                         | 27                                 | 2,434                             | 1.10    | 136.10     |
| Mar-2018       | 2,434                                | -11                         | -5                                 | 2,419                             | -0.21   | 135.81     |
| Jun-2018       | 2,419                                | -4                          | -12                                | 2,402                             | -0.49   | 135.14     |
| Sep-2018       | 2,402                                | -                           | 14                                 | 2,416                             | 0.57    | 135.91     |
| Dec-2018       | 2,416                                | -                           | 18                                 | 2,434                             | 0.73    | 136.91     |
| Mar-2019       | 2,434                                | -                           | 74                                 | 2,508                             | 3.03    | 141.05     |
| Jun-2019       | 2,508                                | -                           | 60                                 | 2,568                             | 2.40    | 144.44     |
| Sep-2019       | 2,568                                | -                           | -3                                 | 2,565                             | -0.11   | 144.28     |
| Dec-2019       | 2,565                                | -                           | 65                                 | 2,630                             | 2.53    | 147.93     |
| Mar-2020       | 2,630                                | -                           | -202                               | 2,428                             | -7.66   | 136.59     |
| Jun-2020       | 2,428                                | -                           | 157                                | 2,586                             | 6.48    | 145.44     |
| Sep-2020       | 2,586                                | -                           | 78                                 | 2,663                             | 3.01    | 149.82     |
| Dec-2020       | 2,663                                | -                           | 110                                | 2,773                             | 4.12    | 155.99     |

## Sources of Portfolio Growth

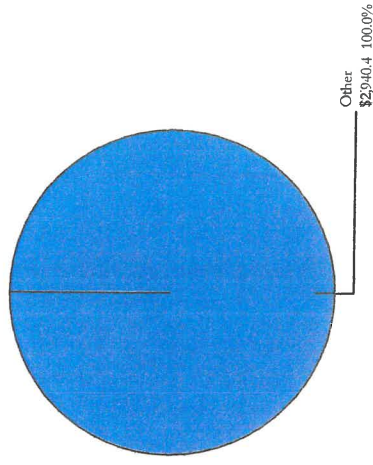
| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return | Unit Value |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|---------|------------|
|                | 701                                  | 1,096                       | 976                                | 2,773                             | 55.99   | 155.99     |



## Portfolio Performance (%)

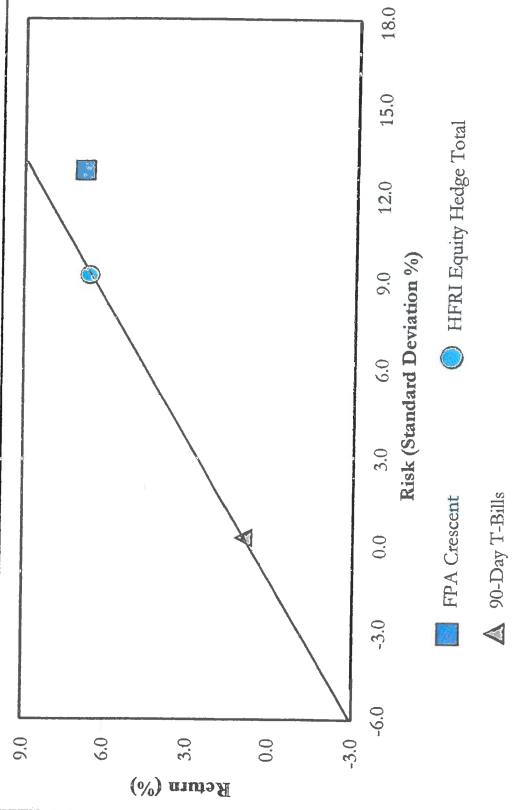


## Asset Allocation (\$000)



## Portfolio Characteristics vs. HFRI Equity Hedge Total Since Inception

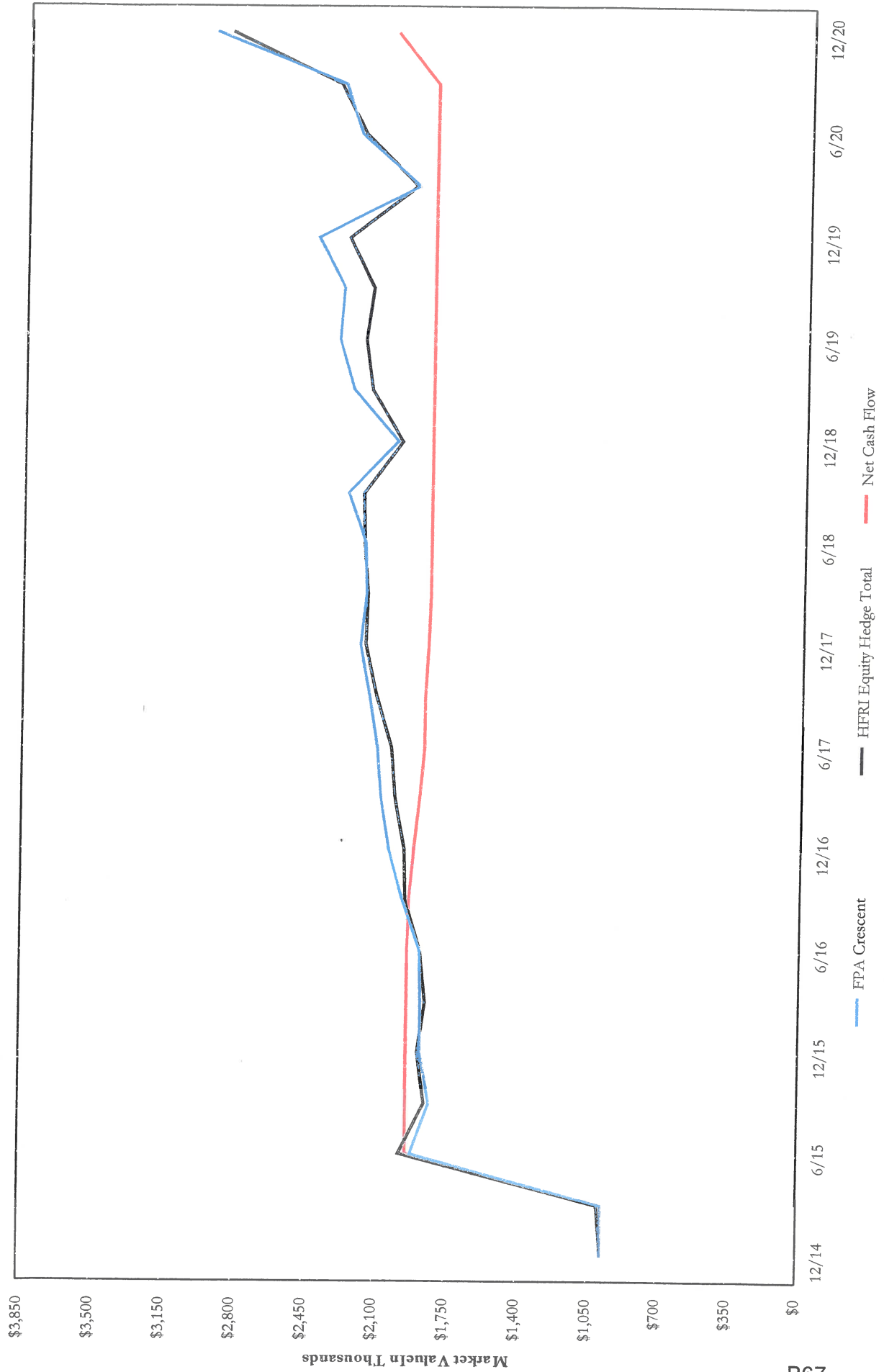
|              | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|--------------|------|-------|-----------|--------------|----------------|
| FPA Crescent | 1.31 | -1.52 | 0.90      | 0.50         | 01/01/2015     |



## Asset Growth (\$000)

|                        | Current Quarter | YTD   | 1 Year | 3 Years | 5 Years | Since Inception | Inception Date |
|------------------------|-----------------|-------|--------|---------|---------|-----------------|----------------|
| FPA Crescent           | 2,299           | 2,423 | 2,423  | 2,191   | 1,876   | 977             | 01/01/2015     |
| Beginning Market Value | 200             | 200   | 200    | 189     | 104     | 1,067           |                |
| Net Contributions      | 441             | 317   | 317    | 560     | 960     | 896             |                |
| Gain/Loss              | 2,940           | 2,940 | 2,940  | 2,940   | 2,940   | 2,940           |                |
| Ending Market Value    |                 |       |        |         |         |                 |                |

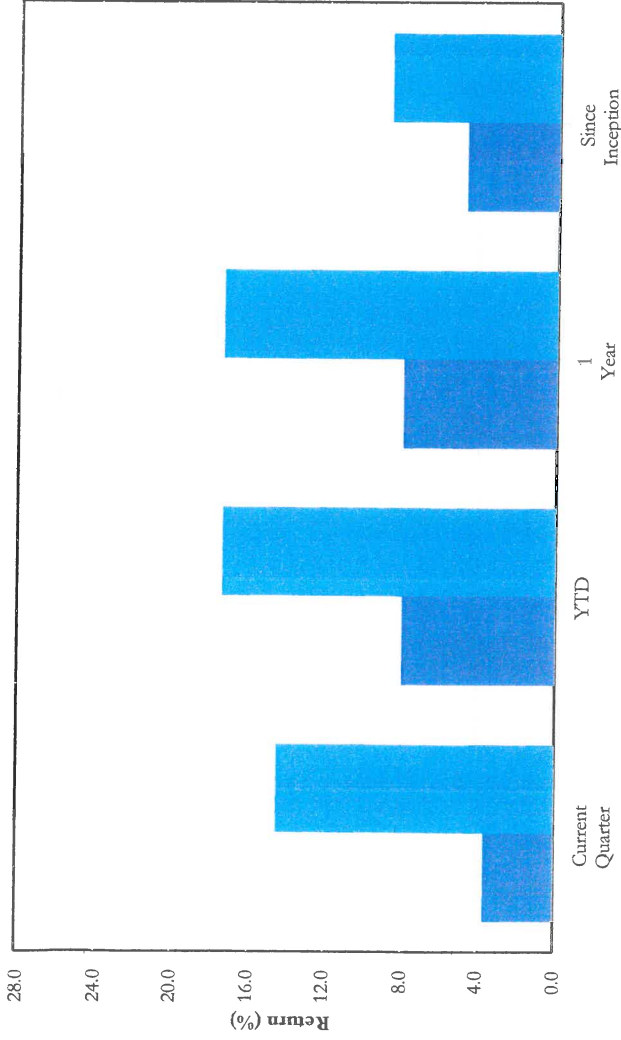
Sources of Portfolio Growth



## Sources of Portfolio Growth

| Periods Ending | Beginning Market Value (\$000) | Net Cash Flow (\$000) | Investment Increment (\$000) | Ending Market Value (\$000) | %Return      | Unit Value    |
|----------------|--------------------------------|-----------------------|------------------------------|-----------------------------|--------------|---------------|
| Dec-2014       | -                              | -                     | -                            | 977                         | N/A          | 100.00        |
| Mar-2015       | 977                            | -                     | 1                            | 979                         | 0.15         | 100.15        |
| Jun-2015       | 979                            | 963                   | -26                          | 1,916                       | -0.15        | 100.00        |
| Sep-2015       | 1,916                          | -                     | -91                          | 1,825                       | -4.73        | 95.27         |
| Dec-2015       | 1,825                          | -                     | 51                           | 1,876                       | 2.80         | 97.94         |
| Mar-2016       | 1,876                          | -                     | -4                           | 1,873                       | -0.19        | 97.75         |
| Jun-2016       | 1,873                          | -                     | 7                            | 1,880                       | 0.39         | 98.13         |
| Sep-2016       | 1,880                          | -8                    | 99                           | 1,972                       | 5.29         | 103.32        |
| Dec-2016       | 1,972                          | -21                   | 88                           | 2,039                       | 4.49         | 107.95        |
| Mar-2017       | 2,039                          | -26                   | 68                           | 2,082                       | 3.38         | 111.60        |
| Jun-2017       | 2,082                          | -17                   | 38                           | 2,104                       | 1.84         | 113.66        |
| Sep-2017       | 2,104                          | -                     | 40                           | 2,143                       | 1.90         | 115.81        |
| Dec-2017       | 2,143                          | -14                   | 62                           | 2,191                       | 2.90         | 119.18        |
| Mar-2018       | 2,191                          | -11                   | -21                          | 2,159                       | -0.98        | 118.01        |
| Jun-2018       | 2,159                          | -                     | 7                            | 2,166                       | 0.32         | 118.39        |
| Sep-2018       | 2,166                          | -                     | 90                           | 2,256                       | 4.15         | 123.30        |
| Dec-2018       | 2,256                          | -                     | -237                         | 2,019                       | -10.52       | 110.33        |
| Mar-2019       | 2,019                          | -                     | 218                          | 2,237                       | 10.80        | 122.24        |
| Jun-2019       | 2,237                          | -                     | 74                           | 2,311                       | 3.33         | 126.31        |
| Sep-2019       | 2,311                          | -                     | -19                          | 2,293                       | -0.81        | 125.29        |
| Dec-2019       | 2,293                          | -                     | 130                          | 2,423                       | 5.69         | 132.41        |
| Mar-2020       | 2,423                          | -                     | -497                         | 1,926                       | -20.51       | 105.25        |
| Jun-2020       | 1,926                          | -                     | 289                          | 2,215                       | 15.00        | 121.04        |
| Sep-2020       | 2,215                          | -                     | 84                           | 2,299                       | 3.80         | 125.64        |
| Dec-2020       | 2,299                          | 200                   | 441                          | 2,940                       | 18.23        | 148.54        |
|                | <b>977</b>                     | <b>1,067</b>          | <b>896</b>                   | <b>2,940</b>                | <b>48.54</b> | <b>148.54</b> |

## Portfolio Performance (%)

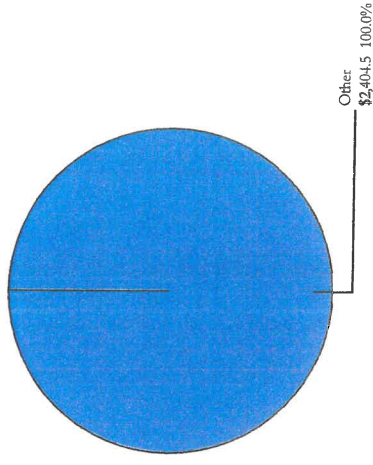


|                         | Current Quarter | YTD   | 1 Year | Since Inception | Inception Date |
|-------------------------|-----------------|-------|--------|-----------------|----------------|
| Salient Tactical Growth | 14.41           | 17.41 | 17.41  | 4.74            | 09/01/2018     |
| HFRI Equity Hedge Total | 3.66            | 8.03  | 8.03   | 8.67            | 09/01/2018     |

## Asset Growth (\$000)

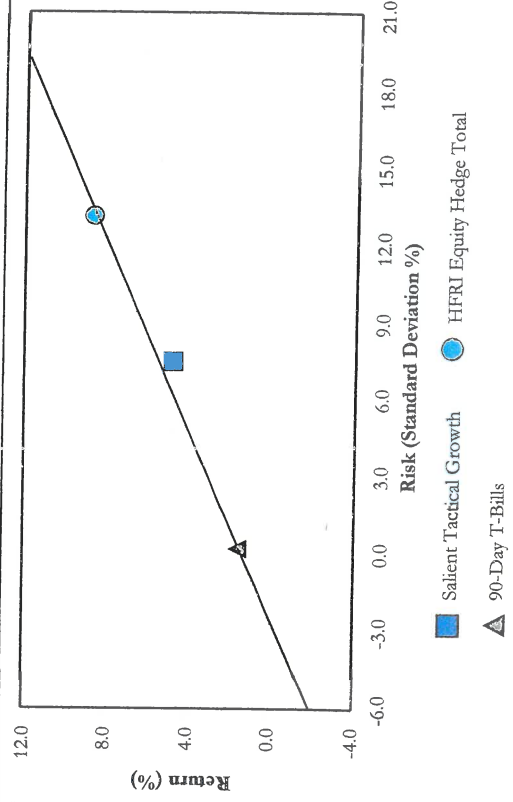
|                         | Current Quarter | YTD   | 1 Year | Since Inception | Inception Date |
|-------------------------|-----------------|-------|--------|-----------------|----------------|
| Salient Tactical Growth | 1,304           | 1,251 | 1,251  | 1,306           | 09/01/2018     |
| Beginning Market Value  | 1,007           | 1,007 | 1,007  | 914             |                |
| Net Contributions       | 94              | 147   | 147    | 185             |                |
| Gain/Loss               | 2,405           | 2,405 | 2,405  | 2,405           |                |
| Ending Market Value     |                 |       |        |                 |                |

## Asset Allocation (\$000)

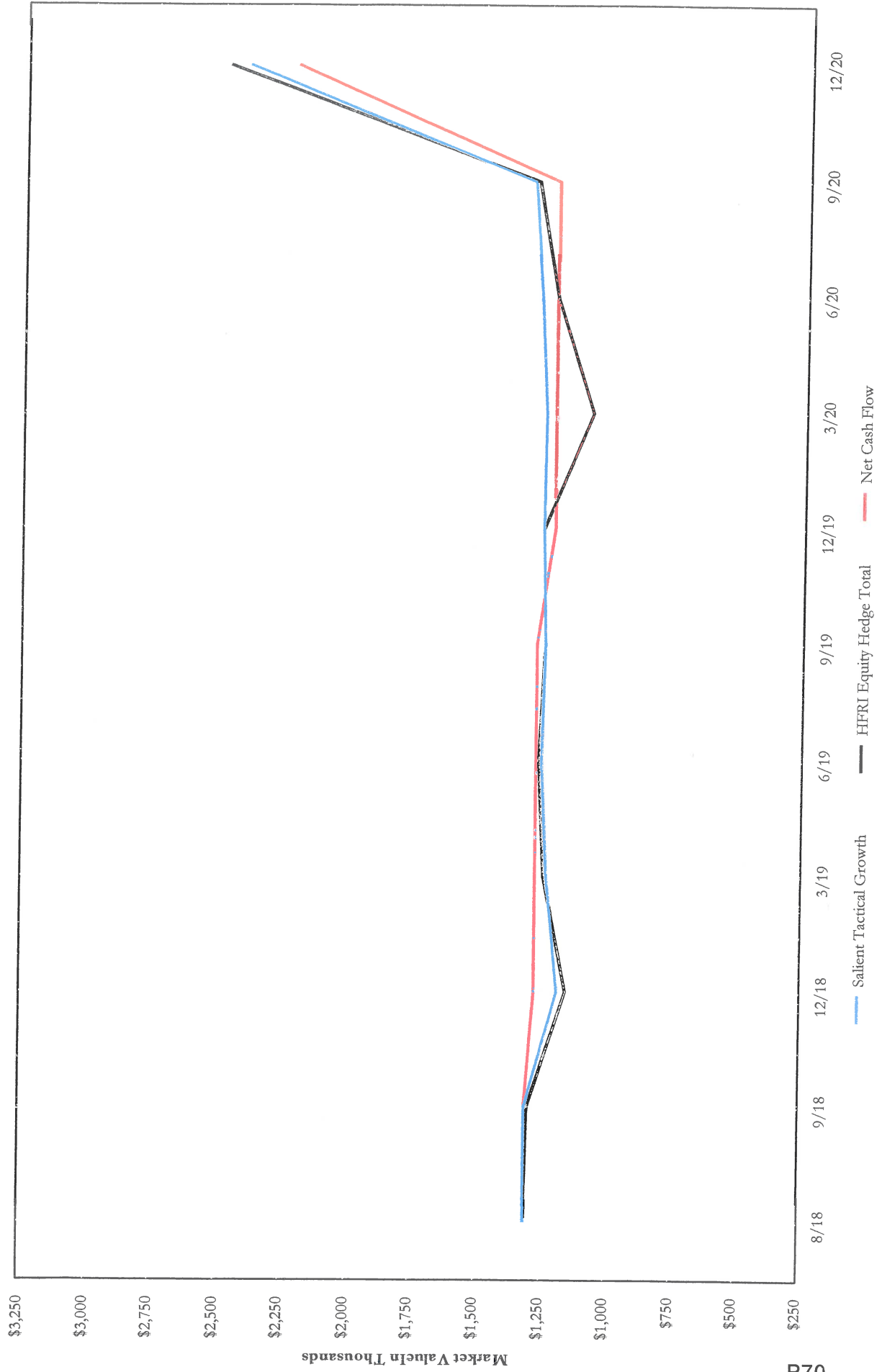


## Portfolio Characteristics vs. HFRI Equity Hedge Total Since Inception

|                         | Beta | Alpha | R-Squared | Sharpe Ratio | Inception Date |
|-------------------------|------|-------|-----------|--------------|----------------|
| Salient Tactical Growth | 0.34 | 1.81  | 0.35      | 0.45         | 09/01/2018     |



Sources of Portfolio Growth





## Sources of Portfolio Growth

| Periods Ending | Beginning<br>Market Value<br>(\$000) | Net<br>Cash Flow<br>(\$000) | Investment<br>Increment<br>(\$000) | Ending<br>Market Value<br>(\$000) | %Return      | Unit Value    |
|----------------|--------------------------------------|-----------------------------|------------------------------------|-----------------------------------|--------------|---------------|
| Aug-2018       | -                                    | -                           | -                                  | 1,306                             | N/A          | 100.00        |
| Sep-2018       | 1,306                                | -                           | 2                                  | 1,308                             | 0.18         | 100.18        |
| Dec-2018       | 1,308                                | -32                         | -90                                | 1,187                             | -6.91        | 93.26         |
| Mar-2019       | 1,187                                | -                           | 47                                 | 1,233                             | 3.93         | 96.93         |
| Jun-2019       | 1,233                                | -                           | 21                                 | 1,254                             | 1.70         | 98.58         |
| Sep-2019       | 1,254                                | -                           | -12                                | 1,242                             | -0.97        | 97.63         |
| Dec-2019       | 1,242                                | -61                         | 70                                 | 1,251                             | 5.64         | 103.13        |
| Mar-2020       | 1,251                                | -                           | -5                                 | 1,246                             | -0.41        | 102.70        |
| Jun-2020       | 1,246                                | -                           | 22                                 | 1,268                             | 1.80         | 104.55        |
| Sep-2020       | 1,268                                | -                           | 35                                 | 1,304                             | 2.80         | 107.47        |
| Dec-2020       | 1,304                                | 1,007                       | 94                                 | 2,405                             | 3.66         | 111.41        |
|                | <b>1,306</b>                         | <b>914</b>                  | <b>185</b>                         | <b>2,405</b>                      | <b>11.41</b> | <b>111.41</b> |

# iShares Core S&P 500 ETF (USD)

Morningstar Analyst Rating™

**Gold**  
02-27-2020

Overall Morningstar Rating™

**★★★★★**  
1,232 US Fund Large Blend

Standard Index

S&amp;P 500 TR USD

Category Index

 Russell 1000 TR  
USD

Morningstar Cat

US Fund Large Blend

**Performance** 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -0.77   | 3.42    | 7.70    | -13.53  | -4.42   |
| 2019              | 13.65   | 4.29    | 1.69    | 9.05    | 31.44   |
| 2020              | -19.60  | 20.54   | 8.92    | 12.14   | 18.37   |
| Trailing Returns  | 1 Yr    | 3 Yr    | 5 Yr    | 10 Yr   | Incept  |
| Std Mkt 12-31-20  | 18.40   | —       | 15.18   | 13.81   | 6.71    |
| Std NAV 12-31-20  | 18.37   | —       | 15.18   | 13.83   | 6.71    |
| Mkt Total Ret     | 18.40   | 14.08   | 15.18   | 13.81   | 6.71    |
| NAV Total Ret     | 18.37   | 14.14   | 15.18   | 13.83   | 6.71    |
| +/- Std Index     | -0.03   | -0.04   | -0.04   | -0.06   | —       |
| +/- Cat Index     | -2.59   | -0.68   | -0.42   | -0.18   | —       |
| % Rank Cat        | 38      | 24      | 20      | 12      | —       |
| No. in Cat        | 1,363   | 1,232   | 1,072   | 814     | —       |

 30-day SEC Yield 2020-03-31  
2.27

**Performance Disclosure**

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-474-2737 or visit [www.ishares.com](http://www.ishares.com).

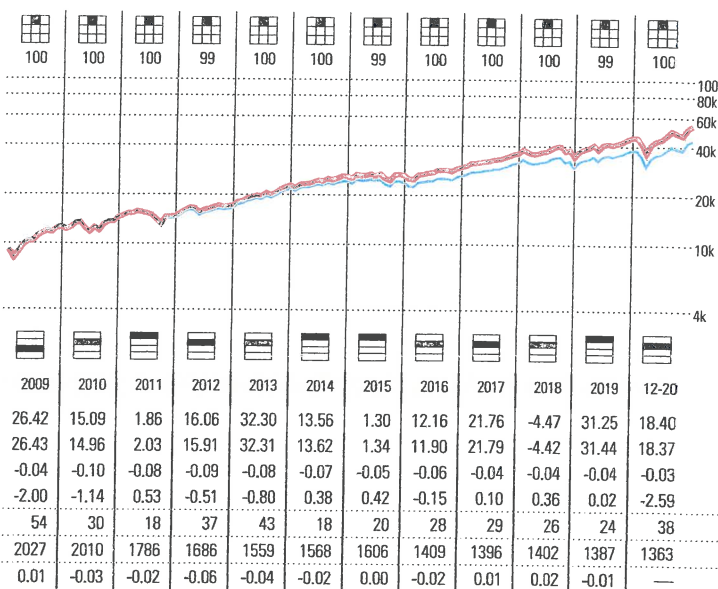
**Fees and Expenses**
**Fund Expenses**

|                                     |      |
|-------------------------------------|------|
| Management Fees %                   | 0.03 |
| Annual Report Net Expense Ratio %   | 0.04 |
| Annual Report Gross Expense Ratio % | 0.04 |
| 12b1 Expense %                      | NA   |

**Risk and Return Profile**

|                        | 3 Yr       | 5 Yr      | 10 Yr |
|------------------------|------------|-----------|-------|
| 1232 funds             | 1072 funds | 814 funds |       |
| Morningstar Rating™    | 4★         | 4★        | 5★    |
| Morningstar Risk       | Avg        | Avg       | Avg   |
| Morningstar Return     | +Avg       | +Avg      | +Avg  |
| Standard Deviation NAV | 18.80      | 15.26     | 13.54 |
| Standard Deviation MKT | 18.66      | 15.17     | 13.49 |
| Mean NAV               | 14.14      | 15.18     | 13.83 |
| Mean MKT               | 14.08      | 15.18     | 13.81 |
| Sharpe Ratio           | 0.72       | 0.93      | 0.98  |

| MPT Statistics               | Standard Index | Best Fit Index |
|------------------------------|----------------|----------------|
| NAV                          |                | S&P 500 TR USD |
| Alpha                        | -0.03          | -0.03          |
| Beta                         | 1.00           | 1.00           |
| R-Squared                    | 100.00         | 100.00         |
| 12-Month Yield               |                | 1.57%          |
| Potential Cap Gains Exp      |                | —              |
| Leveraged                    |                | No             |
| Leverage Type                |                | —              |
| Leverage %                   |                | 100.00         |
| Primary Prospectus Benchmark |                | S&P 500 TR USD |


**Investment Style**

 Equity  
Stocks %

**Growth of \$10,000**

 iShares Core S&P 500 ETF  
53,072  
Category Average  
43,696  
Standard Index  
53,403

**Performance Quartile**  
(within category)

**History**

 Mkt Total Ret %  
NAV Total Ret %  
+/- Standard Index  
+/- Category Index  
% Rank Cat  
No. of Funds in Cat  
Avg Prem/Discount %

**Portfolio Analysis** 01-21-2021

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 0.21   | 0.21   | 0.00    |
| US Stocks          | 98.92  | 98.92  | 0.00    |
| Non-US Stocks      | 0.88   | 0.88   | 0.00    |
| Bonds              | 0.00   | 0.00   | 0.00    |
| Other/Not Clsfd    | 0.00   | 0.00   | 0.00    |
| Total              | 100.00 | 100.00 | 0.00    |

**Equity Style**

| Value |  | Blend | Growth |
|-------|--|-------|--------|
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**Fixed-Income Style**

| Ltd              | Mod | Ext |
|------------------|-----|-----|
| High             | Mid | Low |
| Avg Eff Maturity | —   | —   |
| Avg Eff Duration | —   | —   |
| Avg Wtd Coupon   | —   | —   |
| Avg Wtd Price    | —   | —   |

**Credit Quality Breakdown** —

|         | Bond % |
|---------|--------|
| AAA     | —      |
| AA      | —      |
| A       | —      |
| BBB     | —      |
| BB      | —      |
| B       | —      |
| Below B | —      |
| NR      | —      |

**Regional Exposure**

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | 99.1     | 1.00          |
| Greater Europe | 0.8      | 0.96          |
| Greater Asia   | 0.0      | 0.98          |

**Top Holdings** 01-14-2021

| Share Chg since 01-2021 | Share Amount | Holdings : 505 Total Stocks, 0 Total Fixed-Income, 4% Turnover Ratio | Net Assets % |
|-------------------------|--------------|----------------------------------------------------------------------|--------------|
| +                       | 119 mil      | Apple Inc                                                            | 6.71         |
| +                       | 56 mil       | Microsoft Corp                                                       | 5.22         |
| +                       | 3 mil        | Amazon.com Inc                                                       | 4.33         |
| +                       | 18 mil       | Facebook Inc A                                                       | 2.01         |
| +                       | 6 mil        | Tesla Inc                                                            | 1.97         |
| +                       | 2 mil        | Alphabet Inc A                                                       | 1.74         |
| +                       | 2 mil        | Alphabet Inc Class C                                                 | 1.69         |
| +                       | 15 mil       | Berkshire Hathaway Inc Class B                                       | 1.40         |
| +                       | 20 mil       | Johnson & Johnson                                                    | 1.31         |
| +                       | 23 mil       | JPMorgan Chase & Co                                                  | 1.26         |
| +                       | 13 mil       | Visa Inc Class A                                                     | 1.07         |
| +                       | 5 mil        | NVIDIA Corp                                                          | 1.05         |
| +                       | 7 mil        | UnitedHealth Group Inc                                               | 1.03         |
| +                       | 18 mil       | Procter & Gamble Co                                                  | 1.00         |
| +                       | 14 mil       | The Walt Disney Co                                                   | 0.95         |

**Sector Weightings**

|                        | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>30.8</b> | <b>1.00</b>   |
| Basic Materials        | 2.3         | 1.01          |
| Consumer Cyclical      | 12.8        | 1.02          |
| Financial Services     | 13.4        | 0.99          |
| Real Estate            | 2.4         | 0.98          |
| <b>Sensitive</b>       | <b>46.2</b> | <b>1.00</b>   |
| Communication Services | 10.7        | 0.99          |
| Energy                 | 2.5         | 1.10          |
| Industrials            | 8.5         | 0.97          |
| Technology             | 24.5        | 1.01          |
| <b>Defensive</b>       | <b>23.0</b> | <b>0.99</b>   |
| Consumer Defensive     | 6.6         | 0.94          |
| Healthcare             | 13.7        | 1.01          |
| Utilities              | 2.7         | 0.98          |

**Operations**

|                     |                 |                  |            |
|---------------------|-----------------|------------------|------------|
| Family:             | iShares         | Ticker:          | IVV        |
| Manager:            | Multiple        | Incept:          | 05-15-2000 |
| Tenure:             | 13.0 Years      | Expiration Date: | —          |
| Total Assets:       | \$242,221.1 mil | Exchange:        | NYSE ARCA  |
| Shares Outstanding: | 630.15 mil      | NAV:             | 375.54     |
| Type:               | ETF             | Prem/Discount:   | -0.04      |

|                  |                               |
|------------------|-------------------------------|
| Mkt Price:       | 375.39                        |
| Base Currency:   | USD                           |
| Legal Structure: | Open Ended Investment Company |
| Backing Bank:    | BlackRock Fund Advisors       |

# iShares MSCI USA Min Vol Factor ETF (USD)

Morningstar Analyst Rating™  
Silver  
06-10-2020

Overall Morningstar Rating™  
★★★  
1,232 US Fund Large Blend

Standard Index  
S&P 500 TR USD

Category Index  
Russell 1000 TR USD

Morningstar Cat  
US Fund Large Blend

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -1.12   | 2.85    | 7.82    | -7.56   | 1.36    |
| 2019              | 12.70   | 5.56    | 4.24    | 3.04    | 27.77   |
| 2020              | -17.20  | 12.86   | 5.73    | 6.90    | 5.60    |
| Trailing Returns  | 1 Yr    | 3 Yr    | 5 Yr    | 10 Yr   | Incept  |
| Std Mkt 12-31-20  | 5.64    | —       | 12.44   | —       | 13.59   |
| Std NAV 12-31-20  | 5.60    | —       | 12.45   | —       | 13.61   |
| Mkt Total Ret     | 5.64    | 10.99   | 12.44   | —       | 13.59   |
| NAV Total Ret     | 5.60    | 11.00   | 12.45   | —       | 13.61   |
| +/- Std Index     | -12.80  | -3.18   | -2.77   | —       | —       |
| +/- Cat Index     | -15.36  | -3.82   | -3.15   | —       | —       |
| % Rank Cat        | 95      | 67      | 74      | —       | —       |
| No. in Cat        | 1,363   | 1,232   | 1,072   | —       | —       |

30-day SEC Yield 2020-03-31 2.50

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-474-2737 or visit [www.ishares.com](http://www.ishares.com).

## Fees and Expenses

### Fund Expenses

|                                     |      |
|-------------------------------------|------|
| Management Fees %                   | 0.15 |
| Annual Report Net Expense Ratio %   | 0.15 |
| Annual Report Gross Expense Ratio % | 0.15 |
| 12b1 Expense %                      | NA   |

## Risk and Return Profile

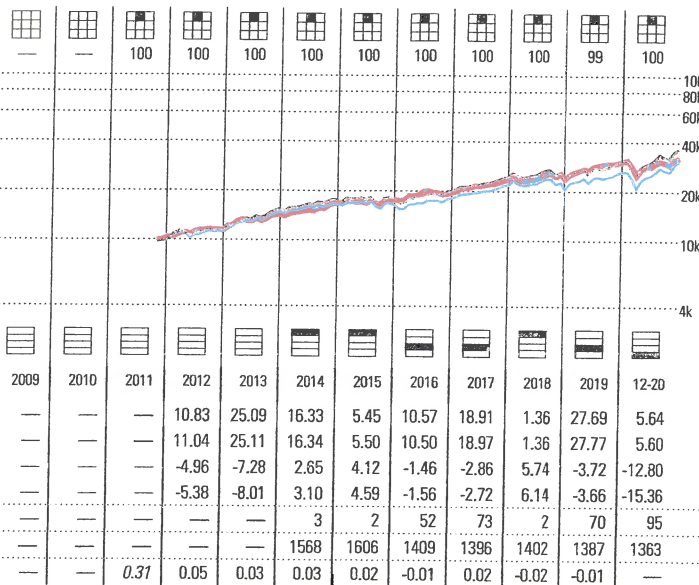
|                        | 3 Yr  | 5 Yr  | 10 Yr |
|------------------------|-------|-------|-------|
| Morningstar Rating™    | 3★    | 3★    | —     |
| Morningstar Risk       | Low   | Low   | —     |
| Morningstar Return     | Avg   | -Avg  | —     |
| Standard Deviation NAV | 14.79 | 12.23 | —     |
| Standard Deviation MKT | 14.60 | 12.08 | —     |
| Mean NAV               | 11.00 | 12.45 | —     |
| Mean MKT               | 10.99 | 12.44 | —     |
| Sharpe Ratio           | 0.68  | 0.93  | —     |

| MPT Statistics          | Standard Index | Best Fit Index                 |
|-------------------------|----------------|--------------------------------|
| NAV                     | —              | Morningstar US Mid Core TR USD |
| Alpha                   | 0.07           | 3.39                           |
| Beta                    | 0.74           | 0.64                           |
| R-Squared               | 88.12          | 89.06                          |
| 12-Month Yield          | —              | 1.81%                          |
| Potential Cap Gains Exp | —              | —                              |
| Leveraged               | —              | No                             |
| Leverage Type           | —              | —                              |
| Leverage %              | —              | 100.00                         |

| Primary Prospectus Benchmark | MSCI USA Minimum Volatility (USD) GR USD |
|------------------------------|------------------------------------------|
|------------------------------|------------------------------------------|

## Operations

|                     |                |                  |                 |
|---------------------|----------------|------------------|-----------------|
| Family:             | iShares        | Ticker:          | USMV            |
| Manager:            | Multiple       | Incept:          | 10-18-2011      |
| Tenure:             | 9.3 Years      | Expiration Date: | —               |
| Total Assets:       | \$30,990.9 mil | Exchange:        | BATS Z-EXCHANGE |
| Shares Outstanding: | 457.60 mil     | NAV:             | 67.89           |
| Type:               | ETF            | Prem/Discount:   | -0.01           |



## Portfolio Analysis 01-22-2021

| Asset Allocation % 01-21-2021 | Net %  | Long % | Short % |
|-------------------------------|--------|--------|---------|
| Cash                          | 0.26   | 0.26   | 0.00    |
| US Stocks                     | 97.40  | 97.40  | 0.00    |
| Non-US Stocks                 | 2.34   | 2.34   | 0.00    |
| Bonds                         | 0.00   | 0.00   | 0.00    |
| Other/Not Clsfd               | 0.00   | 0.00   | 0.00    |
| Total                         | 100.00 | 100.00 | 0.00    |

| Equity Style | Value | Risk | Growth |
|--------------|-------|------|--------|
| Large        | —     | —    | —      |
| Mid          | —     | —    | —      |
| Small        | —     | —    | —      |

| Portfolio Statistics  | Port Avg | Rel Index | Rel Cat |
|-----------------------|----------|-----------|---------|
| P/E Ratio TTM         | 26.0     | 0.92      | 1.05    |
| P/C Ratio TTM         | 15.6     | 0.94      | 0.97    |
| P/B Ratio TTM         | 4.2      | 1.06      | 18.02   |
| Geo Avg Mkt Cap \$mil | 69744    | 0.39      | 0.30    |

| Fixed-Income Style | Ltd | Mod | Ext |
|--------------------|-----|-----|-----|
| High               | —   | —   | —   |
| Mid                | —   | —   | —   |
| Low                | —   | —   | —   |

| Credit Quality Breakdown — | Bond % |
|----------------------------|--------|
| AAA                        | —      |
| AA                         | —      |
| A                          | —      |
| BBB                        | —      |
| BB                         | —      |
| B                          | —      |
| Below B                    | —      |
| NR                         | —      |

| Regional Exposure | Stocks % | Rel Std Index |
|-------------------|----------|---------------|
| Americas          | 98.8     | 1.00          |
| Greater Europe    | 1.2      | 1.33          |
| Greater Asia      | 0.0      | 0.00          |

## Top Holdings 01-21-2021

| Share Chg since 01-2021 | Share Amount | Holdings : 195 Total Stocks, 0 Total Fixed-Income, 22% Turnover Ratio | Net Assets % |
|-------------------------|--------------|-----------------------------------------------------------------------|--------------|
| —                       | 6 mil        | NextEra Energy Inc                                                    | 1.62         |
| —                       | 2 mil        | Vertex Pharmaceuticals Inc                                            | 1.62         |
| —                       | 3 mil        | Johnson & Johnson                                                     | 1.61         |
| —                       | 2 mil        | Eli Lilly and Co                                                      | 1.57         |
| —                       | 2 mil        | Microsoft Corp                                                        | 1.54         |
| —                       | 7 mil        | Gilead Sciences Inc                                                   | 1.50         |
| —                       | 4 mil        | T-Mobile US Inc                                                       | 1.50         |
| —                       | 7 mil        | Newmont Corp                                                          | 1.48         |
| —                       | 6 mil        | Merck & Co Inc                                                        | 1.48         |
| —                       | 2 mil        | Accenture PLC Class A                                                 | 1.48         |
| —                       | 2 mil        | McDonald's Corp                                                       | 1.45         |
| —                       | 2 mil        | Visa Inc Class A                                                      | 1.42         |
| —                       | 809,534      | Regeneron Pharmaceuticals Inc                                         | 1.39         |
| —                       | 4 mil        | Waste Management Inc                                                  | 1.39         |
| —                       | 8 mil        | Verizon Communications Inc                                            | 1.39         |

| Sector Weightings      | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>22.6</b> | <b>0.74</b>   |
| Basic Materials        | 2.6         | 1.14          |
| Consumer Cyclical      | 5.3         | 0.42          |
| Financial Services     | 11.5        | 0.85          |
| Real Estate            | 3.2         | 1.32          |
| <b>Sensitive</b>       | <b>37.5</b> | <b>0.82</b>   |
| Communication Services | 9.8         | 0.91          |
| Energy                 | 0.2         | 0.11          |
| Industrials            | 9.0         | 1.03          |
| Technology             | 18.5        | 0.76          |
| <b>Defensive</b>       | <b>39.9</b> | <b>1.71</b>   |
| Consumer Defensive     | 12.2        | 1.76          |
| Healthcare             | 20.1        | 1.48          |
| Utilities              | 7.6         | 2.75          |



# Vanguard Mid Cap Index Institutional (USD)

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | 0.00    | 2.57    | 4.68    | -15.47  | -9.24   |
| 2019              | 16.78   | 4.36    | 0.60    | 6.87    | 31.04   |
| 2020              | -25.71  | 24.96   | 7.94    | 18.02   | 18.26   |

| Trailing Returns | 1 Yr  | 3 Yr  | 5 Yr  | 10 Yr | Incept |
|------------------|-------|-------|-------|-------|--------|
| Load-adj Mthly   | 18.26 | 12.04 | 13.29 | 12.41 | 10.39  |
| Std 12-31-2020   | 18.26 | —     | 13.29 | 12.41 | 10.39  |
| Total Return     | 18.26 | 12.04 | 13.29 | 12.41 | 10.39  |
| +/- Std Index    | -0.13 | -2.14 | -1.93 | -1.48 | —      |
| +/- Cat Index    | 1.16  | 0.44  | -0.10 | 0.00  | —      |
| % Rank Cat       | 17    | 15    | 19    | 11    | —      |
| No. in Cat       | 407   | 374   | 309   | 215   | —      |

| 7-day Yield               | Subsidized | Unsubsidized |
|---------------------------|------------|--------------|
| 30-day SEC Yield 01-15-21 | 1.31       | 1.31         |

### Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-809-8102 or visit [www.vanguard.com](http://www.vanguard.com).

### Fees and Expenses

#### Sales Charges

Front-End Load %

NA

Deferred Load %

NA

#### Fund Expenses

Management Fees %

0.04

12b1 Expense %

NA

Net Expense Ratio %

0.04

Gross Expense Ratio %

0.04

#### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 4★   | 4★   | 5★    |
| Morningstar Risk    | Avg  | -Avg | -Avg  |
| Morningstar Return  | +Avg | +Avg | +Avg  |

|                    | 3 Yr  | 5 Yr  | 10 Yr |
|--------------------|-------|-------|-------|
| Standard Deviation | 21.69 | 17.79 | 15.62 |
| Mean               | 12.04 | 13.29 | 12.41 |
| Sharpe Ratio       | 0.56  | 0.73  | 0.79  |

| MPT Statistics | Standard Index     | Best Fit Index |
|----------------|--------------------|----------------|
|                | Morningstar US Mid | Cap TR USD     |
| Alpha          | -2.85              | -0.29          |
| Beta           | 1.12               | 0.99           |
| R-Squared      | 93.39              | 99.78          |

|                         | 3 Yr | 5 Yr   | 10 Yr |
|-------------------------|------|--------|-------|
| 12-Month Yield          |      | 1.45%  |       |
| Potential Cap Gains Exp |      | 26.82% |       |

#### Operations

|            |            |                           |              |
|------------|------------|---------------------------|--------------|
| Family:    | Vanguard   | Base Currency:            | USD          |
| Manager:   | Multiple   | Ticker:                   | VMCIX        |
| Tenure:    | 22.7 Years | ISIN:                     | US9229088359 |
| Objective: | Growth     | Minimum Initial Purchase: | \$5 mil      |

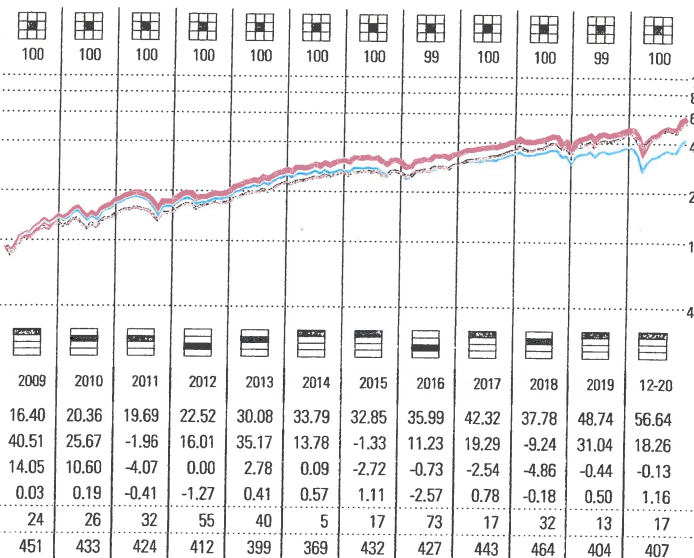
**Morningstar Analyst Rating™**  
Gold  
08-14-2020

**Overall Morningstar Rating™**  
★★★★★  
374 US Fund Mid-Cap Blend

**Standard Index**  
S&P 500 TR USD

**Category Index**  
Russell Mid Cap TR USD

**Morningstar Cat**  
US Fund Mid-Cap Blend



**Investment Style**  
Equity  
Stocks %

### Growth of \$10,000

Vanguard Mid Cap Index Institutional  
56,880  
Category Average  
42,736  
Standard Index  
53,403

**Performance Quartile**  
(within category)

### History

NAV/Price  
Total Return %  
+/- Standard Index  
+/- Category Index  
% Rank Cat  
No. of Funds in Cat

### Portfolio Analysis 12-31-2020

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 0.00   | 0.00   | 0.00    |
| US Stocks          | 97.98  | 97.98  | 0.00    |
| Non-US Stocks      | 2.01   | 2.01   | 0.00    |
| Bonds              | 0.00   | 0.00   | 0.00    |
| Other/Not Clsfd    | 0.00   | 0.00   | 0.00    |
| Total              | 100.00 | 100.00 | 0.00    |

| Equity Style | Value | Blend | Growth |
|--------------|-------|-------|--------|
| Large        | 100   | 100   | 100    |
| Mid          | 100   | 100   | 100    |
| Small        | 100   | 100   | 100    |

| Portfolio Statistics  | Port Avg | Rel Index | Rel Cat |
|-----------------------|----------|-----------|---------|
| P/E Ratio TTM         | 27.4     | 0.97      | 1.09    |
| P/C Ratio TTM         | 15.4     | 0.93      | 1.24    |
| P/B Ratio TTM         | 3.3      | 0.82      | 1.18    |
| Geo Avg Mkt Cap \$mil | 22762    | 0.13      | 2.02    |

### Credit Quality Breakdown —

|         | Bond % |
|---------|--------|
| AAA     | —      |
| AA      | —      |
| A       | —      |
| BBB     | —      |
| BB      | —      |
| B       | —      |
| Below B | —      |
| NR      | —      |

### Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | 98.4     | 0.99          |
| Greater Europe | 0.8      | 0.89          |
| Greater Asia   | 0.8      | 17.64         |

| Share Chg since 11-2020 | Share Amount | Holdings : 348 Total Stocks, 1 Total Fixed-Income, 15% Turnover Ratio | Net Assets % |
|-------------------------|--------------|-----------------------------------------------------------------------|--------------|
| —                       | 18 mil       | Twitter Inc                                                           | 0.74         |
| —                       | 2 mil        | IDEXX Laboratories Inc                                                | 0.73         |
| —                       | 3 mil        | KLA Corp                                                              | 0.68         |
| —                       | 3 mil        | Synopsys Inc                                                          | 0.67         |
| —                       | 7 mil        | Amphenol Corp Class A                                                 | 0.67         |
| —                       | 4 mil        | DocuSign Inc                                                          | 0.67         |
| —                       | 6 mil        | Digital Realty Trust Inc                                              | 0.67         |
| —                       | 632,354      | Chipotle Mexican Grill Inc Class A                                    | 0.66         |
| —                       | 6 mil        | Cadence Design Systems Inc                                            | 0.65         |
| —                       | 2 mil        | Align Technology Inc                                                  | 0.65         |
| —                       | 33 mil       | Freeport-McMoRan Inc                                                  | 0.65         |
| —                       | 6 mil        | Match Group Inc                                                       | 0.64         |
| —                       | 4 mil        | CrowdStrike Holdings Inc Class A                                      | 0.63         |
| —                       | 3 mil        | Veeva Systems Inc Class A                                             | 0.63         |
| —                       | 5 mil        | Peloton Interactive Inc                                               | 0.63         |

| Sector Weightings      | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>34.8</b> | <b>1.13</b>   |
| Basic Materials        | 3.9         | 1.74          |
| Consumer Cyclical      | 11.7        | 0.94          |
| Financial Services     | 10.7        | 0.79          |
| Real Estate            | 8.4         | 3.49          |
| <b>Sensitive</b>       | <b>42.9</b> | <b>0.93</b>   |
| Communication Services | 7.2         | 0.67          |
| Energy                 | 3.1         | 1.37          |
| Industrials            | 11.4        | 1.30          |
| Technology             | 21.1        | 0.87          |
| <b>Defensive</b>       | <b>22.3</b> | <b>0.96</b>   |
| Consumer Defensive     | 3.7         | 0.54          |
| Healthcare             | 12.8        | 0.94          |
| Utilities              | 5.8         | 2.10          |

# iShares Core S&P Small-Cap ETF (USD)

Morningstar Analyst Rating™  
Silver  
06-30-2020

Overall Morningstar Rating™  
★★★★  
629 US Fund Small Blend

Standard Index  
S&P 500 TR USD

Category Index  
Russell 2000 TR USD

Morningstar Cat  
US Fund Small Blend

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | 0.65    | 8.70    | 4.75    | -20.10  | -8.43   |
| 2019              | 11.59   | 1.87    | -0.20   | 8.23    | 22.79   |
| 2020              | -32.65  | 21.98   | 3.13    | 31.29   | 11.24   |
| Trailing Returns  | 1 Yr    | 3 Yr    | 5 Yr    | 10 Yr   | Incept  |
| Std Mkt 12-31-20  | 11.28   | —       | 12.37   | 11.89   | 10.01   |
| Std NAV 12-31-20  | 11.24   | —       | 12.36   | 11.89   | 10.01   |
| Mkt Total Ret     | 11.28   | 7.74    | 12.37   | 11.89   | 10.01   |
| NAV Total Ret     | 11.24   | 7.74    | 12.36   | 11.89   | 10.01   |
| +/- Std Index     | -7.16   | -6.44   | -2.86   | -1.99   | —       |
| +/- Cat Index     | -8.72   | -2.50   | -0.90   | 0.69    | —       |
| % Rank Cat        | 51      | 35      | 25      | 7       | —       |
| No. in Cat        | 671     | 629     | 517     | 367     | —       |

30-day SEC Yield 2020-03-31  
Subsidized 2.35  
Unsubsidized —

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-474-2737 or visit [www.ishares.com](http://www.ishares.com).

## Fees and Expenses

### Fund Expenses

Management Fees % 0.06

Annual Report Net Expense Ratio % 0.07

Annual Report Gross Expense Ratio % 0.07

12b1 Expense % NA

## Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 3★   | 4★   | 5★    |
| Morningstar Risk    | Avg  | Avg  | Avg   |
| Morningstar Return  | Avg  | +Avg | High  |

|                        | 3 Yr  | 5 Yr  | 10 Yr |
|------------------------|-------|-------|-------|
| Standard Deviation NAV | 25.86 | 21.73 | 18.57 |
| Standard Deviation MKT | 25.94 | 21.78 | 18.59 |
| Mean NAV               | 7.74  | 12.36 | 11.89 |
| Mean MKT               | 7.74  | 12.37 | 11.89 |
| Sharpe Ratio           | 0.36  | 0.59  | 0.67  |

| MPT Statistics | Standard Index | Best Fit Index      |
|----------------|----------------|---------------------|
| NAV            | —              | Russell 2000 TR USD |
| Alpha          | -7.82          | -2.25               |
| Beta           | 1.27           | 1.00                |
| R-Squared      | 84.85          | 98.72               |

12-Month Yield 1.11%

Potential Cap Gains Exp —

Leveraged No

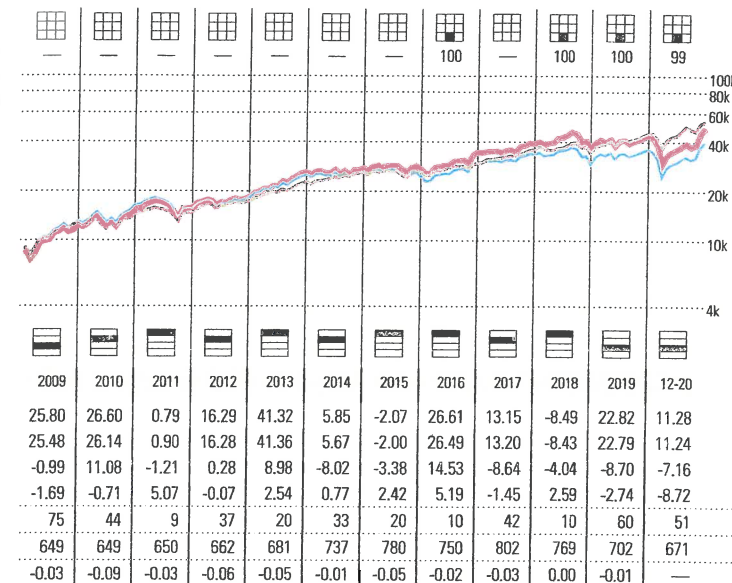
Leverage Type —

Leverage % 100.00

Primary Prospectus Benchmark S&P SmallCap 600 TR USD

## Operations

Family: iShares  
Manager: Multiple  
Tenure: 13.0 Years  
Total Assets: \$63,026.1 mil  
Shares Outstanding: 622.85 mil  
Type: ETF



## Portfolio Analysis 01-21-2021

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 0.28   | 1.19   | 0.91    |
| US Stocks          | 98.83  | 98.83  | 0.00    |
| Non-US Stocks      | 0.88   | 0.88   | 0.00    |
| Bonds              | 0.00   | 0.00   | 0.00    |
| Other/Not Clsfd    | 0.00   | 0.00   | 0.00    |
| Total              | 100.00 | 100.91 | 0.91    |

| Equity Style | Portfolio Statistics  | Port Avg | Rel Index | Rel Cat |
|--------------|-----------------------|----------|-----------|---------|
| Value        | P/E Ratio TTM         | 20.8     | 0.73      | 1.00    |
| Blend        | P/C Ratio TTM         | 8.5      | 0.52      | 0.87    |
| Growth       | P/B Ratio TTM         | 1.9      | 0.48      | 4.68    |
| Large        | Geo Avg Mkt Cap \$mil | 1922     | 0.01      | 0.45    |
| Mid          |                       |          |           |         |
| Small        |                       |          |           |         |

## Fixed-Income Style

| Fixed-Income Style | Avg Eff Maturity | Avg Eff Duration | Avg Wtd Coupon | Avg Wtd Price |
|--------------------|------------------|------------------|----------------|---------------|
| Ltd                | —                | —                | —              | —             |
| Mod                | —                | —                | —              | —             |
| Ext                | —                | —                | —              | —             |
| High               | —                | —                | —              | —             |
| Mid                | —                | —                | —              | —             |
| Low                | —                | —                | —              | —             |

## Credit Quality Breakdown —

| Credit Quality Breakdown — | Bond % |
|----------------------------|--------|
| AAA                        | —      |
| AA                         | —      |
| A                          | —      |
| BBB                        | —      |
| BB                         | —      |
| B                          | —      |
| Below B                    | —      |
| NR                         | —      |

## Regional Exposure

| Regional Exposure | Stocks % | Rel Std Index |
|-------------------|----------|---------------|
| Americas          | 99.7     | 1.01          |
| Greater Europe    | 0.1      | 0.06          |
| Greater Asia      | 0.3      | 5.82          |

## Top Holdings 01-14-2021

| Share Chg since 01-2021 | Share Amount | Holdings : 602 Total Stocks, 0 Total Fixed-Income, 16% Turnover Ratio | Net Assets % |
|-------------------------|--------------|-----------------------------------------------------------------------|--------------|
| —                       | 727 mil      | BlackRock Cash Funds Treasury SL A                                    | 1.17         |
| —                       | 27 mil       | Cliffs Natural Resources Inc.                                         | 0.70         |
| +                       | 7 mil        | NeoGenomics Inc                                                       | 0.66         |
| +                       | 8 mil        | Iridium Communications Inc                                            | 0.60         |
| +                       | 4 mil        | Power Integrations Inc                                                | 0.59         |
| +                       | 2 mil        | Saia Inc                                                              | 0.55         |
| +                       | 3 mil        | Omniceil Inc                                                          | 0.54         |
| +                       | 2 mil        | Proto Labs Inc                                                        | 0.54         |
| +                       | 4 mil        | Crocs Inc                                                             | 0.53         |
| +                       | 2 mil        | Chart Industries Inc                                                  | 0.52         |
| +                       | 3 mil        | Exponent Inc                                                          | 0.51         |
| +                       | 3 mil        | Advanced Energy Industries Inc                                        | 0.49         |
| +                       | 1 mil        | Innovative Industrial Properties I                                    | 0.47         |
| +                       | 3 mil        | Alarm.com Holdings Inc                                                | 0.46         |
| +                       | 3 mil        | Ensign Group Inc                                                      | 0.45         |

## Sector Weightings

| Sector Weightings      | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>43.5</b> | <b>1.42</b>   |
| Basic Materials        | 5.8         | 2.57          |
| Consumer Cyclical      | 13.5        | 1.08          |
| Financial Services     | 15.5        | 1.15          |
| Real Estate            | 8.6         | 3.56          |
| <b>Sensitive</b>       | <b>39.5</b> | <b>0.86</b>   |
| Communication Services | 2.9         | 0.27          |
| Energy                 | 3.5         | 1.53          |
| Industrials            | 17.9        | 2.04          |
| Technology             | 15.2        | 0.63          |
| <b>Defensive</b>       | <b>17.1</b> | <b>0.73</b>   |
| Consumer Defensive     | 3.6         | 0.52          |
| Healthcare             | 12.0        | 0.89          |
| Utilities              | 1.4         | 0.52          |



# iShares Core MSCI EAFE ETF (USD)

**Morningstar Analyst Rating™**  
Silver  
11-27-2020

**Overall Morningstar Rating™**  
★★★  
676 US Fund Foreign Large Blend

**Standard Index**  
MSCI ACWI Ex  
USA NR USD

**Category Index**  
MSCI ACWI Ex  
USA NR USD

**Morningstar Cat**  
US Fund Foreign Large Blend

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -1.39   | -1.01   | 1.07    | -13.03  | -14.20  |
| 2019              | 10.12   | 3.54    | -0.94   | 8.62    | 22.67   |
| 2020              | -23.52  | 15.68   | 5.52    | 16.27   | 8.55    |
| Trailing Returns  | 1 Yr    | 3 Yr    | 5 Yr    | 10 Yr   | Incept  |
| Std Mkt 12-31-20  | 8.17    | —       | 7.93    | —       | 7.29    |
| Std NAV 12-31-20  | 8.55    | —       | 7.92    | —       | 7.32    |
| Mkt Total Ret     | 8.17    | 4.43    | 7.93    | —       | 7.29    |
| NAV Total Ret     | 8.55    | 4.54    | 7.92    | —       | 7.32    |
| +/- Std Index     | -2.11   | -0.34   | -1.00   | —       | —       |
| +/- Cat Index     | -2.11   | -0.34   | -1.00   | —       | —       |
| % Rank Cat        | 51      | 48      | 43      | —       | —       |
| No. in Cat        | 785     | 676     | 586     | —       | —       |

30-day SEC Yield 2020-03-31  
Subsidized 3.46  
Unsubsidized —

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-474-2737 or visit [www.ishares.com](http://www.ishares.com).

## Fees and Expenses

| Fund Expenses                       |      |
|-------------------------------------|------|
| Management Fees %                   | 0.07 |
| Annual Report Net Expense Ratio %   | 0.07 |
| Annual Report Gross Expense Ratio % | 0.07 |
| 12b1 Expense %                      | NA   |

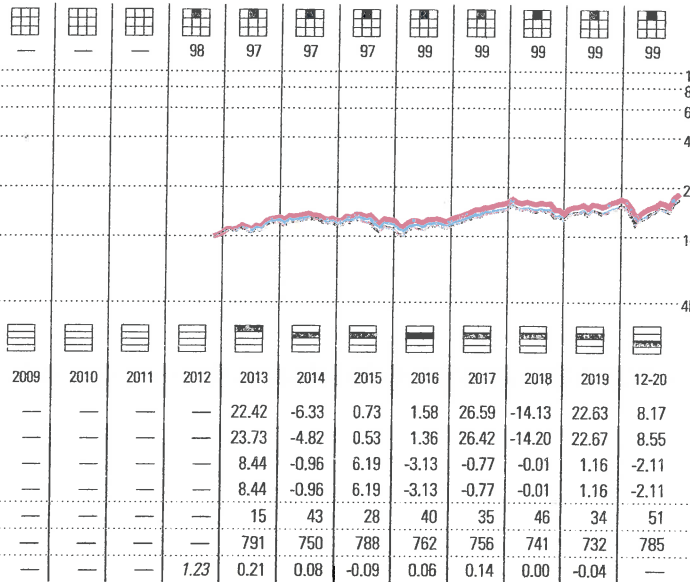
## Risk and Return Profile

|                        | 3 Yr  | 5 Yr  | 10 Yr |
|------------------------|-------|-------|-------|
| Morningstar Rating™    | 3★    | 3★    | —     |
| Morningstar Risk       | Avg   | Avg   | —     |
| Morningstar Return     | Avg   | Avg   | —     |
|                        | 3 Yr  | 5 Yr  | 10 Yr |
| Standard Deviation NAV | 18.43 | 15.65 | —     |
| Standard Deviation MKT | 18.04 | 15.14 | —     |
| Mean NAV               | 4.54  | 7.92  | —     |
| Mean MKT               | 4.43  | 7.93  | —     |
| Sharpe Ratio           | 0.25  | 0.49  | —     |

| MPT Statistics               | Standard Index       | Best Fit Index   |
|------------------------------|----------------------|------------------|
| NAV                          | MSCI EAFE NR USD     | MSCI EAFE NR USD |
| Alpha                        | -0.30                | 0.24             |
| Beta                         | 1.00                 | 1.02             |
| R-Squared                    | 97.50                | 99.85            |
| 12-Month Yield               | —                    | 1.89%            |
| Potential Cap Gains Exp      | —                    | —                |
| Leveraged                    | —                    | No               |
| Leverage Type                | —                    | —                |
| Leverage %                   | —                    | 100.00           |
| Primary Prospectus Benchmark | MSCI EAFE IMI NR USD | —                |

## Operations

|                     |                |                  |                 |
|---------------------|----------------|------------------|-----------------|
| Family:             | iShares        | Ticker:          | IEFA            |
| Manager:            | Multiple       | Incept:          | 10-18-2012      |
| Tenure:             | 8.3 Years      | Expiration Date: | —               |
| Total Assets:       | \$86,108.1 mil | Exchange:        | BATS Z-EXCHANGE |
| Shares Outstanding: | 1,211.40 mil   | NAV:             | 69.40           |
| Type:               | ETF            | Prem/Discount:   | -0.45           |



**Investment Style**  
Equity  
Stocks %

**Growth of \$10,000**  
iShares Core MSCI EAFE ETF 18,309  
Category Average 16,796  
Standard Index 16,904

**Performance Quartile**  
(within category)

**History**  
Mkt Total Ret %  
NAV Total Ret %  
+/- Standard Index  
+/- Category Index  
% Rank Cat  
No. of Funds in Cat  
Avg Prem/Discount %

## Portfolio Analysis 01-20-2021

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 0.55   | 0.56   | 0.00    |
| US Stocks          | 0.91   | 0.91   | 0.00    |
| Non-US Stocks      | 98.40  | 98.40  | 0.00    |
| Bonds              | 0.00   | 0.00   | 0.00    |
| Other/Not Clsfd    | 0.13   | 0.13   | 0.00    |
| Total              | 100.00 | 100.00 | 0.00    |

| Equity Style          | Value    | Blend     | Growth  |
|-----------------------|----------|-----------|---------|
| Large                 | —        | —         | —       |
| Mid                   | —        | —         | —       |
| Small                 | —        | —         | —       |
| Portfolio Statistics  | Port Avg | Rel Index | Rel Cat |
| P/E Ratio TTM         | 21.2     | 1.04      | 1.01    |
| P/C Ratio TTM         | 9.9      | 0.96      | 0.91    |
| P/B Ratio TTM         | 1.7      | 0.92      | 3.20    |
| Geo Avg Mkt Cap \$mil | 27597    | 0.63      | 0.56    |

| Fixed-Income Style | Ltd              | Mod              | Ext            |
|--------------------|------------------|------------------|----------------|
| High               | —                | —                | —              |
| Mid                | —                | —                | —              |
| Low                | —                | —                | —              |
|                    | Avg Eff Maturity | Avg Eff Duration | Avg Wtd Coupon |
|                    | —                | —                | —              |
|                    | Avg Wtd Price    | —                | —              |

| Credit Quality Breakdown — | Bond % |
|----------------------------|--------|
| AAA                        | —      |
| AA                         | —      |
| A                          | —      |
| BBB                        | —      |
| BB                         | —      |
| B                          | —      |
| Below B                    | —      |
| NR                         | —      |

| Regional Exposure | Stocks % | Rel Std Index |
|-------------------|----------|---------------|
| Americas          | 0.9      | 0.10          |
| Greater Europe    | 60.2     | 1.42          |
| Greater Asia      | 38.9     | 0.81          |

## Top Holdings 01-13-2021

| Share Chg<br>since<br>01-2021 | Share<br>Amount | Holdings :<br>2,651 Total Stocks , 3 Total Fixed-Income,<br>2% Turnover Ratio | Net Assets<br>% |
|-------------------------------|-----------------|-------------------------------------------------------------------------------|-----------------|
|                               | 13 mil          | Nestle SA                                                                     | 1.70            |
|                               | 3 mil           | Roche Holding AG Dividend Right Ce                                            | 1.31            |
|                               | 2 mil           | ASML Holding NV                                                               | 1.21            |
|                               | 10 mil          | Novartis AG                                                                   | 1.12            |
|                               | 1 mil           | LVMH Moet Hennessy Louis Vuitton SE                                           | 0.89            |
|                               | 54 mil          | AIA Group Ltd                                                                 | 0.85            |
|                               | 9 mil           | Toyota Motor Corp                                                             | 0.82            |
|                               | 12 mil          | Unilever PLC                                                                  | 0.81            |
|                               | 6 mil           | AstraZeneca PLC                                                               | 0.71            |
|                               | 5 mil           | SAP SE                                                                        | 0.69            |
|                               | 7 mil           | SoftBank Group Corp                                                           | 0.69            |
|                               | 6 mil           | Sony Corp                                                                     | 0.67            |
|                               | 8 mil           | Novo Nordisk A/S B                                                            | 0.65            |
|                               | 8 mil           | Commonwealth Bank of Australia                                                | 0.60            |
|                               | 11 mil          | Total SA                                                                      | 0.59            |

| Sector Weightings      | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>39.0</b> | <b>0.95</b>   |
| Basic Materials        | 8.0         | 1.00          |
| Consumer Cyclical      | 11.1        | 0.91          |
| Financial Services     | 15.6        | 0.87          |
| Real Estate            | 4.2         | 1.57          |
| <b>Sensitive</b>       | <b>35.2</b> | <b>0.96</b>   |
| Communication Services | 5.8         | 0.74          |
| Energy                 | 3.3         | 0.75          |
| Industrials            | 16.3        | 1.43          |
| Technology             | 9.8         | 0.75          |
| <b>Defensive</b>       | <b>25.8</b> | <b>1.16</b>   |
| Consumer Defensive     | 9.8         | 1.07          |
| Healthcare             | 12.4        | 1.26          |
| Utilities              | 3.7         | 1.11          |

# iShares Core MSCI Emerging Markets ETF (USD)

**Morningstar Analyst Rating™**  
**Bronze**  
03-31-2020

**Overall Morningstar Rating™**  
★★★  
697 US Fund Diversified  
Emerging Mkts

**Standard Index**  
MSCI ACWI Ex  
USA NR USD

**Category Index**  
MSCI EM NR USD

**Morningstar Cat**  
US Fund Diversified  
Emerging Mkts

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | 1.20    | -7.76   | -1.37   | -7.34   | -14.69  |
| 2019              | 9.53    | 0.47    | -4.28   | 11.54   | 17.50   |
| 2020              | -24.40  | 18.90   | 9.77    | 19.78   | 18.18   |

| Trailing Returns | 1 Yr  | 3 Yr  | 5 Yr  | 10 Yr | Incept |
|------------------|-------|-------|-------|-------|--------|
| Std Mkt 12-31-20 | 17.88 | —     | 12.35 | —     | 5.35   |
| Std NAV 12-31-20 | 18.18 | —     | 12.25 | —     | 5.39   |
| Mkt Total Ret    | 17.88 | 5.71  | 12.35 | —     | 5.35   |
| NAV Total Ret    | 18.18 | 5.81  | 12.25 | —     | 5.39   |
| +/- Std Index    | 7.53  | 0.93  | 3.32  | —     | —      |
| +/- Cat Index    | -0.13 | -0.36 | -0.56 | —     | —      |
| % Rank Cat       | 40    | 44    | 40    | —     | —      |
| No. in Cat       | 796   | 697   | 597   | —     | —      |

| 30-day SEC Yield 2020-03-31 | Subsidized | Unsubsidized |
|-----------------------------|------------|--------------|
|                             | 2.83       | —            |

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-474-2737 or visit [www.ishares.com](http://www.ishares.com).

## Fees and Expenses

### Fund Expenses

|                   |      |
|-------------------|------|
| Management Fees % | 0.11 |
|-------------------|------|

|                                          |             |
|------------------------------------------|-------------|
| <b>Annual Report Net Expense Ratio %</b> | <b>0.14</b> |
|------------------------------------------|-------------|

|                                            |             |
|--------------------------------------------|-------------|
| <b>Annual Report Gross Expense Ratio %</b> | <b>0.14</b> |
| 12b1 Expense %                             | NA          |

## Risk and Return Profile

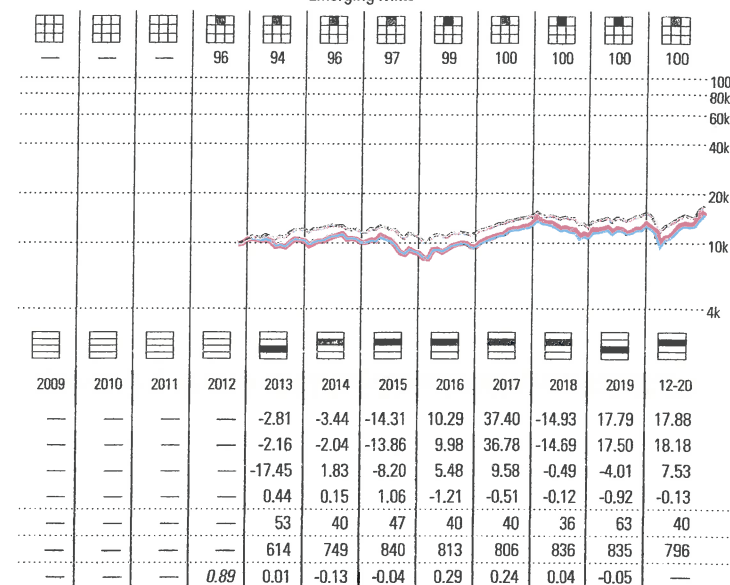
|                     | 3 Yr            | 5 Yr            | 10 Yr          |
|---------------------|-----------------|-----------------|----------------|
| Morningstar Rating™ | 697 funds<br>3★ | 597 funds<br>3★ | 278 funds<br>— |
| Morningstar Risk    | Avg             | Avg             | —              |
| Morningstar Return  | Avg             | Avg             | —              |

|                        | 3 Yr  | 5 Yr  | 10 Yr |
|------------------------|-------|-------|-------|
| Standard Deviation NAV | 20.04 | 17.61 | —     |
| Standard Deviation MKT | 20.33 | 17.73 | —     |
| Mean NAV               | 5.81  | 12.25 | —     |
| Mean MKT               | 5.71  | 12.35 | —     |
| Sharpe Ratio           | 0.31  | 0.68  | —     |

| MPT Statistics               | Standard Index | Best Fit Index     |
|------------------------------|----------------|--------------------|
| NAV                          | —              | MSCI EM NR USD     |
| Alpha                        | 1.07           | -0.35              |
| Beta                         | 1.04           | 1.01               |
| R-Squared                    | 88.27          | 99.82              |
| 12-Month Yield               | —              | 1.87%              |
| Potential Cap Gains Exp      | —              | —                  |
| Leveraged                    | —              | No                 |
| Leverage Type                | —              | —                  |
| Leverage %                   | —              | 100.00             |
| Primary Prospectus Benchmark | —              | MSCI EM IMI NR USD |

## Operations

|                     |                |
|---------------------|----------------|
| Family:             | iShares        |
| Manager:            | Multiple       |
| Tenure:             | 8.3 Years      |
| Total Assets:       | \$77,052.5 mil |
| Shares Outstanding: | 1,155.00 mil   |
| Type:               | ETF            |



**Investment Style**  
Equity  
Stocks %

## Growth of \$10,000

iShares Core MSCI Emerging Markets ETF  
15,683  
Category Average  
15,027  
Standard Index  
16,904

## Performance Quintile (within category)

## History

|                     |       |
|---------------------|-------|
| Mkt Total Ret %     | 17.88 |
| NAV Total Ret %     | 18.18 |
| +/- Standard Index  | 7.53  |
| +/- Category Index  | -0.13 |
| % Rank Cat          | 40    |
| No. of Funds in Cat | 796   |
| Avg Prem/Discount % | —     |

## Portfolio Analysis 01-20-2021

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 0.16   | 0.27   | 0.11    |
| US Stocks          | 0.21   | 0.21   | 0.00    |
| Non-US Stocks      | 99.59  | 99.59  | 0.00    |
| Bonds              | 0.00   | 0.00   | 0.00    |
| Other/Not Clsfd    | 0.04   | 0.04   | 0.00    |
| Total              | 100.00 | 100.11 | 0.11    |

| Equity Style | Portfolio Statistics  | Port Avg | Rel Index | Rel Cat |
|--------------|-----------------------|----------|-----------|---------|
| Value        | P/E Ratio TTM         | 18.9     | 0.93      | 0.87    |
| Blend        | P/C Ratio TTM         | 10.3     | 1.00      | 0.82    |
| Growth       | P/B Ratio TTM         | 1.9      | 1.08      | 5.10    |
| Large        | Geo Avg Mkt Cap \$mil | 37629    | 0.85      | 0.58    |
| Mid          |                       |          |           |         |
| Small        |                       |          |           |         |

| Fixed-Income Style | Avg Eff Maturity | Avg Eff Duration | Avg Wtd Coupon | Avg Wtd Price |
|--------------------|------------------|------------------|----------------|---------------|
| Ltd                | —                | —                | —              | —             |
| Mod                | —                | —                | —              | —             |
| Ext                | —                | —                | —              | —             |
| High               | —                | —                | —              | —             |
| Med                | —                | —                | —              | —             |
| Low                | —                | —                | —              | —             |

| Credit Quality Breakdown | Bond % |
|--------------------------|--------|
| AAA                      | —      |
| AA                       | —      |
| A                        | —      |
| BBB                      | —      |
| BB                       | —      |
| B                        | —      |
| Below B                  | —      |
| NR                       | —      |

| Regional Exposure | Stocks % | Rel Std Index |
|-------------------|----------|---------------|
| Americas          | 7.8      | 0.82          |
| Greater Europe    | 11.9     | 0.28          |
| Greater Asia      | 80.3     | 1.67          |

## Top Holdings 01-13-2021

| Share Chg since 01-2021 | Share Amount | Holdings : 2,491 Total Stocks, 15% Turnover Ratio | 0 Total Fixed-Income, 0 Total Cash | Net Assets % |
|-------------------------|--------------|---------------------------------------------------|------------------------------------|--------------|
| 201 mil                 |              | Taiwan Semiconductor Manufacturing                |                                    | 6.01         |
| 47 mil                  |              | Tencent Holdings Ltd                              |                                    | 5.32         |
| 15 mil                  |              | Alibaba Group Holding Ltd ADR                     |                                    | 5.31         |
| 39 mil                  |              | Samsung Electronics Co Ltd                        |                                    | 3.99         |
| 29 mil                  |              | Meituan                                           |                                    | 1.82         |
| 4 mil                   |              | Naspers Ltd Class N                               |                                    | 1.08         |
| 7 mil                   |              | JD.com Inc ADR                                    |                                    | 0.87         |
| 23 mil                  |              | Reliance Industries Ltd                           |                                    | 0.85         |
| 48 mil                  |              | Ping An Insurance (Group) Co. of C                |                                    | 0.82         |
| 783 mil                 |              | China Construction Bank Corp Class                |                                    | 0.81         |
| 10 mil                  |              | NIO Inc ADR                                       |                                    | 0.78         |
| 2 mil                   |              | Baidu Inc ADR                                     |                                    | 0.75         |
| 3 mil                   |              | Pinduoduo Inc ADR                                 |                                    | 0.69         |
| 4 mil                   |              | SK Hynix Inc                                      |                                    | 0.68         |
| 30 mil                  |              | VALE SA                                           |                                    | 0.68         |

| Sector Weightings      | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>43.5</b> | <b>1.06</b>   |
| Basic Materials        | 7.8         | 0.96          |
| Consumer Cyclical      | 16.5        | 1.36          |
| Financial Services     | 16.5        | 0.92          |
| Real Estate            | 2.7         | 1.02          |
| <b>Sensitive</b>       | <b>43.2</b> | <b>1.18</b>   |
| Communication Services | 12.2        | 1.54          |
| Energy                 | 4.6         | 1.04          |
| Industrials            | 5.2         | 0.46          |
| Technology             | 21.3        | 1.63          |
| <b>Defensive</b>       | <b>13.2</b> | <b>0.59</b>   |
| Consumer Defensive     | 5.9         | 0.64          |
| Healthcare             | 5.2         | 0.53          |
| Utilities              | 2.1         | 0.63          |



# Baird Aggregate Bond Inst (USD)

**Morningstar Analyst Rating™**  
**Gold**  
 02-19-2020

**Overall Morningstar Rating™**  
 ★★★★★  
 380 US Fund Intermediate  
 Core Bond

**Standard Index**  
 BBgBarc US Agg  
 Bond TR USD

**Category Index**  
 BBgBarc US Agg  
 Bond TR USD

**Morningstar Cat**  
 US Fund Intermediate  
 Core Bond

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -1.52   | -0.24   | 0.07    | 1.41    | -0.30   |
| 2019              | 3.32    | 3.16    | 2.41    | 0.30    | 9.48    |
| 2020              | 1.50    | 4.79    | 1.06    | 1.07    | 8.63    |
| Trailing Returns  | 1 Yr    | 3 Yr    | 5 Yr    | 10 Yr   | Incept  |
| Load-adj Mthly    | 8.63    | 5.84    | 5.04    | 4.68    | 5.50    |
| Std 12-31-2020    | 8.63    | —       | 5.04    | 4.68    | 5.50    |
| Total Return      | 8.63    | 5.84    | 5.04    | 4.68    | 5.50    |
| +/- Std Index     | 1.12    | 0.50    | 0.61    | 0.84    | —       |
| +/- Cat Index     | 1.12    | 0.50    | 0.61    | 0.84    | —       |
| % Rank Cat        | 22      | 14      | 11      | 5       | —       |
| No. in Cat        | 415     | 380     | 330     | 252     | —       |

|                           | Subsidized | Unsubsidized |
|---------------------------|------------|--------------|
| 7-day Yield               | —          | —            |
| 30-day SEC Yield 12-31-20 | 1.33       | 0.00         |

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 866-442-2473 or visit [www.bairdfunds.com](http://www.bairdfunds.com).

## Fees and Expenses

### Sales Charges

Front-End Load %

NA

Deferred Load %

NA

### Fund Expenses

Management Fees %

0.25

12b1 Expense %

NA

Net Expense Ratio %

0.30

Gross Expense Ratio %

0.30

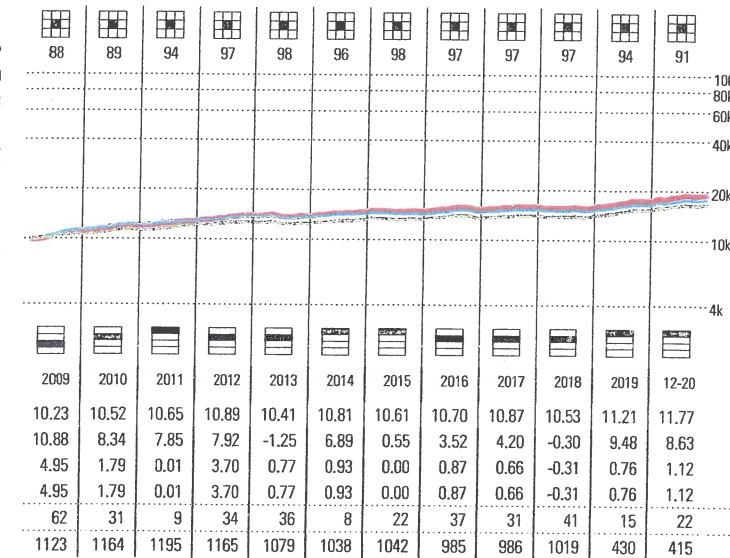
### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 4★   | 4★   | 5★    |
| Morningstar Risk    | Avg  | Avg  | Avg   |
| Morningstar Return  | +Avg | +Avg | High  |
| Standard Deviation  | 3.81 | 3.41 | 3.11  |
| Mean                | 5.84 | 5.04 | 4.68  |
| Sharpe Ratio        | 1.12 | 1.12 | 1.29  |

| MPT Statistics          | Standard Index | Best Fit Index<br>BBgBarc US<br>Universal TR USD |
|-------------------------|----------------|--------------------------------------------------|
| Alpha                   | 0.22           | 0.02                                             |
| Beta                    | 1.07           | 1.09                                             |
| R-Squared               | 91.19          | 98.00                                            |
| 12-Month Yield          |                | 2.25%                                            |
| Potential Cap Gains Exp |                | 3.47%                                            |

### Operations

|                |            |
|----------------|------------|
| Family:        | Baird      |
| Manager:       | Multiple   |
| Tenure:        | 20.3 Years |
| Objective:     | Income     |
| Base Currency: | USD        |



**Investment Style**  
 Fixed-Income  
 Bond %

## Growth of \$10,000

Baird Aggregate Bond Inst  
 18,979  
 Category Average  
 17,722  
 Standard Index  
 16,450

**Performance Quartile**  
 (within category)

## History

NAV/Price  
 Total Return %  
 +/- Standard Index  
 +/- Category Index  
 % Rank Cat  
 No. of Funds in Cat

## Portfolio Analysis 12-31-2020

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 5.39   | 5.39   | 0.00    |
| US Stocks          | 0.00   | 0.00   | 0.00    |
| Non-US Stocks      | 0.00   | 0.00   | 0.00    |
| Bonds              | 90.76  | 90.76  | 0.00    |
| Other/Not Clsfd    | 3.85   | 3.85   | 0.00    |
| Total              | 100.00 | 100.00 | 0.00    |

## Equity Style

| Value | Blend | Growth |
|-------|-------|--------|
| Large | —     | —      |
| Mid   | —     | —      |
| Small | —     | —      |

## Fixed-Income Style

| Ltd  | Mod | Ext |
|------|-----|-----|
| High | —   | —   |
| Mid  | —   | —   |
| Low  | —   | —   |

## Portfolio Statistics

|                       | Port Avg | Rel Index | Rel Cat |
|-----------------------|----------|-----------|---------|
| P/E Ratio TTM         | —        | —         | —       |
| P/C Ratio TTM         | —        | —         | —       |
| P/B Ratio TTM         | —        | —         | —       |
| Geo Avg Mkt Cap \$mil | —        | —         | —       |
| Avg Eff Maturity      | 7.94     | —         | —       |
| Avg Eff Duration      | 6.22     | —         | —       |
| Avg Wtd Coupon        | 3.35     | —         | —       |
| Avg Wtd Price         | 111.91   | —         | —       |

## Credit Quality Breakdown 12-31-2020

|         | Bond % |
|---------|--------|
| AAA     | 56.30  |
| AA      | 3.60   |
| A       | 15.80  |
| BBB     | 23.30  |
| BB      | 1.00   |
| B       | 0.00   |
| Below B | 0.00   |
| NR      | 0.00   |

## Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | —        | —             |
| Greater Europe | —        | —             |
| Greater Asia   | —        | —             |

## Top Holdings 09-30-2020

| Share Chg since 09-2020 | Share Amount | Holdings : 0 Total Stocks, 1,753 Total Fixed-Income, 31% Turnover Ratio | Net Assets % |
|-------------------------|--------------|-------------------------------------------------------------------------|--------------|
| +                       | 1,329 mil    | United States Treasury Bonds 2.875%                                     | 5.11         |
| +                       | 1,549 mil    | First American Government Obligs U                                      | 4.71         |
| -                       | 1,092 mil    | United States Treasury Notes 1.875%                                     | 3.39         |
| +                       | 899 mil      | United States Treasury Bonds 2.5%                                       | 3.26         |
| +                       | 617 mil      | United States Treasury Notes 2.25%                                      | 2.08         |
| +                       | 567 mil      | United States Treasury Notes 2.5%                                       | 1.86         |
| +                       | 534 mil      | United States Treasury Notes 2%                                         | 1.77         |
| +                       | 474 mil      | United States Treasury Notes 2.125%                                     | 1.50         |
| +                       | 349 mil      | United States Treasury Bonds 2.875%                                     | 1.37         |
| +                       | 275 mil      | United States Treasury Notes 2.25%                                      | 0.91         |
| +                       | 167 mil      | United States Treasury Notes 1.625%                                     | 0.54         |
| -                       | 157 mil      | Federal Home Loan Banks 4%                                              | 0.53         |
| -                       | 140 mil      | Government National Mortgage Assoc                                      | 0.46         |
| *                       | 107 mil      | Fmna Pass-Thru 1 2.5%                                                   | 0.35         |
| *                       | 110 mil      | Towd Point Mortgage Trust 1.75%                                         | 0.34         |

## Sector Weightings

|                        | Stocks % | Rel Std Index |
|------------------------|----------|---------------|
| <b>Cyclical</b>        | —        | —             |
| Basic Materials        | —        | —             |
| Consumer Cyclical      | —        | —             |
| Financial Services     | —        | —             |
| Real Estate            | —        | —             |
| <b>Sensitive</b>       | —        | —             |
| Communication Services | —        | —             |
| Energy                 | —        | —             |
| Industrials            | —        | —             |
| Technology             | —        | —             |
| <b>Defensive</b>       | —        | —             |
| Consumer Defensive     | —        | —             |
| Healthcare             | —        | —             |
| Utilities              | —        | —             |



# Metropolitan West Total Return Bd I (USD)

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -1.30   | -0.09   | 0.04    | 1.53    | 0.16    |
| 2019              | 3.20    | 3.20    | 2.24    | 0.19    | 9.09    |
| 2020              | 2.32    | 4.07    | 1.26    | 1.20    | 9.11    |

| Trailing Returns | 1 Yr | 3 Yr | 5 Yr | 10 Yr | Incept |
|------------------|------|------|------|-------|--------|
| Load-adj Mthly   | 9.11 | 6.04 | 4.79 | 4.74  | 6.09   |
| Std 12-31-2020   | 9.11 | —    | 4.79 | 4.74  | 6.09   |
| Total Return     | 9.11 | 6.04 | 4.79 | 4.74  | 6.09   |

|               |      |      |       |      |   |
|---------------|------|------|-------|------|---|
| +/- Std Index | 1.61 | 0.70 | 0.35  | 0.90 | — |
| +/- Cat Index | 1.54 | 0.58 | -0.08 | 0.57 | — |

|            |     |     |     |     |   |
|------------|-----|-----|-----|-----|---|
| % Rank Cat | 29  | 24  | 55  | 23  | — |
| No. in Cat | 602 | 543 | 464 | 343 | — |

|                           |            |              |
|---------------------------|------------|--------------|
| 7-day Yield 01-22-21      | Subsidized | Unsubsidized |
| 30-day SEC Yield 12-31-20 | 1.13       | —            |
|                           | 1.10       | 2.89         |

### Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-241-4671 or visit [www.mwamllc.com](http://www.mwamllc.com).

### Fees and Expenses

#### Sales Charges

#### Front-End Load %

NA

#### Deferred Load %

NA

#### Fund Expenses

#### Management Fees %

0.35

#### 12b1 Expense %

NA

#### Net Expense Ratio %

0.46

#### Gross Expense Ratio %

0.46

#### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 4★   | 3★   | 4★    |
| Morningstar Risk    | -Avg | -Avg | -Avg  |
| Morningstar Return  | +Avg | Avg  | +Avg  |

|                    | 3 Yr | 5 Yr | 10 Yr |
|--------------------|------|------|-------|
| Standard Deviation | 3.54 | 3.16 | 2.93  |
| Mean               | 6.04 | 4.79 | 4.74  |
| Sharpe Ratio       | 1.25 | 1.14 | 1.39  |

| MPT Statistics | Standard Index | Best Fit Index              |
|----------------|----------------|-----------------------------|
|                |                | BBgBarc US Universal TR USD |
| Alpha          | 0.56           | 0.51                        |
| Beta           | 1.03           | 1.01                        |
| R-Squared      | 96.51          | 96.68                       |

|                         |       |
|-------------------------|-------|
| 12-Month Yield          | 1.70% |
| Potential Cap Gains Exp | 0.85% |

### Operations

|            |                          |
|------------|--------------------------|
| Family:    | Metropolitan West Funds  |
| Manager:   | Multiple                 |
| Tenure:    | 23.8 Years               |
| Objective: | Corporate Bond - General |

|                           |              |
|---------------------------|--------------|
| Base Currency:            | USD          |
| Ticker:                   | MWTIX        |
| ISIN:                     | US5929055094 |
| Minimum Initial Purchase: | \$3 mil      |

|                       |                 |
|-----------------------|-----------------|
| Purchase Constraints: | —               |
| Incept:               | 03-31-2000      |
| Type:                 | MF              |
| Total Assets:         | \$89,404.46 mil |

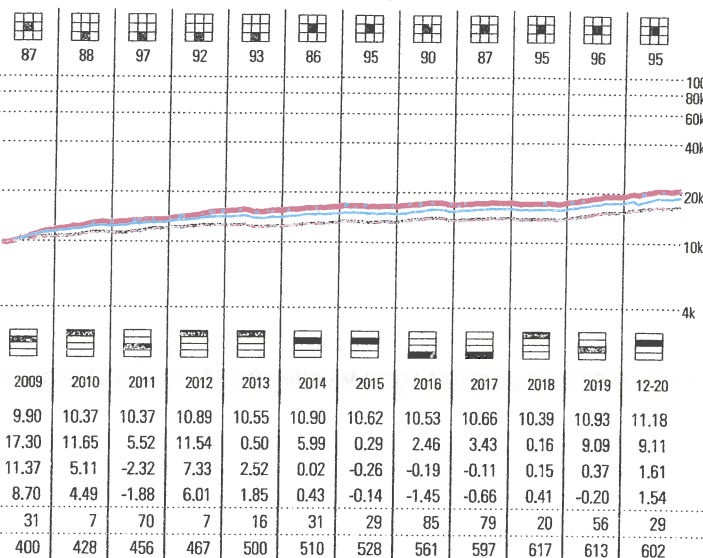
Morningstar Analyst Rating™  
★★★★  
Gold  
12-01-2020

Overall Morningstar Rating™  
★★★★  
543 US Fund Intermediate  
Core-Plus Bond

Standard Index  
BBgBarc US Agg  
Bond TR USD

Category Index  
BBgBarc US  
Universal TR USD

Morningstar Cat  
US Fund Intermediate  
Core-Plus Bond



Investment Style  
Fixed-Income  
Bond %

### Growth of \$10,000

Metropolitan West Total Return Bd I  
20,805  
Category Average  
18,847  
Standard Index  
16,450

Performance Quartile  
(within category)

### History

NAV/Price  
Total Return %  
+/- Standard Index  
+/- Category Index  
% Rank Cat  
No. of Funds in Cat

### Portfolio Analysis 12-31-2020

| Asset Allocation % | Net %  | Long % | Short % | Share Chg since 11-2020 | Share Amount | Holdings : 0 Total Stocks , 1,789 Total Fixed-Income, 405% Turnover Ratio | Net Assets % |
|--------------------|--------|--------|---------|-------------------------|--------------|---------------------------------------------------------------------------|--------------|
| Cash               | -7.59  | 5.43   | 13.03   |                         |              |                                                                           |              |
| US Stocks          | 0.00   | 0.00   | 0.00    |                         |              |                                                                           |              |
| Non-US Stocks      | 0.00   | 0.00   | 0.00    | ⊕                       | 7,322 mil    | United States Treasury Notes 0.12%                                        | 8.08         |
| Bonds              | 107.01 | 107.02 | 0.00    | ⊖                       | 5,668 mil    | United States Treasury Notes 0.12%                                        | 6.26         |
| Other/Not Clsfd    | 0.58   | 0.58   | 0.00    | ⊕                       | 4,998 mil    | United States Treasury Notes 0.38%                                        | 5.53         |
| Total              | 100.00 | 113.03 | 13.03   | ⊕                       | 4,431 mil    | United States Treasury Bonds 1.62%                                        | 4.87         |
|                    |        |        |         |                         | 4,173 mil    | United States Treasury Notes 0.12%                                        | 4.61         |
|                    |        |        |         |                         | 3,505 mil    | Federal National Mortgage Associat                                        | 4.02         |
|                    |        |        |         |                         | 2,925 mil    | Federal National Mortgage Associat                                        | 3.35         |
|                    |        |        |         |                         | 2,800 mil    | United States Treasury Notes 0.38%                                        | 3.09         |
|                    |        |        |         |                         | 2,758 mil    | United States Treasury Notes 0.25%                                        | 3.03         |
|                    |        |        |         |                         | 1,728 mil    | Government National Mortgage Assoc                                        | 1.99         |
|                    |        |        |         |                         | 1,652 mil    | Federal National Mortgage Associat                                        | 1.92         |
|                    |        |        |         |                         | 1,642 mil    | United States Treasury Notes 0.88%                                        | 1.81         |
|                    |        |        |         |                         | 1,741 mil    | United States Treasury Bonds 1.38%                                        | 1.80         |
|                    |        |        |         |                         | 1,397 mil    | United States Treasury Notes 0.62%                                        | 1.54         |
|                    |        |        |         |                         | 1,193 mil    | Government National Mortgage Assoc                                        | 1.39         |

### Equity Style

| Value | Bond | Growth |
|-------|------|--------|
| Large |      |        |
| Mid   |      |        |
| Small |      |        |

### Portfolio Statistics

| P/E Ratio TTM | P/C Ratio TTM | P/B Ratio TTM | Geo Avg Mkt Cap \$mil |
|---------------|---------------|---------------|-----------------------|
| —             | —             | —             | —                     |

### Fixed-Income Style

| Ltd  | Mod | Ext |
|------|-----|-----|
| High |     |     |
| Mid  |     |     |
| Low  |     |     |

|                  |        |
|------------------|--------|
| Avg Eff Maturity | 7.97   |
| Avg Eff Duration | 5.58   |
| Avg Wtd Coupon   | 2.15   |
| Avg Wtd Price    | 104.42 |

### Credit Quality Breakdown 09-30-2020

|         | Bond % |
|---------|--------|
| AAA     | 67.16  |
| AA      | 3.08   |
| A       | 6.63   |
| BBB     | 16.76  |
| BB      | 2.91   |
| B       | 0.78   |
| Below B | 2.68   |
| NR      | 0.00   |

### Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | —        | —             |
| Greater Europe | —        | —             |
| Greater Asia   | —        | —             |

### Sector Weightings

|                        | Stocks % | Rel Std Index |
|------------------------|----------|---------------|
| <b>Cyclical</b>        |          |               |
| Basic Materials        | —        | —             |
| Consumer Cyclical      | —        | —             |
| Financial Services     | —        | —             |
| Real Estate            | —        | —             |
| <b>Sensitive</b>       |          |               |
| Communication Services | —        | —             |
| Energy                 | —        | —             |
| Industrials            | —        | —             |
| Technology             | —        | —             |
| <b>Defensive</b>       |          |               |
| Consumer Defensive     | —        | —             |
| Healthcare             | —        | —             |
| Utilities              | —        | —             |



# TIAA-CREF Core Bond Instl (USD)

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -1.28   | -0.29   | 0.07    | 1.13    | -0.38   |
| 2019              | 3.44    | 3.12    | 2.28    | 0.23    | 9.35    |
| 2020              | -0.91   | 5.65    | 1.29    | 1.73    | 7.87    |
| Trailing Returns  | 1 Yr    | 3 Yr    | 5 Yr    | 10 Yr   | Incept  |
| Load-adj Mthly    | 7.87    | 5.53    | 5.05    | 4.45    | 5.25    |
| Std 12-31-2020    | 7.87    | —       | 5.05    | 4.45    | 5.25    |
| Total Return      | 7.87    | 5.53    | 5.05    | 4.45    | 5.25    |
| +/- Std Index     | 0.36    | 0.19    | 0.61    | 0.61    | —       |
| +/- Cat Index     | 0.30    | 0.07    | 0.18    | 0.29    | —       |
| % Rank Cat        | 57      | 44      | 42      | 37      | —       |
| No. in Cat        | 602     | 543     | 464     | 343     | —       |

| 7-day Yield               | Subsidized | Unsubsidized |
|---------------------------|------------|--------------|
| 30-day SEC Yield 01-21-21 | 1.61       | 3.16         |

### Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 877-518-9161 or visit [www.tiaa.org](http://www.tiaa.org).

### Fees and Expenses

#### Sales Charges

#### Front-End Load %

NA

#### Deferred Load %

NA

#### Fund Expenses

#### Management Fees %

0.28

#### 12b1 Expense %

NA

#### Net Expense Ratio %

0.30

#### Gross Expense Ratio %

0.30

#### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 3★   | 3★   | 3★    |
| Morningstar Risk    | Avg  | Avg  | Avg   |
| Morningstar Return  | Avg  | Avg  | Avg   |
| Standard Deviation  | 4.34 | 3.76 | 3.32  |
| Mean                | 5.53 | 5.05 | 4.45  |
| Sharpe Ratio        | 0.92 | 1.02 | 1.15  |

| MPT Statistics | Standard Index    | Best Fit Index |
|----------------|-------------------|----------------|
|                | BBgBarc US Credit | TR USD         |
| Alpha          | -0.04             | 0.53           |
| Beta           | 1.07              | 0.65           |
| R-Squared      | 69.43             | 95.41          |

|                         | 3 Yr  | 5 Yr | 10 Yr |
|-------------------------|-------|------|-------|
| 12-Month Yield          | 2.38% |      |       |
| Potential Cap Gains Exp | 1.06% |      |       |

#### Operations

|            |                  |                           |              |                       |                |
|------------|------------------|---------------------------|--------------|-----------------------|----------------|
| Family:    | TIAA Investments | Base Currency:            | USD          | Purchase Constraints: | —              |
| Manager:   | Multiple         | Ticker:                   | TIBDX        | Incept:               | 07-01-1999     |
| Tenure:    | 17.1 Years       | ISIN:                     | US87244W6075 | Type:                 | MF             |
| Objective: | Income           | Minimum Initial Purchase: | \$2 mil      | Total Assets:         | \$8,259.13 mil |

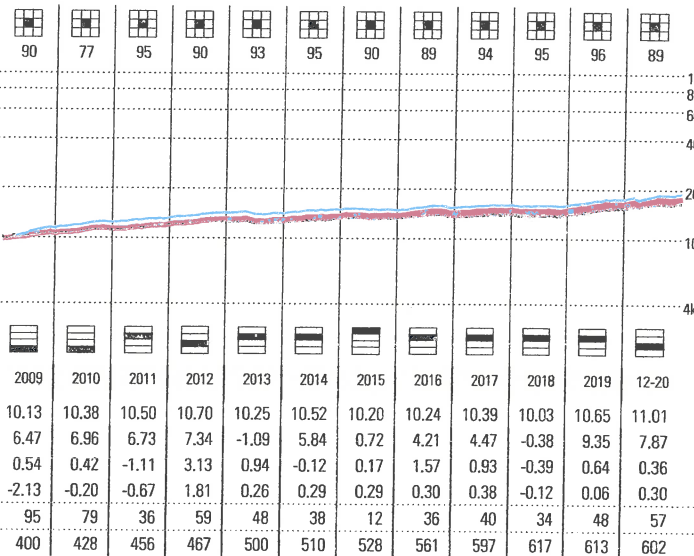
Morningstar Analyst Rating™  
Silver  
02-24-2020

Overall Morningstar Rating™  
★★★  
543 US Fund Intermediate  
Core-Plus Bond

Standard Index  
BBgBarc US Agg  
Bond TR USD

Category Index  
BBgBarc US  
Universal TR USD

Morningstar Cat  
US Fund Intermediate  
Core-Plus Bond



#### Investment Style

Fixed-Income  
Bond %

#### Growth of \$10,000

TIAA-CREF Core Bond Instl  
17,602  
Category Average  
18,847  
Standard Index  
16,450

#### Performance Quartile (within category)

#### History

NAV/Price  
Total Return %  
+/- Standard Index  
+/- Category Index  
% Rank Cat  
No. of Funds in Cat

### Portfolio Analysis 11-30-2020

| Asset Allocation %    | Net %  | Long % | Short % | Share Chg since 10-2020 | Share Amount     | Holdings : 0 Total Stocks, 1,873 Total Fixed-Income, 133% Turnover Ratio | Net Assets %                                   |
|-----------------------|--------|--------|---------|-------------------------|------------------|--------------------------------------------------------------------------|------------------------------------------------|
| Cash                  | 9.94   | 9.94   | 0.00    | —                       | —                | —                                                                        | —                                              |
| US Stocks             | 0.00   | 0.00   | 0.00    | —                       | —                | —                                                                        | —                                              |
| Non-US Stocks         | 0.00   | 0.00   | 0.00    | —                       | —                | —                                                                        | —                                              |
| Bonds                 | 95.81  | 95.81  | 0.00    | —                       | —                | —                                                                        | —                                              |
| Other/Not Clsfd       | -5.75  | 1.95   | 7.70    | —                       | —                | —                                                                        | —                                              |
| Total                 | 100.00 | 107.70 | 7.70    | —                       | —                | —                                                                        | —                                              |
| Equity Style          | Value  | Bland  | Growth  | Port Avg                | Rel Index        | Rel Cat                                                                  |                                                |
| P/E Ratio TTM         | —      | —      | —       | —                       | —                | —                                                                        | 79 mil Government National Mortgage Assoc 1.06 |
| P/C Ratio TTM         | —      | —      | —       | —                       | —                | —                                                                        | 74 mil Federal National Mortgage Assoc 0.99    |
| P/B Ratio TTM         | —      | —      | —       | —                       | —                | —                                                                        | 75 mil United States Treasury Bills 0% 0.95    |
| Geo Avg Mkt Cap \$mil | —      | —      | —       | —                       | —                | —                                                                        | 55 mil United States Treasury Bonds 3% 0.94    |
|                       |        |        |         |                         |                  |                                                                          | 47 mil United States Treasury Bonds 3.38% 0.85 |
|                       |        |        |         |                         |                  |                                                                          | 47 mil United States Treasury Bonds 3.5% 0.82  |
|                       |        |        |         |                         |                  |                                                                          | 61 mil Federal National Mortgage Assoc 0.81    |
|                       |        |        |         |                         |                  |                                                                          | 55 mil Government National Mortgage Assoc 0.73 |
|                       |        |        |         |                         |                  |                                                                          | 43 mil United States Treasury Bonds 2.75% 0.70 |
|                       |        |        |         |                         |                  |                                                                          | 46 mil United States Treasury Notes 0.5% 0.58  |
| Fixed-Income Style    | Ltd    | Mod    | Ext     | Avg Eff Maturity        | Avg Eff Duration | Avg Wtd Coupon                                                           | Avg Wtd Price                                  |
|                       |        |        |         | 7.80                    | 5.90             | 3.28                                                                     | 108.25                                         |

### Credit Quality Breakdown 10-31-2020

|         | Bond % |
|---------|--------|
| AAA     | 47.25  |
| AA      | 5.70   |
| A       | 15.16  |
| BBB     | 24.12  |
| BB      | 3.57   |
| B       | 2.42   |
| Below B | 0.43   |
| NR      | 1.35   |

### Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | —        | —             |
| Greater Europe | —        | —             |
| Greater Asia   | —        | —             |

### Sector Weightings

|                        | Stocks % | Rel Std Index |
|------------------------|----------|---------------|
| <b>Cyclical</b>        | —        | —             |
| Basic Materials        | —        | —             |
| Consumer Cyclical      | —        | —             |
| Financial Services     | —        | —             |
| Real Estate            | —        | —             |
| <b>Sensitive</b>       | —        | —             |
| Communication Services | —        | —             |
| Energy                 | —        | —             |
| Industrials            | —        | —             |
| Technology             | —        | —             |
| <b>Defensive</b>       | —        | —             |
| Consumer Defensive     | —        | —             |
| Healthcare             | —        | —             |
| Utilities              | —        | —             |

# BrandywineGLOBAL Global Opp Bond I (USD)

**Morningstar Analyst Rating™**  
Bronze  
10-13-2020

**Overall Morningstar Rating™**  
★★★★★  
180 US Fund World Bond

**Standard Index**  
BBgBarc US Agg  
Bond TR USD

**Category Index**  
BBgBarc Global  
Aggregate TR USD

**Morningstar Cat**  
US Fund World Bond

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | 3.94    | -6.79   | -0.88   | -1.07   | -4.99   |
| 2019              | 2.93    | 3.59    | -1.79   | 4.22    | 9.14    |
| 2020              | -11.36  | 10.76   | 3.85    | 10.37   | 12.52   |

| Trailing Returns | 1 Yr  | 3 Yr  | 5 Yr | 10 Yr | Incept |
|------------------|-------|-------|------|-------|--------|
| Load-adj Mthly   | 12.52 | 5.27  | 6.65 | 4.59  | 6.89   |
| Std 12-31-2020   | 12.52 | —     | 6.65 | 4.59  | 6.89   |
| Total Return     | 12.52 | 5.27  | 6.65 | 4.59  | 6.89   |
| +/- Std Index    | 5.01  | -0.07 | 2.21 | 0.75  | —      |
| +/- Cat Index    | 3.32  | 0.42  | 1.86 | 1.76  | —      |
| % Rank Cat       | 7     | 18    | 2    | 2     | —      |
| No. in Cat       | 204   | 180   | 169  | 115   | —      |

| 7-day Yield 01-22-21 | Subsidized | Unsubsidized |
|----------------------|------------|--------------|
| 30-day SEC Yield     | 0.00       | —            |

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 877-721-1926 or visit [www.leggmason.com](http://www.leggmason.com).

## Fees and Expenses

### Sales Charges

|                  |    |
|------------------|----|
| Front-End Load % | NA |
| Deferred Load %  | NA |

### Fund Expenses

|                       |      |
|-----------------------|------|
| Management Fees %     | 0.50 |
| 12b1 Expense %        | NA   |
| Net Expense Ratio %   | 0.68 |
| Gross Expense Ratio % | 0.68 |

### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 3★   | 5★   | 5★    |
| Morningstar Risk    | High | High | +Avg  |
| Morningstar Return  | +Avg | High | High  |

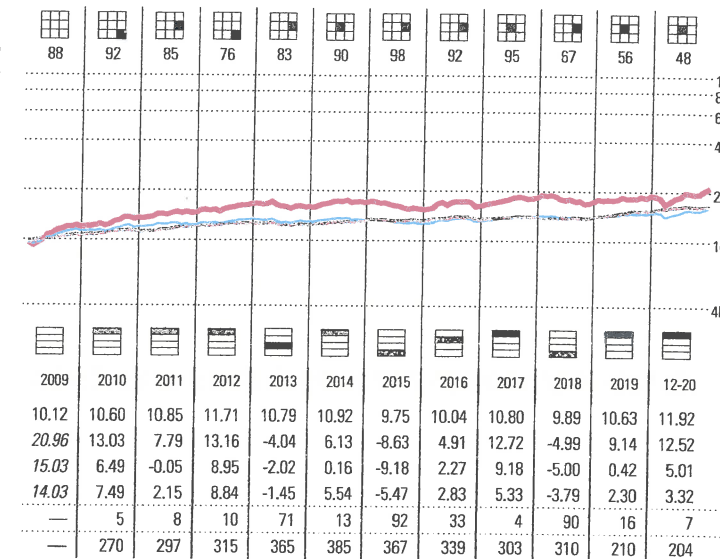
|                    | 3 Yr  | 5 Yr | 10 Yr |
|--------------------|-------|------|-------|
| Standard Deviation | 10.50 | 9.59 | 8.12  |
| Mean               | 5.27  | 6.65 | 4.59  |
| Sharpe Ratio       | 0.40  | 0.60 | 0.52  |

| MPT Statistics | Standard Index    | Best Fit Index     |
|----------------|-------------------|--------------------|
|                | JPM GBI-EM Global | Diversified TR USD |

|                         |      |        |
|-------------------------|------|--------|
| Alpha                   | 0.63 | 2.45   |
| Beta                    | 0.94 | 0.78   |
| R-Squared               | 9.13 | 84.47  |
| 12-Month Yield          | —    | —      |
| Potential Cap Gains Exp | —    | -6.81% |

## Operations

|                |                                |
|----------------|--------------------------------|
| Family:        | Franklin Templeton Investments |
| Manager:       | Multiple                       |
| Tenure:        | 14.2 Years                     |
| Objective:     | Worldwide Bond                 |
| Base Currency: | USD                            |



## Portfolio Analysis 12-31-2020

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 6.49   | 90.00  | 83.51   |
| US Stocks          | 0.49   | 0.49   | 0.00    |
| Non-US Stocks      | 0.00   | 0.00   | 0.00    |
| Bonds              | 87.74  | 87.81  | 0.07    |
| Other/Not Clsfd    | 5.28   | 5.28   | 0.00    |
| Total              | 100.00 | 183.58 | 83.58   |

| Equity Style | Value | Blend | Growth |
|--------------|-------|-------|--------|
|              | Large | Mid   | Small  |
|              | Value | Blend | Growth |
|              | Large | Mid   | Small  |

| Portfolio Statistics  | Port Avg | Rel Index | Rel Cat |
|-----------------------|----------|-----------|---------|
| P/E Ratio TTM         | —        | —         | —       |
| P/C Ratio TTM         | —        | —         | —       |
| P/B Ratio TTM         | —        | —         | —       |
| Geo Avg Mkt Cap \$mil | —        | —         | —       |

| Credit Quality Breakdown 11-30-2020 | Bond % |
|-------------------------------------|--------|
| AAA                                 | 25.49  |
| AA                                  | 4.99   |
| A                                   | 19.79  |
| BBB                                 | 34.07  |
| BB                                  | 15.36  |
| B                                   | 0.30   |
| Below B                             | 0.00   |
| NR                                  | 0.00   |

| Credit Quality Breakdown 11-30-2020 | Bond % |
|-------------------------------------|--------|
| AAA                                 | 25.49  |
| AA                                  | 4.99   |
| A                                   | 19.79  |
| BBB                                 | 34.07  |
| BB                                  | 15.36  |
| B                                   | 0.30   |
| Below B                             | 0.00   |
| NR                                  | 0.00   |

| Regional Exposure | Stocks % | Rel Std Index |
|-------------------|----------|---------------|
| Americas          | —        | —             |
| Greater Europe    | —        | —             |
| Greater Asia      | —        | —             |

| Share Chg since 09-2020 | Share Amount | Holdings : 0 Total Stocks, 189 Total Fixed-Income, 103% Turnover Ratio | Net Assets % |
|-------------------------|--------------|------------------------------------------------------------------------|--------------|
| +                       | 336 mil      | United States Treasury Notes 0.15%                                     | 14.48        |
| +                       | 101 mil      | JPMorgan US Government MMkt Instl                                      | 4.35         |
| +                       | 79 mil       | United States Treasury Notes 0.15%                                     | 3.41         |
| +                       | 1,355 mil    | Mexico (United Mexican States) 7.7                                     | 3.39         |
| +                       | 1,116 mil    | Mexico (United Mexican States) 8.5%                                    | 3.00         |
| +                       | 1,052 mil    | Mexico (United Mexican States) 8.5%                                    | 2.78         |
| +                       | 64 mil       | United States Treasury Notes 0.21%                                     | 2.78         |
| +                       | 200,400 mil  | Republic of Colombia 6%                                                | 2.71         |
| +                       | 268 mil      | Secretaria Tesouro Nacional 10%                                        | 2.63         |
| +                       | 680,600 mil  | Indonesia (Republic of) 9%                                             | 2.50         |
| +                       | 55 mil       | Goldman Sachs Group, Inc. 0.96%                                        | 2.38         |
| +                       | 62 mil       | Australia (Commonwealth of) 5.75%                                      | 2.25         |
| +                       | 52 mil       | Ford Motor Credit Company LLC 1.04%                                    | 2.24         |
| +                       | 45 mil       | Bank of Nova Scotia 0.63%                                              | 1.97         |
| +                       | 811 mil      | Republic of South Africa 8.75%                                         | 1.96         |

| Sector Weightings      | Stocks % | Rel Std Index |
|------------------------|----------|---------------|
| <b>Cyclical</b>        | —        | —             |
| Basic Materials        | —        | —             |
| Consumer Cyclical      | —        | —             |
| Financial Services     | —        | —             |
| Real Estate            | —        | —             |
| <b>Sensitive</b>       | —        | —             |
| Communication Services | —        | —             |
| Energy                 | —        | —             |
| Industrials            | —        | —             |
| Technology             | —        | —             |
| <b>Defensive</b>       | —        | —             |
| Consumer Defensive     | —        | —             |
| Healthcare             | —        | —             |
| Utilities              | —        | —             |

# PIMCO Income Instl (USD)

**Morningstar Analyst Rating™**  
**Gold**  
 05-20-2020

**Overall Morningstar Rating™**  
 ★★★★★  
 295 US Fund Multisector  
 Bond

**Standard Index**  
 BBgBarc US Agg  
 Bond TR USD

**Category Index**  
 BBgBarc US  
 Universal TR USD

**Morningstar Cat**  
 US Fund Multisector  
 Bond

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -0.27   | -0.44   | 0.56    | 0.74    | 0.58    |
| 2019              | 3.03    | 2.40    | -0.11   | 2.53    | 8.05    |
| 2020              | -7.66   | 6.48    | 3.01    | 4.46    | 5.80    |

| Trailing Returns | 1 Yr  | 3 Yr  | 5 Yr | 10 Yr | Incept |
|------------------|-------|-------|------|-------|--------|
| Load-adj Mthly   | 5.80  | 4.76  | 6.30 | 7.36  | 8.06   |
| Std 12-31-2020   | 5.80  | —     | 6.30 | 7.36  | 8.06   |
| Total Return     | 5.80  | 4.76  | 6.30 | 7.36  | 8.06   |
| +/- Std Index    | -1.71 | -0.58 | 1.87 | 3.52  | —      |
| +/- Cat Index    | -1.78 | -0.69 | 1.43 | 3.19  | —      |
| % Rank Cat       | 47    | 47    | 20   | 1     | —      |
| No. in Cat       | 336   | 295   | 259  | 135   | —      |

| 7-day Yield               | Subsidized | Unsubsidized |
|---------------------------|------------|--------------|
| 30-day SEC Yield 12-31-20 | 2.54       | 2.54         |

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-877-4626 or visit [www.pimco.com](http://www.pimco.com).

## Fees and Expenses

### Sales Charges

Front-End Load %

NA

Deferred Load %

NA

### Fund Expenses

Management Fees %

0.50

12b1 Expense %

NA

Net Expense Ratio %

1.09

Gross Expense Ratio %

1.09

### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 3★   | 4★   | 5★    |
| Morningstar Risk    | -Avg | -Avg | -Avg  |
| Morningstar Return  | Avg  | +Avg | High  |

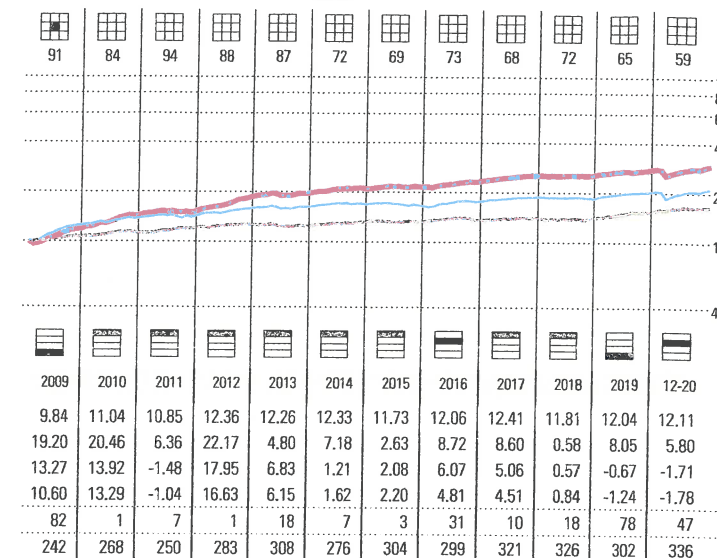
|                    | 3 Yr | 5 Yr | 10 Yr |
|--------------------|------|------|-------|
| Standard Deviation | 5.78 | 4.60 | 4.26  |
| Mean               | 4.76 | 6.30 | 7.36  |
| Sharpe Ratio       | 0.57 | 1.09 | 1.54  |

| MPT Statistics | Standard Index | Best Fit Index |
|----------------|----------------|----------------|
| Alpha          | 1.71           | 1.34           |
| Beta           | 0.43           | 0.49           |
| R-Squared      | 6.26           | 85.04          |

|                         | 3 Yr | 5 Yr    | 10 Yr |
|-------------------------|------|---------|-------|
| 12-Month Yield          | —    | 4.86%   | —     |
| Potential Cap Gains Exp | —    | -10.10% | —     |

## Operations

|            |                  |
|------------|------------------|
| Family:    | PIMCO            |
| Manager:   | Multiple         |
| Tenure:    | 13.8 Years       |
| Objective: | Multisector Bond |



**Investment Style**  
 Fixed-Income  
 Bond %

## Growth of \$10,000

PIMCO Income Instl  
 29,197  
 Category Average  
 21,253  
 Standard Index  
 16,450

**Performance Quartile**  
 (within category)

## History

NAV/Price  
 Total Return %  
 +/- Standard Index  
 +/- Category Index  
 % Rank Cat  
 No. of Funds in Cat

## Portfolio Analysis 09-30-2020

| Asset Allocation % | Net %  | Long % | Short % |
|--------------------|--------|--------|---------|
| Cash               | 24.42  | 118.82 | 94.40   |
| US Stocks          | 0.59   | 0.59   | 0.00    |
| Non-US Stocks      | 0.21   | 0.21   | 0.00    |
| Bonds              | 88.96  | 181.41 | 112.45  |
| Other/Not Clsfd    | 5.82   | 6.03   | 0.21    |
| Total              | 100.00 | 307.06 | 207.06  |

## Equity Style

| Value | Blend | Growth |
|-------|-------|--------|
| Large | —     | —      |
| Mid   | —     | —      |
| Small | —     | —      |

## Portfolio Statistics

|                       | Port Avg | Rel Index | Rel Cat |
|-----------------------|----------|-----------|---------|
| P/E Ratio TTM         | 8.1      | —         | —       |
| P/C Ratio TTM         | —        | —         | —       |
| P/B Ratio TTM         | 0.3      | —         | 0.22    |
| Geo Avg Mkt Cap \$mil | 3924     | —         | 0.07    |
| Avg Eff Maturity      | —        | 4.14      | —       |
| Avg Eff Duration      | —        | 1.93      | —       |
| Avg Wtd Coupon        | —        | 3.34      | —       |
| Avg Wtd Price         | —        | 105.05    | —       |

## Fixed-Income Style

| Ltd  | Mod | Ext |
|------|-----|-----|
| High | —   | —   |
| Med  | —   | —   |
| Low  | —   | —   |

## Credit Quality Breakdown —

|         | Bond % |
|---------|--------|
| AAA     | —      |
| AA      | —      |
| A       | —      |
| BBB     | —      |
| BB      | —      |
| B       | —      |
| Below B | —      |
| NR      | —      |

## Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | 66.5     | —             |
| Greater Europe | 33.5     | —             |
| Greater Asia   | 0.0      | —             |

| Share Chg since 06-2020 | Share Amount | Holdings : 23 Total Stocks , 6,833 Total Fixed-Income, 421% Turnover Ratio | Net Assets % |
|-------------------------|--------------|----------------------------------------------------------------------------|--------------|
| ★                       | 11,049 mil   | 10 Year Treasury Note Future Dec 20                                        | -12.27       |
| ★                       | 8,152 mil    | Federal National Mortgage Associat                                         | 6.69         |
| ★                       | 5,921 mil    | Federal National Mortgage Associat                                         | 4.95         |
| —                       | 411 mil      | Pimco Fds                                                                  | 3.22         |
| ★                       | 3,208 mil    | Federal National Mortgage Associat                                         | -2.68        |
| ★                       | 1,877 mil    | Long-Term Euro Btp Future Dec 20                                           | 2.59         |
| ★                       | 2,469 mil    | Federal Home Loan Banks                                                    | 2.06         |
| —                       | 2,384 mil    | Csmc Trust                                                                 | 2.05         |
| ★                       | 1,794 mil    | Federal National Mortgage Associat                                         | 1.50         |
| +                       | 1,596 mil    | United States Treasury Notes                                               | 1.42         |
| —                       | 1,733 mil    | Csmc Trust                                                                 | 1.40         |
| ★                       | 1,589 mil    | Federal National Mortgage Associat                                         | 1.31         |
| ★                       | 1,508 mil    | Federal National Mortgage Associat                                         | 1.26         |
| —                       | 1,336 mil    | Csmc Trust                                                                 | 1.16         |
| —                       | 1,354 mil    | Csmc Trust                                                                 | 1.12         |

## Sector Weightings

|                        | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>86.8</b> | —             |
| Basic Materials        | 0.0         | —             |
| Consumer Cyclical      | 0.0         | —             |
| Financial Services     | 41.5        | —             |
| Real Estate            | 45.3        | —             |
| <b>Sensitive</b>       | <b>12.7</b> | —             |
| Communication Services | 11.8        | —             |
| Energy                 | 0.0         | —             |
| Industrials            | 0.9         | —             |
| Technology             | 0.0         | —             |
| <b>Defensive</b>       | <b>0.5</b>  | —             |
| Consumer Defensive     | 0.0         | —             |
| Healthcare             | 0.0         | —             |
| Utilities              | 0.5         | —             |



# FPA Crescent (USD)

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -0.98   | 0.32    | 4.15    | -10.52  | -7.43   |
| 2019              | 10.80   | 3.33    | -0.81   | 5.69    | 20.02   |
| 2020              | -20.51  | 15.00   | 3.80    | 18.15   | 12.11   |

| Trailing Returns | 1 Yr  | 3 Yr  | 5 Yr  | 10 Yr | Incept |
|------------------|-------|-------|-------|-------|--------|
| Load-adj Mthly   | 12.11 | 7.59  | 8.68  | 8.18  | 10.07  |
| Std 12-31-2020   | 12.11 | —     | 8.68  | 8.18  | 10.07  |
| Total Return     | 12.11 | 7.59  | 8.68  | 8.18  | 10.07  |
| +/- Std Index    | -0.72 | -0.95 | -1.07 | 0.41  | —      |
| +/- Cat Index    | -0.72 | -0.95 | -1.07 | 0.41  | —      |
| % Rank Cat       | 49    | 58    | 63    | 43    | —      |
| No. in Cat       | 673   | 636   | 575   | 414   | —      |

## 7-day Yield

## 30-day SEC Yield

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and ten-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-982-4372 or visit [www.fpaunds.com](http://www.fpaunds.com).

## Fees and Expenses

### Sales Charges

### Front-End Load %

NA

### Deferred Load %

NA

### Fund Expenses

### Management Fees %

1.00

### 12b1 Expense %

NA

### Net Expense Ratio %

1.21

### Gross Expense Ratio %

1.23

### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 2★   | 2★   | 3★    |
| Morningstar Risk    | High | High | High  |
| Morningstar Return  | Avg  | Avg  | Avg   |

|                    | 3 Yr  | 5 Yr  | 10 Yr |
|--------------------|-------|-------|-------|
| Standard Deviation | 16.84 | 13.69 | 11.09 |
| Mean               | 7.59  | 8.68  | 8.18  |
| Sharpe Ratio       | 0.43  | 0.59  | 0.71  |

| MPT Statistics | Standard Index | Best Fit Index    |
|----------------|----------------|-------------------|
|                |                | Morningstar       |
|                |                | Lifetime Mod 2055 |
|                |                | TR USD            |

|           |       |       |
|-----------|-------|-------|
| Alpha     | -3.02 | -0.63 |
| Beta      | 1.39  | 0.92  |
| R-Squared | 91.83 | 93.87 |

|                         |        |
|-------------------------|--------|
| 12-Month Yield          | —      |
| Potential Cap Gains Exp | 20.25% |

## Operations

|                |            |
|----------------|------------|
| Family:        | FPA        |
| Manager:       | Multiple   |
| Tenure:        | 27.6 Years |
| Objective:     | Growth     |
| Base Currency: | USD        |

|                           |             |
|---------------------------|-------------|
| Ticker:                   | FPACX       |
| ISIN:                     | US025417596 |
| Minimum Initial Purchase: | \$1,500     |
| Min Auto Investment Plan: | \$100       |
| Minimum IRA Purchase:     | \$100       |

|                       |                 |
|-----------------------|-----------------|
| Purchase Constraints: | —               |
| Incept:               | 06-02-1993      |
| Type:                 | MF              |
| Total Assets:         | \$10,087.53 mil |

## Morningstar Analyst Rating™

Gold

04-06-2020

## Overall Morningstar Rating™

★★★

636 US Fund Allocation—50% to 70% Equity

## Standard Index

Morningstar Mod

Tgt Risk TR USD

## Category Index

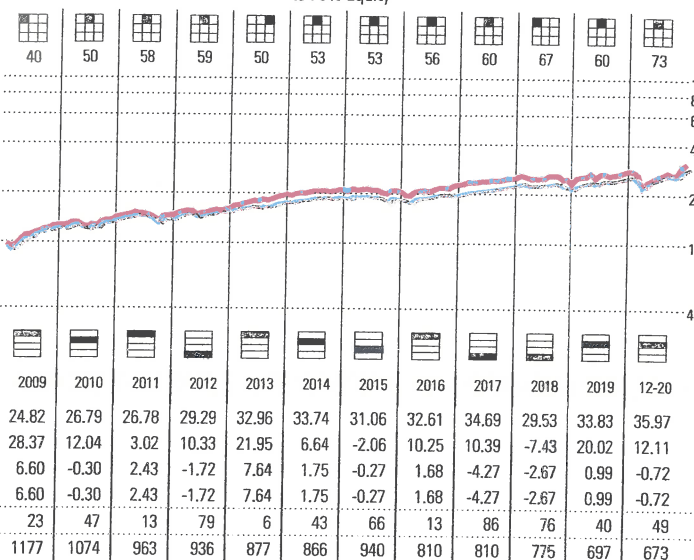
Morningstar Mod

Tgt Risk TR USD

## Morningstar Cat

US Fund Allocation—

50% to 70% Equity



## Investment Style

Equity

Stocks %

## Growth of \$10,000

|                  |        |
|------------------|--------|
| FPA Crescent     | 31,561 |
| Category Average | 28,192 |
| Standard Index   | 28,902 |

## Performance Quartile

(within category)

## History

|                     |   |
|---------------------|---|
| NAV/Price           | — |
| Total Return %      | — |
| +/- Standard Index  | — |
| +/- Category Index  | — |
| % Rank Cat          | — |
| No. of Funds in Cat | — |

## Portfolio Analysis 12-31-2020

### Asset Allocation %

|                 | Net %  | Long % | Short % |
|-----------------|--------|--------|---------|
| Cash            | 20.33  | 20.33  | 0.00    |
| US Stocks       | 48.37  | 50.80  | 2.44    |
| Non-US Stocks   | 24.18  | 25.06  | 0.88    |
| Bonds           | 4.59   | 5.18   | 0.59    |
| Other/Not Clsfd | 2.54   | 2.54   | 0.00    |
| Total           | 100.00 | 103.91 | 3.91    |

### Equity Style

| Value | Blend | Growth |
|-------|-------|--------|
| Large | —     | —      |
| Mid   | —     | —      |
| Small | —     | —      |

### Portfolio Statistics

|                       | Port Avg | Rel Index | Rel Cat |
|-----------------------|----------|-----------|---------|
| P/E Ratio TTM         | 26.3     | 1.14      | 1.03    |
| P/C Ratio TTM         | 13.3     | 1.08      | 0.91    |
| P/B Ratio TTM         | 1.6      | 0.70      | 0.56    |
| Geo Avg Mkt Cap \$mil | 58715    | 1.32      | 0.59    |

### Fixed-Income Style

| Ltd  | Mod | Ext |
|------|-----|-----|
| High | —   | —   |
| Mid  | —   | —   |
| Low  | —   | —   |

|                  |   |
|------------------|---|
| Avg Eff Maturity | — |
| Avg Eff Duration | — |
| Avg Wtd Coupon   | — |
| Avg Wtd Price    | — |

### Credit Quality Breakdown —

|         | Bond % |
|---------|--------|
| AAA     | —      |
| AA      | —      |
| A       | —      |
| BBB     | —      |
| BB      | —      |
| B       | —      |
| Below B | —      |
| NR      | —      |

### Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | 66.3     | 1.08          |
| Greater Europe | 20.8     | 1.16          |
| Greater Asia   | 12.9     | 0.62          |

## Sector Weightings

|                        | Stocks %    | Ref Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>41.9</b> | <b>1.10</b>   |
| Basic Materials        | 9.5         | 1.83          |
| Consumer Cyclical      | 8.7         | 0.81          |
| Financial Services     | 23.7        | 1.59          |
| Real Estate            | 0.0         | 0.00          |
| <b>Sensitive</b>       | <b>55.4</b> | <b>1.46</b>   |
| Communication Services | 28.2        | 3.98          |
| Energy                 | 1.6         | 0.49          |
| Industrials            | 9.1         | 0.79          |
| Technology             | 16.5        | 1.03          |
| <b>Defensive</b>       | <b>2.8</b>  | <b>0.12</b>   |
| Consumer Defensive     | 0.0         | 0.00          |
| Healthcare             | 1.0         | 0.08          |
| Utilities              | 1.7         | 0.52          |



# Salient Tactical Growth Inst (USD)

**Morningstar Quantitative Rating™**  
Neutral<sup>o</sup>  
09-30-2020

**Overall Morningstar Rating™**  
★★★  
188 US Fund Long-Short Equity

**Standard Index**  
S&P 500 TR USD

**Category Index**  
S&P 500 TR USD

**Morningstar Cat**  
US Fund Long-Short Equity

## Performance 12-31-2020

| Quarterly Returns | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total % |
|-------------------|---------|---------|---------|---------|---------|
| 2018              | -1.28   | 0.48    | 3.09    | -6.87   | -4.76   |
| 2019              | 3.93    | 1.70    | -0.97   | 5.75    | 10.69   |
| 2020              | -0.41   | 1.80    | 2.80    | 4.02    | 8.40    |

| Trailing Returns | 1 Yr   | 3 Yr  | 5 Yr  | 10 Yr | Incept |
|------------------|--------|-------|-------|-------|--------|
| Load-adj Mthly   | 8.40   | 4.55  | 5.60  | 4.34  | 4.32   |
| Std 12-31-2020   | 8.40   | —     | 5.60  | 4.34  | 4.32   |
| Total Return     | 8.40   | 4.55  | 5.60  | 4.34  | 4.32   |
| +/- Std Index    | -10.00 | -9.63 | -9.62 | -9.55 | —      |
| +/- Cat Index    | -10.00 | -9.63 | -9.62 | -9.55 | —      |
| % Rank Cat       | 40     | 45    | 49    | 58    | —      |
| No. in Cat       | 209    | 188   | 148   | 49    | —      |

| 7-day Yield      | Subsidized | Unsubsidized |
|------------------|------------|--------------|
| 30-day SEC Yield | —          | —            |

## Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-999-6809 or visit [www.forwardinvesting.com](http://www.forwardinvesting.com).

## Fees and Expenses

### Sales Charges

|                  |    |
|------------------|----|
| Front-End Load % | NA |
| Deferred Load %  | NA |

### Fund Expenses

|                       |      |
|-----------------------|------|
| Management Fees %     | 1.15 |
| 12b1 Expense %        | NA   |
| Net Expense Ratio %   | 1.51 |
| Gross Expense Ratio % | 1.51 |

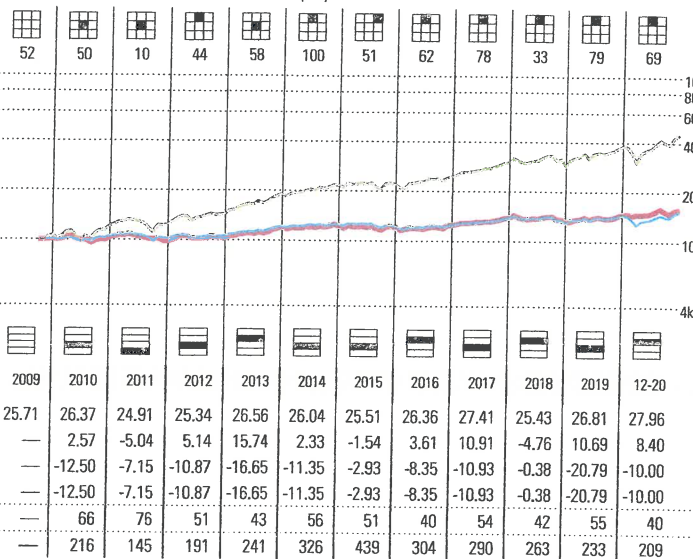
### Risk and Return Profile

|                     | 3 Yr | 5 Yr | 10 Yr |
|---------------------|------|------|-------|
| Morningstar Rating™ | 3★   | 3★   | 3★    |
| Morningstar Risk    | Low  | Low  | Low   |
| Morningstar Return  | Avg  | Avg  | Avg   |
| Standard Deviation  | 7.51 | 6.64 | 6.48  |
| Mean                | 4.55 | 5.60 | 4.34  |
| Sharpe Ratio        | 0.43 | 0.68 | 0.59  |

| MPT Statistics          | Standard Index | Best Fit Index                   |
|-------------------------|----------------|----------------------------------|
|                         |                | Morningstar US Technology TR USD |
| Alpha                   | -0.68          | -3.91                            |
| Beta                    | 0.29           | 0.27                             |
| R-Squared               | 51.60          | 61.53                            |
| 12-Month Yield          | —              | —                                |
| Potential Cap Gains Exp | —              | 5.95%                            |

### Operations

|            |                     |                           |              |                       |              |
|------------|---------------------|---------------------------|--------------|-----------------------|--------------|
| Family:    | Salient Funds       | Base Currency:            | USD          | Purchase Constraints: | —            |
| Manager:   | Christopher Guptill | Ticker:                   | FTGWX        | Incept:               | 09-14-2009   |
| Tenure:    | 11.3 Years          | ISIN:                     | US34986P4081 | Type:                 | MF           |
| Objective: | Growth              | Minimum Initial Purchase: | \$100,000    | Total Assets:         | \$299.16 mil |



## Investment Style

Equity  
Stocks %

## Growth of \$10,000

Salient Tactical Growth Inst  
15,853  
Category Average  
15,249  
Standard Index  
44,778

## Performance Quartile (within category)

### History

NAV/Price  
Total Return %  
+/- Standard Index  
+/- Category Index  
% Rank Cat  
No. of Funds in Cat

## Portfolio Analysis 11-30-2020

| Asset Allocation % | Net %  | Long % | Short % | Share Chg since 10-2020 | Share Amount | Holdings : 1,969 Total Stocks, 1 Total Fixed-Income, 435% Turnover Ratio | Net Assets % |
|--------------------|--------|--------|---------|-------------------------|--------------|--------------------------------------------------------------------------|--------------|
| Cash               | 30.47  | 30.60  | 0.13    | —                       | —            | SPDR® S&P 500 ETF Trust                                                  | 44.98        |
| US Stocks          | 68.31  | 68.31  | 0.00    | —                       | 51,056       | Invesco QQQ Trust                                                        | 5.30         |
| Non-US Stocks      | 1.22   | 1.22   | 0.00    | —                       | 95,469       | Consumer Discret Sel Sect SPDR® ETF                                      | 5.20         |
| Bonds              | 0.00   | 0.00   | 0.00    | —                       | 127,798      | Health Care Select Sector SPDR® ETF                                      | 4.86         |
| Other/Not Clsfd    | 0.00   | 0.00   | 0.00    | —                       | 73,705       | iShares Russell 2000 Value ETF                                           | 3.13         |
| Total              | 100.00 | 100.13 | 0.13    | —                       | 101,738      | Industrial Select Sector SPDR® ETF                                       | 3.10         |
|                    |        |        |         | —                       | 123,449      | Materials Select Sector SPDR® ETF                                        | 3.04         |

### Equity Style

| Value | Blend | Growth |
|-------|-------|--------|
| —     | —     | —      |
| —     | —     | —      |
| —     | —     | —      |
| —     | —     | —      |

### Fixed-Income Style

| Ltd | Mod | Ext |
|-----|-----|-----|
| —   | —   | —   |
| —   | —   | —   |
| —   | —   | —   |
| —   | —   | —   |

### Credit Quality Breakdown —

|         | Bond % |
|---------|--------|
| AAA     | —      |
| AA      | —      |
| A       | —      |
| BBB     | —      |
| BB      | —      |
| B       | —      |
| Below B | —      |
| NR      | —      |

### Regional Exposure

|                | Stocks % | Rel Std Index |
|----------------|----------|---------------|
| Americas       | 98.3     | 0.99          |
| Greater Europe | 1.5      | 1.71          |
| Greater Asia   | 0.2      | 4.43          |

### Sector Weightings

|                        | Stocks %    | Rel Std Index |
|------------------------|-------------|---------------|
| <b>Cyclical</b>        | <b>34.3</b> | <b>1.12</b>   |
| Basic Materials        | 5.5         | 2.41          |
| Consumer Cyclical      | 16.7        | 1.34          |
| Financial Services     | 9.9         | 0.74          |
| Real Estate            | 2.2         | 0.90          |
| <b>Sensitive</b>       | <b>41.1</b> | <b>0.89</b>   |
| Communication Services | 8.8         | 0.82          |
| Energy                 | 1.7         | 0.73          |
| Industrials            | 11.3        | 1.29          |
| Technology             | 19.3        | 0.80          |
| <b>Defensive</b>       | <b>24.6</b> | <b>1.05</b>   |
| Consumer Defensive     | 5.8         | 0.83          |
| Healthcare             | 16.7        | 1.23          |
| Utilities              | 2.1         | 0.77          |

# Mutual Fund Detail Report

## Disclosure Statement

The Mutual Fund Detail Report is to be used as supplemental sales literature, and therefore must be preceded or accompanied by the fund's current prospectus and a disclosure statement. Please read the prospectus carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm. Portfolio information is based on the most recent information available to Morningstar.

### Pre-inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the fund's actual inception. These calculated returns reflect the historical performance of the oldest share class of the fund, adjusted to reflect the fees and expenses of this share class. These fees and expenses are referenced in the report's Performance section.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

### Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when redeemed, may be worth more or less than the original investment. Fund portfolio statistics change over time. The fund is not FDIC-insured, may lose value and is not guaranteed by a bank or other financial institution.

Total Return and Quarterly Return reflects performance without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing fund expenses and assumes reinvestment of dividends and capital gains. If adjusted for sales charges and the effects of taxation, the performance quoted would be reduced.

Standardized Return is reflected as of the quarter-end. It depicts performance without adjusting for the effects of taxation, but is adjusted for sales charges and all ongoing fund expenses, and assumes reinvestment of dividends and capital gains. If adjusted for the effects of taxation, the performance quoted would be reduced. The sales charge used in the calculation was obtained from the fund's most recent prospectus and/or shareholder report available to Morningstar. Standardized Returns never include pre-inception history.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Returns, except that it represents return through month-end. As with Standardized Returns, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly reduced.

Morningstar % Rank within Morningstar Category does not account for a fund's

sales charge (if applicable). Rankings will not be provided for periods less than one year.

### Growth of 10,000

This graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and with that of the average for all funds in its Morningstar category. The total returns are not adjusted to reflect sales charges or the effects of taxation, but are adjusted to reflect actual ongoing fund expenses, and assume reinvestment of dividends and capital gains. If adjusted, sales charges would reduce the performance quoted. The index is an unmanaged portfolio of specified securities and cannot be invested in directly. The index and the category average do not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

**If pre-inception data is included in the analysis, it will be graphed.**

### Morningstar Analyst Rating

The Morningstar Analyst Rating is not a credit or risk rating. It is a subjective evaluation performed by the mutual fund analysts of Morningstar, Inc. Morningstar evaluates funds based on five key pillars, which are process, performance, people, parent, and price. Morningstar's analysts use this five pillar evaluation to identify funds they believe are more likely to outperform over the long term on a risk-adjusted basis. Analysts consider quantitative and qualitative factors in their research, and the weighting of each pillar may vary. The Analyst Rating ultimately reflects the analyst's overall assessment and is overseen by Morningstar's Analyst Rating Committee. The approach serves not as a formula but as a framework to ensure consistency across Morningstar's global coverage universe.

The Analyst Rating scale ranges from Gold to Negative, with Gold being the highest rating and Negative being the lowest rating. A fund with a Gold rating distinguishes itself across the five pillars and has garnered the analysts' highest level of conviction. A fund with a Silver rating has notable advantages across several, but perhaps not all, of the five pillars—strengths that give the analysts a high level of conviction. A Bronze-rated fund has advantages that outweigh the disadvantages across the five pillars, with sufficient level of analyst conviction to warrant a positive rating. A fund with a Neutral rating isn't seriously flawed across the five pillars, nor does it distinguish itself very positively. A Negative rated fund is flawed in at least one if not more pillars and is considered an inferior offering to its peers. Analyst Ratings are reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://corporate.morningstar.com/us/documents/MethodologyDocuments/AnalystRatingforFundsMethodology.pdf>.

**The Morningstar Analyst Rating should not be used as the sole basis in evaluating a mutual fund. Morningstar Analyst Ratings are based on Morningstar's current expectations about future events; therefore, in no way does Morningstar represent ratings as a guarantee nor should they be viewed by an investor as such. Morningstar Analyst Ratings involve unknown risks and uncertainties which may cause Morningstar's expectations not to occur or to differ significantly from what we expected.**

### Risk and Return

The Morningstar Rating is calculated for funds with at least a three-year history. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's monthly performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category receive 5 stars, the next 22.5% receive 4 stars, the next

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35% receive 3 stars, the next 22.5% receive 2 stars and the bottom 10% receive 1 star. The Overall Morningstar Rating for a mutual fund is derived from a weighted average of the performance figures associated with its three-, five- and 10-year (if applicable) Morningstar Rating metrics.

Please note that some Morningstar proprietary calculations, including the Morningstar Rating, may be calculated based on adjusted historical returns (pre-inception returns). If the extended performance rating is in effect, the "stars" are represented as unshaded stars. For each mutual fund with at least a three-year history, Morningstar calculates a Morningstar Rating based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's adjusted monthly performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars and the bottom 10% receive 1 star. This investment's independent Morningstar Rating metric is then compared against the open-end mutual fund universe's actual performance breakpoints to determine its extended performance rating. The Overall Morningstar Rating for a mutual fund is derived from a weighted average of the actual performance figures associated with its three-, five- and 10-year (if applicable) Morningstar Rating metrics.

Morningstar Return rates a mutual fund's performance relative to other funds in its Morningstar Category. It is an assessment of a fund's excess return over a risk-free rate (the return of the 90-day Treasury Bill), after adjusting for all applicable loads and sales charges, in comparison with the mutual funds in its Morningstar Category. In each Morningstar Category, the top 10% of funds earn a High Morningstar Return (HIGH), the next 22.5% Above Average (+AVG), the middle 35% Average (AVG), the next 22.5% Below Average (-AVG), and the bottom 10% Low (LOW). Morningstar Return is measured for up to three time periods (three-, five-, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the mutual fund. Funds with less than three years of performance history are not rated.

Morningstar Risk evaluates a mutual fund's downside volatility relative to that of other funds in its Morningstar Category. It is an assessment of the variations in a fund's monthly returns, with an emphasis on downside variations, in comparison with the mutual funds in its Morningstar Category. In each Morningstar Category, the 10% of funds with the lowest measured risk are described as Low Risk (LOW), the next 22.5% Below Average (-AVG), the middle 35% Average (AVG), the next 22.5% Above Average (+AVG), and the top 10% High (HIGH). Morningstar Risk is measured for up to three time periods (three-, five-, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the mutual fund. Funds with less than three years of performance history are not rated.

**If pre-inception returns are included in this analysis, the risk and return profile data calculated on the basis of these returns will appear in italics.**

### Risk Measures

The risk measures below are calculated for funds with at least a three-year history.

Standard deviation is a statistical measure of the volatility of the fund's returns.

Mean represents the annualized geometric return for the period shown.

The Sharpe ratio uses standard deviation and excess return to determine reward per unit of risk.

Alpha measures the difference between a fund's actual returns and its expected

performance, given its level of risk (as measured by beta). Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Beta is a measure of a fund's sensitivity to market movements. A portfolio with a beta greater than 1 is more volatile than the market, and a portfolio with a beta less than 1 is less volatile than the market.

R-squared reflects the percentage of a fund's movements that is explained by movements in its benchmark index, showing the degree of correlation between the fund and the benchmark. This figure is also helpful in assessing how likely it is that alpha and beta are statistically significant.

Best Fit index: Alpha, beta, and R-squared statistics are presented for a broad market index and a "Best Fit" index. The Best Fit index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the Best Fit index. The Best Fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund.

**Risk measures calculated using pre-inception data, if included in the analysis, will be presented in italics.**

### Asset Allocation

The weighting of the portfolio in various asset classes, including "Other" is shown in the table. "Other" includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks.

In the table, allocation to the classes is shown for long positions, short positions, and net (long positions net of short) positions. These statistics summarize what the managers are buying and how they are positioning the portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the funds' exposure and risk.

Most managed product portfolios hold fairly conventional securities, such as long positions in stocks and bonds. Other portfolios use other investment strategies or securities, such as short positions or derivatives, to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics.

Most portfolios take long positions in securities. Long positions involve buying the security outright and then selling it later, with the hope that the security price rises over time. In contrast, short positions are taken to benefit from anticipated price declines. In this type of transaction, the investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can now buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience losses by buying it at a higher price than the sale price.

The strategy of selling securities short is prevalent in specialized portfolios, such as long-short, market-neutral, bear-market, and hedge funds. Most conventional portfolios do not typically short securities, although they may reserve the right to do so under special circumstances. Funds may also short derivatives, and this is sometimes more efficient than shorting individual securities. Short positions produce negative exposure to the security that is being shorted. This means that when the security rises in value, the short position will fall in value and vice versa. Morningstar's portfolio statistics will capture this negative exposure. For example, if a fund has many short stock positions, the percent of assets in stocks in the asset allocation breakdown may

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For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI's average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive.

For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static breakpoints are utilized. These

Credit quality breakdowns are shown for corporate-bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit quality rating as assigned by a NRSRO. Bonds not rated by a NRSRO are included in the not rated (NR) category.

Turnover Ratio is a decent proxy for how frequently a manager trades his or her portfolio. The inverse of a fund's turnover ratio is the average holding period for a security in the fund. As turnover increases, a fund's brokerage costs typically rise as well.

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be negative. Funds must provide their broker with cash collateral for the short position, so funds that short often have a large cash position, sometimes even exceeding 100% cash.

Note that all other portfolio statistics presented in this report are based on the long holdings of the fund only.

### Style Analysis

The Morningstar Style Box reveals a fund's investment style as of the date noted on this report.

For equity funds the vertical axis shows the market capitalization of the stocks owned and the horizontal axis shows investment style (value, blend, or growth).

For fixed-income funds, the vertical axis shows the credit quality of the bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's effective duration.

Morningstar seeks credit rating information from fund companies on a periodic basis (e.g., quarterly). In compiling credit rating information Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations (NRSROs). For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating, and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings. PLEASE NOTE: Morningstar, Inc. is not itself a NRSRO nor does it issue a credit rating on the fund. A NRSRO or rating agency ratings can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low", "medium", or "high" based on their average credit quality. Funds with a low credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; medium are those less than "AA-", but greater or equal to "BBB-"; and high are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

### Equity Portfolio Statistics

The referenced data elements below are a weighted average of the long equity holdings in the portfolio.

The Price/Earnings ratio is a weighted average of the price/earnings ratios of the stocks in the underlying fund's portfolio. The P/E ratio of a stock is calculated by dividing the current price of the stock by its trailing 12-months' earnings per share. In computing the average, Morningstar weights each portfolio holding by the percentage of equity assets it represents.

The Price/Cash Flow ratio is a weighted average of the price/cash-flow ratios of the stocks in a fund's portfolio. Price/cash-flow shows the ability of a business to generate cash and acts as a gauge of liquidity and solvency.

The Price/Book ratio is a weighted average of the price/book ratios of all the stocks in the underlying fund's portfolio. The P/B ratio of a company is calculated by dividing the market price of its stock by the company's per-share book value. Stocks with negative book values are excluded from this calculation.

The geometric average market capitalization of a fund's equity portfolio offers a measure of the size of the companies in which the mutual fund invests.

### Fixed-Income Portfolio Statistics

The referenced data elements below are a weighted average of the long fixed income holdings in the portfolio.

Duration is a time measure of a bond's interest rate sensitivity. Average effective duration is a weighted average of the duration of the underlying fixed income securities within the portfolio.

Average effective maturity is a weighted average of all the maturities of the bonds in a portfolio, computed by weighting each maturity date by the market value of the security.

Average weighted coupon is generated from the fund's portfolio by weighting the coupon of each bond by its relative size in the portfolio. Coupons are fixed percentages paid out on a fixed-income security on an annual basis.

Average weighted price is generated from the fund's portfolio by weighting the price of each bond by its relative size in the portfolio. This number reveals if the fund favors bonds selling at prices above or below face value (premium or discount securities, respectively). A higher number indicates a bias toward

## Operations

Purchase constraints denote if a mutual fund has any of the following qualities: Qualified Access (A), Institutional (T), Closed to New Investments, (C) or Closed to All Investments (L). Because these qualities can all act as restrictions and/or requirements for investment, they are grouped together.

Potential capital gains exposure is the percentage of a mutual fund's total assets that represents capital appreciation.

## Fees and Expenses

Prospectus Gross Expense Ratio reflects the annual percentage of a fund's assets paid out in expenses. Expenses include management, 12B-1, transfer agent and all other asset-based fees associated with the fund's daily operations and distribution, with the exception of brokerage commissions. It does not reflect expenses that have been reimbursed by the investment advisor, reductions from brokerage service arrangements or other expense offset arrangements.

Prospectus Net Expense Ratio reflects actual expenses paid by the fund as well as any voluntary waivers, reductions from brokerage service arrangements and any other expense offset arrangements.

## Investment Risks

**International/Emerging Market Equities:** Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

**Sector Strategies:** Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

**Non-Diversified Strategies:** Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

**Small Cap Equities:** Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

**Mid Cap Equities:** Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

**High-Yield Bonds:** Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

**Tax-Free Municipal Bonds:** The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

**Bonds:** Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

**HOLDRs:** The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

**Hedge Funds:** The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

**Bank Loan/Senior Debt:** Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

**Exchange Traded Notes (ETNs):** ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

**Leveraged ETFs:** Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

**Short Positions:** When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

**Long-Short:** Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

**Liquidity Risk:** Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

**Market Price Risk:** The market price of ETFs, HOLDrs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

**Market Risk:** The market prices of ETFs and HOLDrs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

# Performance Appendix

Performance Data below is net of fees. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

| Account Name                   | QTD   | YTD   | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
|--------------------------------|-------|-------|--------|---------|---------|----------|-----------------|----------------|
| Baird Investment Management    | 1.07  | 8.63  | 8.63   | 5.84    | --      | --       | 5.84            | 12/01/2017     |
| Brandywine Global Opp          | 10.37 | 12.51 | 12.51  | 5.27    | 6.62    | --       | 3.31            | 10/01/2012     |
| FPA Crescent                   | 18.23 | 12.18 | 12.18  | 7.62    | 8.69    | --       | 6.82            | 01/01/2015     |
| Met West Total Return Bond     | 1.20  | 9.11  | 9.11   | 6.04    | 4.81    | --       | 4.02            | 07/01/2014     |
| Mutual Fund Cash               | 0.00  | 0.37  | 0.37   | 1.31    | 1.00    | --       | --              | 09/01/2012     |
| PIMCO Income Instl             | 4.12  | 5.45  | 5.45   | 4.65    | 6.24    | --       | 5.72            | 01/01/2013     |
| Restricted Cash Account        | 0.00  | 0.37  | 0.37   | --      | --      | --       | 1.38            | 02/01/2018     |
| Salient Tactical Growth        | 3.66  | 8.03  | 8.03   | --      | --      | --       | 4.74            | 09/01/2018     |
| TIAA CREF                      | 1.73  | 7.86  | 7.86   | 5.60    | --      | --       | 5.33            | 12/01/2017     |
| Vanguard Mid Cap Index         | 18.02 | 18.26 | 18.26  | 12.04   | 13.29   | --       | 13.78           | 10/01/2012     |
| iShares Core S&P 500 ETF       | 12.19 | 18.33 | 18.33  | 14.06   | 15.19   | --       | 15.19           | 01/01/2016     |
| iShares MSCI EAFE ETF          | 15.66 | 8.19  | 8.19   | 4.44    | --      | --       | 6.01            | 09/01/2017     |
| iShares MSCI Emerging Mkts ETF | 18.92 | 17.89 | 17.89  | 5.70    | --      | --       | 7.32            | 09/01/2017     |
| iShares MSCI USA Min Vol ETF   | 6.99  | 5.58  | 5.58   | 10.96   | 12.42   | --       | 12.42           | 01/01/2016     |
| iShares S&P Small Cap          | 31.22 | 11.23 | 11.23  | 7.72    | --      | --       | 11.29           | 10/01/2016     |

All performance above are Time Weighted(TWR) performance

## Glossary of Terms

**Active Contribution Return:** The gain or loss percentage of an investment relative to the performance of the investment benchmark.

**Active Exposure:** The percentage difference in weight of the portfolio compared to its policy benchmark.

**Active Return:** Arithmetic difference between the manager's return and the benchmark's return over a specified time period.

**Actual Correlation:** A measure of the correlation (linear dependence) between two variables X and Y, with a value between +1 and -1 inclusive. This is also referred to as coefficient of correlation.

**Alpha:** A measure of a portfolio's time weighted return in excess of the market's return, both adjusted for risk. A positive alpha indicates that the portfolio outperformed the market on a risk-adjusted basis, and a negative alpha indicates the portfolio did worse than the market.

**Best Quarter:** The highest quarterly return for a certain time period.

**Beta:** A measure of the sensitivity of a portfolio's time weighted return (net of fees) against that of the

market. A beta greater than 1.00 indicates volatility greater than the market.

**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.

**Core:** Refers to an investment strategy mandate that is blend of growth and value styles without a pronounced tilt toward either style.

**Cumulative Selection Return (Cumulative Return):** Cumulative investment performance over a specified period of time.

**Distribution Rate:** The most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and/or return of capital.

**Down Market Capture:** The ratio of average portfolio returns over the benchmark during periods of negative benchmark return. Lower values indicate better product 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 quarterly set of returns. The higher the value, the more risk the product has.

**Downside Semi Deviation:** A statistical calculation that measures the volatility of returns below a minimum acceptable return. This return measure isolates the negative portion of volatility: the larger the number, the greater the volatility.

**Drawdown:** A drawdown is the peak-to-trough decline during a specific period of an investment, fund or commodity.

**Excess over Benchmark:** The percentage gain or loss of an investment relative to the investment's benchmark.

**Excess Return:** Arithmetic difference between the manager's return and the risk-free return over a specified time period.

**Growth:** A diversified investment strategy which includes investment selections that have capital appreciation as the primary goal, with little or no dividend payouts. These strategies can include reinvestment in expansion, acquisitions, and/or research and development opportunities.

**Growth of Dollar:** The aggregate amount an investment has gained or lost over a certain time period, also referred to as Cumulative Return, stated in terms of the amount to which an initial dollar investment would have grown over the given time period.

**Investment Decision Process (IDP):** A model for structuring the investment process and implementing the correct attribution methodologies. The IDP includes every decision made concerning the division of the assets under management over the various asset categories. To analyze each decision's contribution to the total return, a modeling approach must measure the marginal value of every individual decision. In this respect, the hierarchy of the decisions becomes very important. We therefore use the IDP model, which serves as a proper foundation for registering the decisions and relating them to each other.

**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.

**Jensen's Alpha:** The Jensen's alpha measure is a risk-adjusted performance measure that represents the average return on a portfolio or investment above or below that predicted by the capital asset pricing model (CAPM) given the portfolio's or investment's beta and the average market return. This metric is also commonly referred to as alpha.

**Kurtosis:** A statistical measure that is used to describe the distribution, or skewness, of observed data around the mean, sometimes referred to as the volatility of volatility.

**Maximum Drawdown:** The drawdown is defined as the percent retracement from a fund's peak to the fund's trough value. It is in effect from the time the fund's retracement 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.

**Modern Portfolio Theory (MPT):** An investment analysis theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward.

**Mutual Fund (MF):** An investment program funded by shareholders that trade in diversified holdings and is professionally managed.

**Peer Group:** A combination of funds that share the same investment style combined as a group for comparison purposes.

**Peer/ Plan Sponsor Universe:** A combination of asset pools of total plan investments by specific sponsor and plan types for comparison purposes.

**Performance Ineligible Assets:** Performance returns are not calculated for certain assets because accurate valuations and transaction data for these assets are not processed or maintained by us. Common examples of these include life insurance, some annuities and some assets held externally.

**Performance Statistics:** A generic term for various measures of investment performance measurement terms.

**Portfolio Characteristics:** A generic term for various measures of investment portfolio characteristics.

**Preferred Return:** A term used in the private equity (PE) world, and also referred to as a "Hurdle Rate." It refers to the threshold return that the limited partners of a private equity fund must receive, prior to the PE firm receiving its carried interest or "carry."

**Ratio of Cumulative Wealth:** A defined ratio of the Cumulative Return of the portfolio divided by the Cumulative Return of the benchmark for a certain time period.

**Regression Based Analysis:** A statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables

**Residual Correlation:** Within returns-based style analysis, residual correlation refers to the portion of a strategy's return pattern that cannot be explained by its correlation to the asset-class benchmarks to which it is being compared.

**Return:** A rate of investment performance for the specified period.

**Rolling Percentile Ranking:** A measure of an investment portfolio's ranking versus a peer group for a specific rolling time period (i.e. Last 3 Years, Last 5 years, etc.).

**R-Squared:** The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

**SA/CF (Separate Account/Comingled Fund):** Represents an acronym for Separate Account and Comingled Fund investment vehicles.

**Sector Benchmark:** A market index that serves as a proxy for a sector within an asset class.

**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 results in.

**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.

**Total Fund Benchmark:** The policy benchmark for a complete asset pool that could consist of multiple investment mandates.

**Total Fund Composite:** The aggregate of multiple portfolios within an asset pool or household.

**Tracking Error:** A measure of standard deviation for a portfolio's investment performance, relative to the performance of an appropriate market benchmark.

**Treynor Ratio:** A ratio that divides the excess return (above the risk free rate) by the portfolio's beta to arrive at a unified measure of risk adjusted return. It is generally used to rank portfolios, funds and benchmarks. A higher ratio is indicative of higher returns per unit of market risk. This measurement can help determine if the portfolio is reaching its goal of increasing returns while managing market risk.

**Up Market Capture:** The ratio of average portfolio returns over the benchmark during periods of positive benchmark return. Higher values indicate better product performance.

**Upside Semi Deviation:** A statistical calculation that measures the volatility of returns above an acceptable return. This return measure isolates the positive portion of volatility; the larger the number, the greater the volatility.

**Value:** A diversified investment strategy that includes investment selections which tend to trade at a lower price relative to its dividends, earnings, and sales. Common attributes are stocks that include high dividend, low price-to-book ratio, and/or low price-to-earnings ratio.

**Worst Quarter:** The lowest rolling quarterly return for a certain time period.

## Information Disclosures

*Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.*

*Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.*

*Benchmark indices and blends included in this material are for informational purposes only, are provided solely as a comparison tool and may not reflect the underlying composition and/or investment objective(s) associated with the account(s). Indices are unmanaged and not available for direct investment. Index returns do not take into account fees or other charges. Such fees and charges would reduce performance.*

*The performance data shown reflects past performance, which does not guarantee future results. Investment return and principal will fluctuate so that an investor's shares when redeemed may be worth more or less than original cost. Please note, current performance may be higher or lower than the performance data shown. For up to date month-end performance information, please contact your Financial Advisor or visit the funds' company website.*

*Investors should carefully consider the fund's investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds' company*

## website.

Past performance is no gua

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Credit quality is a measure o  
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s, including possible loss of principal. **Growth investing** does not guarantee a stock of these companies can have relatively high valuations. Because of these t in a growth stock can be more risky than an investment in a company with ions. **Value investing** involves the risk that the market may not recognize that l they may not appreciate as anticipated. **Small and mid-capitalization** ncial resources, product diversification and competitive strengths of larger small capitalization companies may not trade as readily as, and be subject to larger, more established companies. **Bond funds** and bond holdings have the d credit risks that are associated with the underlying bonds owned by the in bond funds, and in funds with significant bond holdings, is not guaranteed. es may carry additional risks, including foreign economic, political, monetary currency exchange rates, foreign taxes and differences in financial and tional investing may not be for everyone. These risks may be magnified in re investments, including private equity funds, real estate funds, hedge funds, nds of hedge funds, private equity, and managed futures funds, are ant risks that can include losses due to leveraging or other speculative liquidity, volatility of returns, restrictions on transferring interests in a fund, n, absence and/or delay of information regarding valuations and pricing, lays in tax reporting, less regulation and higher fees than mutual funds and tions, personnel and processes of the advisor. **Master Limited Partnerships** ps or limited liability companies that are taxed as partnerships and whose units or limited liability company units) are traded on securities exchanges like ntly, most MLPs operate in the energy, natural resources or real estate nterests are subject to the risks generally applicable to companies in the ectors, including commodity pricing risk, supply and demand risk, depletion MLP interests in the real estate sector are subject to special risks, including e fluctuations, as well as risks related to general and economic conditions. , MLPs maintain exposure to price volatility of commodities and/or e more volatile than investments that diversify across many sectors and ject to additional risks including: investors having limited control and rights e MLP, limited access to capital, cash flow risk, lack of liquidity, dilution risk, d call rights related to acquisitions.

also involve prepayment risk, in that faster or slower prepayments than age loans can dramatically alter the yield-to-maturity of a mortgage-backed ncludes the possibility that a fund may invest the proceeds at generally lower

meet their objective of being tax-efficient.

bject to special risks, including interest rate and property value fluctuations, ral and economic conditions. **High yield** fixed income securities, also known d speculative, involve greater risk of default and tend to be more volatile than : securities.

a bond issuer's creditworthiness, or ability to repay interest and principal to ar. The credit ratings shown are based on security rating as provided by



Standard & Poor's, Moody's and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P and Fitch's classification (the equivalent of Aaa and C, respectively, by Moody's). Ratings of BBB or higher by S&P and Fitch (Baa or higher by Moody's) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as "NR".

**"Alpha tilt strategies** comprise a core holding of stocks that mimic a benchmark type index such as the S&P 500 to which additional securities are added to help tilt the fund toward potentially outperforming the market in an effort to enhance overall investment returns. Tilt strategies are subject to significant timing risk and could potentially expose investors to extended periods of underperformance."

**Custom Account Index:** The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

## Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client's investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups

<https://www.invmetrics.com/style-peer-groups>

## Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation

denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

## Alternatives

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Traditional alternative investment vehicles often are speculative and include a high degree of risk. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to:

- Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices;
- Lack of liquidity in that there may be no secondary market for a fund;
- Volatility of returns;
- Restrictions on transferring interests in a fund;
- Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- Absence of information regarding valuations and pricing;
- Complex tax structures and delays in tax reporting;
- Less regulation and higher fees than mutual funds; and
- Risks associated with the operations, personnel, and processes of the manager.

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For most investment advisory clients, the program account will be charged an asset-based wrap fee every quarter ("the Fee"). In general, the Fee covers investment advisory services and reporting. In addition to the Fee, clients will pay the fees and expenses of any funds in which their account is invested. Fund fees and expenses are charged directly to the pool of assets the fund invests in and impact the valuations. Clients must understand that these fees and expenses are an additional cost and will not be included in the Fee amount in the account statements.

As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of \$100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately \$115,762.50 without the fees and \$107,372.63 with the fees. Please see the applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at [www.morganstanley.com/ADV](http://www.morganstanley.com/ADV) or from your Financial Advisor/Private Wealth Advisor.

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You could lose money in Money Market Funds. Although MMFs classified as government funds (i.e., MMFs that invest 99.5% of total assets in cash and/or securities backed by the U.S. government) and retail funds (i.e., MMFs open to natural person investors only) seek to preserve value at \$1.00 per share, they cannot guarantee they will do so. The price of other MMFs will fluctuate and when you sell shares they may be worth more or less than originally paid. MMFs may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits. A MMF investment is not insured or guaranteed by the Federal Deposit Insurance Corporation or other government agency.

# Rudd and Wisdom, Inc.

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April 17, 2020

**Via E-Mail: amsel@hlb-cpa.com**

Board of Trustees

The City of Galveston Employees'

Retirement Plan for City Employees

c/o Ms. Ann S. Masel, CPA

1011 Tremont

Galveston, Texas 77550

Re: Recommended Actuarial Assumptions for the  
December 31, 2019 Actuarial Valuation

Dear Trustees:

As a part of the December 31, 2019 actuarial valuation of The City of Galveston Employees' Retirement Plan for City Employees (the Plan), we have reviewed all of the actuarial assumptions used in the December 31, 2018 actuarial valuation of the Plan to see if they remain appropriate or should be revised for the December 31, 2019 actuarial valuation. The results of an actuarial valuation do not determine the ultimate cost of the Plan but a recommended funding pattern that will hopefully be well matched with the Plan's actual experience as it unfolds over the long-term future. The accuracy and usefulness of actuarial valuations depend upon the use of actuarial assumptions that will reasonably reflect the Plan's future experience observed over a long period of time.

All of the major demographic actuarial assumptions were reviewed in preparation for the first regular actuarial valuation we performed for the Plan which was as of December 31, 2015 and which the board received in May 2016. We used those demographic assumptions for the four consecutive annual actuarial valuations through December 31, 2018, except for mortality, for which a new assumption was recommended for the December 31, 2018 actuarial valuation. All of those demographic assumptions used for the December 31, 2018 actuarial valuation continue to be appropriate for the December 31, 2019 actuarial valuation. Our review of the economic assumptions, summarized in Exhibit 1, leads us to recommend using the same assumptions as we did last year.

### Economic Assumptions

There are two components to the investment return assumption: (1) the rate of inflation and (2) the net real rate of return. The current investment return assumption is 7.25% per year net of

investment-related expenses, consisting of an assumed rate of inflation of 2.75% per year and an assumed net real rate of return of 4.50%. Each component represents the annual average rate expected over the long-term future. While this is a theoretical approach, it provides a reasonable basis for the selection of an investment return assumption. In addition, the other key economic assumptions, the general compensation increase assumption and the payroll increase assumption, are also influenced by the inflation assumption. These economic assumptions are consistent with each other because they contain the same assumed annual rate of inflation of 2.75%.

#### **Recommended Actuarial Assumptions**

As a result of our review of all of the actuarial assumptions used in the December 31, 2018 actuarial valuation, we recommend no changes for the December 31, 2019 actuarial valuation.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions in this report.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF/RBM:nlg

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## Exhibit 1

### The City of Galveston Employees' Retirement Plan for City Employees Review of the Actuarial Investment Return Assumption for the December 31, 2019 Actuarial Valuation

#### Theoretical Investment Return Assumption Development

|                                                                                                                          | Gross Annual<br>Real Rate of<br>Investment<br>Return (ROR) <sup>1</sup> | Estimated<br>Investment<br>Expenses <sup>2</sup> | Net<br>Real<br>ROR | Asset Allocation            |                       |                       |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------|--------------------|-----------------------------|-----------------------|-----------------------|
|                                                                                                                          |                                                                         |                                                  |                    | 12/31/<br>2019 <sup>3</sup> | Hypothetical<br>Set A | Hypothetical<br>Set B |
| <b>Domestic Equity</b>                                                                                                   |                                                                         |                                                  |                    |                             |                       |                       |
| Large cap (iShares Core S&P 500)                                                                                         | 6.5%                                                                    | 0.25%                                            | 6.25%              | 14.9%                       | 15%                   | 15%                   |
| Large cap (iShares MSCI USA<br>min. vol.)                                                                                | 6.5                                                                     | 0.36                                             | 6.14               | 15.6                        | 14                    | 15                    |
| Mid cap (Vanguard Index)                                                                                                 | 7.0                                                                     | 0.25                                             | 6.75               | 16.1                        | 14                    | 10                    |
| Small cap (iShares S&P<br>Small-Cap)                                                                                     | 7.0                                                                     | 0.28                                             | 6.72               | <u>8.5</u>                  | <u>7</u>              | <u>6</u>              |
|                                                                                                                          |                                                                         |                                                  |                    | 55.1                        | 50                    | 46                    |
| <b>International Equity</b>                                                                                              |                                                                         |                                                  |                    |                             |                       |                       |
| Developed (iShares MSCI EAFE)                                                                                            | 7.0                                                                     | 0.28                                             | 6.72               | 5.1                         | 6                     | 10                    |
| Emerging (iShares MSCI Emerg.)                                                                                           | 8.5                                                                     | 0.35                                             | 8.15               | <u>2.5</u>                  | <u>3</u>              | <u>3</u>              |
|                                                                                                                          |                                                                         |                                                  |                    | 7.6                         | 9                     | 13                    |
| <b>Fixed Income</b>                                                                                                      |                                                                         |                                                  |                    |                             |                       |                       |
| Domestic Intermediate (Baird, Met<br>West, TIAA-CREF)                                                                    | 2.0                                                                     | 0.53                                             | 1.47               | 17.7                        | 19                    | 22                    |
| World (Brandywine Global)                                                                                                | 2.5                                                                     | 0.80                                             | 1.70               | 3.6                         | 5                     | 5                     |
| Multisector (PIMCO Income)                                                                                               | 2.5                                                                     | 0.71                                             | 1.79               | <u>4.6</u>                  | <u>5</u>              | <u>5</u>              |
|                                                                                                                          |                                                                         |                                                  |                    | 25.9                        | 29                    | 32                    |
| <b>Alternatives</b>                                                                                                      |                                                                         |                                                  |                    |                             |                       |                       |
| Long/short equity (Salient)                                                                                              | 5.5                                                                     | 1.77                                             | 3.73               | 2.2                         | 3                     | 0                     |
| Absolute return (Wells Fargo)                                                                                            | 3.5                                                                     | 1.31                                             | 2.19               | 2.6                         | 3                     | 0                     |
| Balanced allocation (FPA<br>Crescent)                                                                                    | 4.5                                                                     | 1.28                                             | 3.22               | <u>4.2</u>                  | <u>4</u>              | <u>6</u>              |
|                                                                                                                          |                                                                         |                                                  |                    | 9.0                         | 10                    | 6                     |
| <b>Cash</b>                                                                                                              | 0.5                                                                     | 0.31                                             | 0.19               | <u>2.4</u>                  | <u>2</u>              | <u>3</u>              |
|                                                                                                                          |                                                                         |                                                  |                    | 100.0%                      | 100%                  | 100%                  |
| <b>Weighted Average Net Real ROR Assumption</b>                                                                          |                                                                         |                                                  |                    | 4.78%                       | 4.62%                 | 4.55%                 |
| <b>Possible Theoretical Annual Investment Return Assumption<br/>– Net Real ROR Plus Assumed Annual Rate of Inflation</b> |                                                                         |                                                  |                    |                             |                       |                       |
| Assumed 2.75% Inflation                                                                                                  |                                                                         |                                                  |                    | 7.53%                       | 7.37%                 | 7.30%                 |

<sup>1</sup> A gross annual real rate of investment return is the long-term total annual rate of investment return, before any expenses, that is in excess of the assumed annual inflation rate. These are assumptions made by Rudd and Wisdom, Inc.

<sup>2</sup> These assumed investment-related expenses as a percent of assets are based on the larger of expense ratios from the Quantitative Group and from Morningstar and include both direct and indirect expenses, with an addition of 0.07% for the fees of the custodial bank and 0.14% for the fees of The Quantitative Group.

<sup>3</sup> From the December 31, 2019 report of the Quantitative Group.



**Exhibit 1 (continued)**

**Price Inflation in the USA - Average Annual Rates of Increase in the CPI-U**

| <u>Years<br/>(Dec. to Dec.)</u> | <u>Number<br/>of Years</u> | <u>Average<br/>Annual Increase</u> |
|---------------------------------|----------------------------|------------------------------------|
| 1954 – 2019                     | 65                         | 3.54%                              |
| 1959 – 2019                     | 60                         | 3.68                               |
| 1964 – 2019                     | 55                         | 3.91                               |
| 1969 – 2019                     | 50                         | 3.91                               |
| 1974 – 2019                     | 45                         | 3.62                               |
| 1979 – 2019                     | 40                         | 3.07                               |
| 1984 – 2019                     | 35                         | 2.58                               |
| 1989 – 2019                     | 30                         | 2.40                               |
| 1994 – 2019                     | 25                         | 2.18                               |
| 1999 – 2019                     | 20                         | 2.14                               |

Most inflation forecasts are for 10 years or less. For example, the average 10-year forecast in the December 2019 Livingston Survey published by the Federal Reserve Bank of Philadelphia was 2.22%. Similarly, the 2020 Wall Street Consensus Survey for the next decade included an average inflation forecast of 2.1%. However, 10 years is much too short a forecast period for a public employee defined benefit pension plan. In the 2019 annual report of the OASDI Trust Funds (Social Security), the ultimate inflation assumptions for their 75-year projections are 3.2%, 2.6%, and 2.0% for the low-cost, intermediate, and high-cost assumptions, respectively. Looking at the average annual increase in the CPI-U over historical periods of 30 to 65 years above and considering the Social Security forecasts, we believe that reasonable assumed rates of inflation for the long-term future would range from 2.5% to 3.5%. Shorter term considerations make the lower part of that range more desirable.

**Administrative Expenses Paid from the Plan Assets**

| <u>Plan Year</u> | <u>Administrative<br/>Expenses Paid from the Plan</u> | <u>Covered Payroll</u> | <u>% of Payroll<br/>(2) ÷ (3)</u> |
|------------------|-------------------------------------------------------|------------------------|-----------------------------------|
| (1)              | (2)                                                   | (3)                    | (4)                               |
| 2019             | \$165,770                                             | \$26,941,018           | 0.62%                             |
| 2018             | 138,864                                               | 26,308,423             | 0.53                              |
| 2017             | 133,006                                               | 25,308,650             | 0.53                              |
| 2016             | 145,136                                               | 22,853,063             | 0.64                              |
| 2015             | 127,460                                               | 21,925,267             | 0.58                              |
| 2014             | 123,414                                               | 20,400,300             | 0.60                              |
| 2013             | 136,324                                               | 17,570,017             | 0.78                              |
| 2013-2019        | \$969,974                                             | \$161,306,738          | 0.60%                             |

### Exhibit 1 (continued)

The assumed future administrative expenses will be added to the normal cost contribution rate as was done for the prior four actuarial valuations. For the December 31, 2019 actuarial valuation, we recommend assuming 0.60% of payroll, the average developed above for the last seven plan years. This is the same assumption as for the prior actuarial valuation. The covered payroll was determined as the employee contributions for the plan year divided by the 6% contribution rate.

#### Comparison of 12/31/2018 Actuarial Economic Assumptions with 12/31/2019 Actuarial Economic Assumptions

| <u>Actuarial Assumption<sup>1</sup></u>  | <u>12/31/2018<br/>Actuarial<br/>Economic<br/>Assumptions</u> | <u>12/31/2019<br/>Actuarial<br/>Economic<br/>Assumptions</u> |
|------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Inflation (Price)                        | 2.75%                                                        | 2.75%                                                        |
| Net real rate of return <sup>2</sup>     | <u>4.50</u>                                                  | <u>4.50</u>                                                  |
| Net total investment return <sup>2</sup> | 7.25%                                                        | 7.25%                                                        |
| Employee pay increase <sup>3</sup>       | 4.15%                                                        | 4.15%                                                        |
| Aggregate payroll increase               | 2.75%                                                        | 2.75%                                                        |
| Administrative expenses (% of payroll)   | 0.60%                                                        | 0.60%                                                        |

<sup>1</sup> All assumptions are annual rates.

<sup>2</sup> Net of investment-related expenses.

<sup>3</sup> For both 12/31/2018 and 12/31/2019, it is a 2.75% annual general pay increase combined with promotion and merit pay increases that average 1.4% per year over a 25-year career.

# Rudd and Wisdom, Inc.

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May 17, 2019

**Via E-Mail: amasel@hlb-cpa.com**

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Actuarial Valuation as of December 31, 2018 with  
Different Assumptions and Benefits

Dear Trustees:

At your request, we have prepared this report which presents additional results of the actuarial valuation of the City of Galveston Employees' Retirement Plan for City Employees (the Plan) as of December 31, 2018. The purposes of these additional results are (1) to show the effects with revised economic assumptions that include an investment return assumption of 7% and (2) to study the effects of gradual increases in the maximum annual benefit. As we have done in the studies of changes in plan provisions in prior years, we recommend a maximum period for paying off the unfunded liability of 20 years.

We redid the actuarial valuation as of December 31, 2018 lowering the inflation assumption underlying the actuarial economic assumption from 2.75% to 2.5%. In connection with the change in inflation rate, the investment return assumption was changed from 7.25% to 7% net of investment-related expenses. In addition, the general compensation increase assumption and the aggregate payroll increase assumption were changed from 2.75% to 2.5%, equal to the inflation assumption.

In Exhibit 1, the Set A results are from the original actuarial valuation while Set B is the valuation results with these new assumptions including the 7% investment return and no changes in benefits. The key changes are an increase in the unfunded liability (item 5) of \$1.8 million and an increase in the period to pay off the unfunded liability (item 8) of 5.1 years from 16.8 years to 21.9 years. Set C reveals that in order to have a 20-year pay off period, the city's contribution rate would need to be increased to 9.35% in January 2020.

The Set D and Set E results in Exhibit 1 reflect the effects of increasing the maximum annual benefit from \$50,000 to \$55,000 (Set D) and to \$60,000 (Set E). In order to have a 20-year pay

off period, the city's contribution rate would need to be increased in January 2020 to 9.7% for the \$55,000 maximum or to 10% for the \$60,000 maximum. This is in contrast to the results of the original valuation using the 7.25% investment return assumption where no city contribution increase would currently be required for a change in the maximum benefit from \$50,000 up to \$60,000 while keeping within a 20-year pay off period.

These additional results are based on the Plan's actuarial valuation as of December 31, 2018, including the actuarial assumptions, the census data, and the plan provisions summarized in our report to the board of trustees dated May 1, 2019, except for the changes in the actuarial economic assumptions and in the maximum annual benefit described in this report.

### Recent History of Assumptions

For your reference, we have included the below summary of the key assumptions used in the valuation over the last five years. This summary shows how these key assumptions have been adjusted and lowered over the last few years.

| Valuation Date | Assumptions (Annual Rates) |           |                   |                            |
|----------------|----------------------------|-----------|-------------------|----------------------------|
|                | Investment Return          | Inflation | Aggregate Payroll | Individual Compensation    |
| 12/31/2014     | 8.00%                      | 3.00%     | 3.25%             | 5.00%                      |
| 12/31/2015     | 7.50                       | 3.25      | 3.25              | 3.25 plus PMI <sup>1</sup> |
| 12/31/2016     | 7.25                       | 3.00      | 3.00              | 3.00 plus PMI <sup>1</sup> |
| 12/31/2017     | 7.25                       | 2.75      | 2.75              | 2.75 plus PMI <sup>1</sup> |
| 12/31/2018     | 7.25                       | 2.75      | 2.75              | 2.75 plus PMI <sup>1</sup> |

<sup>1</sup> PMI stands for promotion and merit increases that vary by length of service (greatest in early years of service) and average 1.4% per year over a 25-year career.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Please let us know if you have any questions.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.



**Exhibit 1**

**The City of Galveston Employees' Retirement Plan for City Employees  
Results of the December 31, 2018 Actuarial Valuation with Different Assumptions and Benefits**

| Economic Assumptions                             | Set A               | Set B               | Set C               | Set D               | Set E               |
|--------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| - Investment Return                              | 7.25%               | 7.00%               | 7.00%               | 7.00%               | 7.00%               |
| - Inflation and Payroll Increase                 | 2.75%               | 2.50%               | 2.50%               | 2.50%               | 2.50%               |
| Maximum Annual Benefit                           | \$50,000            | \$50,000            | \$50,000            | \$55,000            | \$60,000            |
| 1. Actuarial present value of future benefits    | \$ 84,711,432       | \$ 87,228,616       | \$ 87,228,616       | \$ 88,291,833       | \$ 89,176,725       |
| 2. Actuarial present value of future normal cost | \$ 16,364,009       | \$ 17,036,194       | \$ 17,036,194       | \$ 17,411,733       | \$ 17,731,481       |
| 3. Actuarial accrued liability                   | \$ 68,347,423       | \$ 70,192,422       | \$ 70,192,422       | \$ 70,880,100       | \$ 71,445,244       |
| 4. Actuarial value of assets                     | \$ 52,374,631       | \$ 52,374,631       | \$ 52,374,631       | \$ 52,374,631       | \$ 52,374,631       |
| 5. UAAL [(3) - (4)]                              | \$ 15,972,792       | \$ 17,817,791       | \$ 17,817,791       | \$ 18,505,469       | \$ 19,070,613       |
| 6. Percent of payroll                            |                     |                     |                     |                     |                     |
| a. Normal cost                                   | 9.81%               | 10.12%              | 10.12%              | 10.28%              | 10.40%              |
| b. For UAAL                                      | 5.19%               | 4.88%               | 5.23%               | 5.42%               | 5.60%               |
| c. Total                                         | 15.00% <sup>1</sup> | 15.00% <sup>1</sup> | 15.35% <sup>2</sup> | 15.70% <sup>3</sup> | 16.00% <sup>4</sup> |
| 7. Annualized covered payroll                    | \$ 26,061,778       | \$ 26,061,778       | \$ 26,061,778       | \$ 26,061,778       | \$ 26,061,778       |
| 8. Years to amortize the UAAL                    | 16.8 years          | 21.9 years          | 20.0 years          | 20.0 years          | 20.0 years          |
| 9. Funded ratio                                  | 76.6%               | 74.6%               | 74.6%               | 73.9%               | 73.3%               |

<sup>1</sup> Contribution rates of 6% by the employees and 9% by the city.

<sup>2</sup> Contribution rates of 6% by the employees and 9.35% by the city, increasing from 9% to 9.35% in January 2020.

<sup>3</sup> Contribution rates of 6% by the employees and 9.70% by the city, increasing from 9% to 9.70% in January 2020.

<sup>4</sup> Contribution rates of 6% by the employees and 10.00% by the city, increasing from 9% to 10.00% in January 2020.

# Rudd and Wisdom, Inc.

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May 6, 2019.

**Via E-Mail: amasel@hlb-cpa.com**

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Report on Special Study

Dear Trustees:

At your request, we have completed the special study for the City of Galveston Employees' Retirement Plan for City Employees (the Plan) to answer the question, "What would be the actuarial effect on the Plan of amending it so that employees would discontinue making their 6% employee contributions when their benefit would be limited by the cap of \$50,000 in the present Plan provisions?" The summary answer is that the loss of those 6% employee contributions would increase the expected period of time required to pay off the unfunded liability from 16.8 years as of December 31, 2018 to 21.4 years based on the actuarial value of assets. Using the market value of assets, the unfunded liability pay off period would increase from 23.7 years to 30.0 years.

### Methodology and Assumptions

This special study is based on the Plan's actuarial valuation as of December 31, 2018, including the actuarial assumptions and the census data, summarized in our report to the board of trustees dated May 1, 2019. We assumed for this special study that the potential amendment would be effective retroactively to January 1, 2019. These were the steps in the methodology used for the special study:

1. Identify the year when each employee's projected benefit would first be limited by the \$50,000 cap.
2. Project the 6% contributions each employee in step 1 would have made after the projected benefit exceeds \$50,000.

3. Assume each employee in step 1 would work for the city until the later of age 65 or December 31, 2020.
4. Determine the present value of the contributions in step 2 as of December 31, 2018.
5. Determine the unfunded liability pay off period if the contributions in step 2 are not made to the Plan.

#### Considerations

1. The potential change to stop contributions would require the board to develop administrative rules for annually reviewing the accrued benefits of participants approaching the \$50,000 maximum, communicating the results to the employees who first attain the maximum and to the city payroll department, and documenting the results.
2. This potential plan change to stop contributions once the projected benefit exceeds the \$50,000 maximum, payable at normal retirement date age 65, would affect the early retirement benefits. For example, if someone stops contributing prior to age 55, then their benefit would not increase any further and they would only be entitled to an immediate early retirement benefit at age 55 of 50% of the \$50,000, or \$25,000. With the current plan provisions effective as of November 2017 of applying the early retirement reductions to the projected benefit prior to applying the cap, there is the potential for an employee to currently receive a reduced early retirement benefit of \$50,000 payable immediately at age 55. Changing the plan to cease employee contributions once the earned benefit, payable at normal retirement, is capped at \$50,000 would cause the benefit to stop increasing and would result in early retirement benefits being capped at smaller amounts than are currently allowed.

The potential plan change should include language to protect the employees currently eligible for early retirement with an accrued benefit greater than \$50,000 subject to the \$50,000 limit after the application of the early retirement reduction factor.

3. Leaving the cap at \$50,000 indefinitely and stopping employee contributions once the cap is attained is not a good long-term benefit design because (a) the \$50,000 will gradually erode by inflation over time and (b) the employees who would stop making contributions would become responsible for making up the short fall in the total benefit that they would have had if the Plan had no cap.
4. The better long-term benefit design would be to periodically increase the cap until it is eliminated, restoring the benefit design that was in place before the stop-gap 2003 amendment.
5. The Board would need to specify procedures of how this amendment would work if the \$50,000 is increased in the future. We would recommend that if the cap is later increased after the potential amendment has been in effect, then the benefits would increase, and the employees

who had stopped contributions would then need to contribute a lump sum of after-tax contributions to make up for what would have been contributed. This would be cumbersome and awkward for the plan administration.

6. We recommend that the board ask its legal counsel for a letter of opinion regarding the potential change of some employees contributing 6% and other employees not contributing with respect to the tax-deferred status of all the employee contributions since the addition to the plan of "employer pick-up" under the Internal Revenue Code Section 414(h).

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Please let us know if you have any questions.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF/RBM:nlg

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# Rudd and Wisdom, Inc.

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April 29, 2019

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Recommended Actuarial Assumptions for the  
December 31, 2018 Actuarial Valuation

Dear Trustees:

As a part of the December 31, 2018 actuarial valuation of The City of Galveston Employees' Retirement Plan for City Employees (the Plan), we have reviewed all of the actuarial assumptions used in the December 31, 2017 actuarial valuation of the Plan to see if they remain appropriate or should be revised for the December 31, 2018 actuarial valuation. The results of an actuarial valuation do not determine the ultimate cost of the Plan but a recommended funding pattern that will hopefully be well matched with the Plan's actual experience as it unfolds over the long-term future. The accuracy and usefulness of actuarial valuations depend upon the use of actuarial assumptions that will reasonably reflect the Plan's future experience observed over a long period of time.

All of the major demographic actuarial assumptions were reviewed in preparation for the first regular actuarial valuation we performed for the Plan which was as of December 31, 2015 and which the board received in May 2016. We used those demographic assumptions for the three consecutive annual actuarial valuations through December 31, 2017. All of those demographic assumptions continue to be appropriate for the December 31, 2018 actuarial valuation, except for mortality, for which a new assumption is recommended on the next page. In this report, our review of the economic assumptions, summarized in Exhibit 1, leads us to recommend using the same assumptions as we did last year.

### Economic Assumptions

There are two components to the investment return assumption: (1) the rate of inflation and (2) the net real rate of return. The current investment return assumption is 7.25% per year net of

investment-related expenses, consisting of an assumed rate of inflation of 2.75% per year and an assumed net real rate of return of 4.50%. Each component represents the annual average rate expected over the long-term future. While this is a theoretical approach, it provides a reasonable basis for the selection of an investment return assumption. In addition, the other key economic assumptions, the general compensation increase assumption and the payroll increase assumption, are also influenced by the inflation assumption. These economic assumptions are consistent with each other because they contain the same assumed annual rate of inflation of 2.75%.

### **Mortality Assumption**

The Plan is not large enough for its mortality experience to be the basis of the mortality assumption. We have always used a published mortality table we considered appropriate for the Plan, with a projection for mortality improvement. The Society of Actuaries (SOA) conducted the first mortality study of public pension plans, with the final study released near the end of January. The study resulted in three sets of mortality tables, one for teachers, one for public safety, and one for general employees. We believe that the tables for general employees are appropriate for the Plan. Within each set, there are separate sex-distinct tables for employees and for retirees. In addition, within each set there are above-median income tables, below-median income tables and total dataset tables. We believe that the below-median income tables are appropriate for the Plan. The mortality experience comes from calendar years 2008-2013, with a midpoint of July 1, 2010. The naming convention uses Pub-2010 as the core acronym, with PubG-2010 the acronym for the general employees set of tables.

The base tables are projected for future mortality improvement. In prior actuarial valuations, we used static projection to a future year, (2024), with a projection scale (Scale AA). We recommend that the mortality assumption for the December 31, 2018 actuarial valuation include generational projection of mortality improvement (a different effective mortality table for each year of birth cohort) using the most recent mortality improvement projection scale developed by the SOA, the MP-2018.

**In summary, we recommend that the mortality assumption for the December 31, 2018 actuarial valuation consist of the PubG-2010 below-median income tables for employees and for retirees, projected for mortality improvement generationally using the projection scale MP-2018.**

### **Recommended Actuarial Assumptions**

As a result of our review of all of the actuarial assumptions used in the December 31, 2017 actuarial valuation, we recommend only one change for the December 31, 2018 actuarial valuation, a new mortality assumption as described above.

Board of Trustees  
Page 3  
April 29, 2019

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions in this report.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF/RBM:nlg

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## Exhibit 1

### The City of Galveston Employees' Retirement Plan for City Employees Review of the Actuarial Investment Return Assumption for the December 31, 2018 Actuarial Valuation

#### Theoretical Investment Return Assumption Development

|                                                                 | Gross Annual<br>Real Rate of<br>Investment<br>Return (ROR) <sup>1</sup> | Estimated<br>Investment<br>Expenses <sup>2</sup> | Net<br>Real<br>ROR | Asset Allocation            |                       |                       |
|-----------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------|--------------------|-----------------------------|-----------------------|-----------------------|
|                                                                 |                                                                         |                                                  |                    | 12/31/<br>2018 <sup>3</sup> | Hypothetical<br>Set A | Hypothetical<br>Set B |
| <b>Domestic Equity</b>                                          |                                                                         |                                                  |                    |                             |                       |                       |
| Large cap (iShares Core S&P 500)                                | 6.5%                                                                    | 0.25%                                            | 6.25%              | 13.7%                       | 14%                   | 15%                   |
| Large cap (iShares MSCI USA<br>min. vol.)                       | 6.5                                                                     | 0.36                                             | 6.14               | 14.8                        | 14                    | 15                    |
| Mid cap (Vanguard Index)                                        | 7.0                                                                     | 0.24                                             | 6.76               | 14.6                        | 14                    | 10                    |
| Small cap (iShares S&P<br>Small-Cap)                            | 7.0                                                                     | 0.28                                             | 6.72               | <u>8.3</u>                  | <u>8</u>              | <u>6</u>              |
|                                                                 |                                                                         |                                                  |                    | 51.4                        | 50                    | 46                    |
| <b>International Equity</b>                                     |                                                                         |                                                  |                    |                             |                       |                       |
| Developed (iShares MSCI EAFE)                                   | 7.0                                                                     | 0.29                                             | 6.71               | 5.1                         | 6                     | 10                    |
| Emerging (iShares MSCI Emerg.)                                  | 8.5                                                                     | 0.35                                             | 8.15               | <u>2.6</u>                  | <u>3</u>              | <u>3</u>              |
|                                                                 |                                                                         |                                                  |                    | 7.7                         | 9                     | 13                    |
| <b>Fixed Income</b>                                             |                                                                         |                                                  |                    |                             |                       |                       |
| Domestic Intermediate (Baird, Met<br>West, TIAA-CREF)           | 2.0                                                                     | 0.53                                             | 1.47               | 19.6                        | 19                    | 24                    |
| World (Brandywine Global)                                       | 2.5                                                                     | 0.79                                             | 1.71               | 3.9                         | 5                     | 5                     |
| Multisector (PIMCO Income)                                      | 2.5                                                                     | 0.93                                             | 1.57               | <u>5.0</u>                  | <u>5</u>              | <u>5</u>              |
|                                                                 |                                                                         |                                                  |                    | 28.5                        | 29                    | 34                    |
| <b>Alternatives</b>                                             |                                                                         |                                                  |                    |                             |                       |                       |
| Long/short equity (Salient)                                     | 5.5                                                                     | 1.72                                             | 3.78               | 2.4                         | 3                     | 0                     |
| Absolute return (Wells Fargo)                                   | 3.5                                                                     | 0.92                                             | 2.58               | 2.8                         | 3                     | 0                     |
| Balanced allocation (FPA<br>Crescent)                           | 4.5                                                                     | 1.31                                             | 3.19               | <u>4.2</u>                  | <u>4</u>              | <u>5</u>              |
|                                                                 |                                                                         |                                                  |                    | 9.4                         | 10                    | 5                     |
| <b>Cash</b>                                                     | 0.5                                                                     | 0.31                                             | 0.19               | <u>3.0</u>                  | <u>2</u>              | <u>2</u>              |
|                                                                 |                                                                         |                                                  |                    | 100.0%                      | 100%                  | 100%                  |
| <b>Weighted Average Net Real ROR Assumption</b>                 |                                                                         |                                                  |                    | 4.60%                       | 4.63%                 | 4.53%                 |
| <b>Possible Theoretical Annual Investment Return Assumption</b> |                                                                         |                                                  |                    |                             |                       |                       |
| <b>– Net Real ROR Plus Assumed Annual Rate of Inflation</b>     |                                                                         |                                                  |                    |                             |                       |                       |
| Assumed 2.75% Inflation                                         |                                                                         |                                                  |                    | 7.35%                       | 7.38%                 | 7.28%                 |

<sup>1</sup> A gross annual real rate of investment return is the long-term total annual rate of investment return, before any expenses, that is in excess of the assumed annual inflation rate. These are assumptions made by Rudd and Wisdom, Inc.

<sup>2</sup> These assumed investment-related expenses as a percent of assets are based on the larger of expense ratios from the Quantitative Group and from Morningstar and include both direct and indirect expenses, with an addition of 0.07% for the fees of the custodial bank and 0.14% for the fees of The Quantitative Group.

<sup>3</sup> From the December 31, 2018 report of the Quantitative Group.



**Exhibit 1 (continued)**

**Price Inflation in the USA - Average Annual Rates of Increase in the CPI-U**

| <u>Years<br/>(Dec. to Dec.)</u> | <u>Number<br/>of Years</u> | <u>Average<br/>Annual Increase</u> |
|---------------------------------|----------------------------|------------------------------------|
| 1953 – 2018                     | 65                         | 3.50%                              |
| 1958 – 2018                     | 60                         | 3.67                               |
| 1963 – 2018                     | 55                         | 3.88                               |
| 1968 – 2018                     | 50                         | 3.99                               |
| 1973 – 2018                     | 45                         | 3.83                               |
| 1978 – 2018                     | 40                         | 3.33                               |
| 1983 – 2018                     | 35                         | 2.63                               |
| 1988 – 2018                     | 30                         | 2.48                               |
| 1993 – 2018                     | 25                         | 2.20                               |
| 1998 – 2018                     | 20                         | 2.16                               |

Most inflation forecasts are for 10 years or less. For example, the 10-year forecast in the December 2018 Livingston Survey published by the Federal Reserve Bank of Philadelphia was 2.23%. Similarly, the 2019 Wall Street Censuses Survey for the next decade included an average inflation forecast of 2.2%. However, 10 years is much too short a forecast period for a public employee defined benefit pension plan. In the 2019 annual report of the OASDI Trust Funds (Social Security), the ultimate inflation assumptions for their 75-year projections were 3.2%, 2.6%, and 2.0% for the low-cost, intermediate, and high-cost assumptions, respectively. Looking at the average annual increase in the CPI-U over historical periods of 30 to 65 years above and considering the Social Security forecasts, we believe that reasonable assumed rates of inflation for the long-term future would range from 2.5% to 3.5%. Shorter term considerations make the bottom half of that range more desirable.

**General Administrative Expenses Paid from the Plan Assets**

| <u>Plan Year</u> | <u>General Administrative<br/>Expenses Paid from the Plan</u> | <u>Covered Payroll</u> | <u>% of Payroll<br/>(2) ÷ (3)</u> |
|------------------|---------------------------------------------------------------|------------------------|-----------------------------------|
| (1)              | (2)                                                           | (3)                    | (4)                               |
| 2018             | \$138,864                                                     | \$26,308,423           | 0.53%                             |
| 2017             | 133,006                                                       | 25,308,650             | 0.53                              |
| 2016             | 145,136                                                       | 22,853,063             | 0.64                              |
| 2015             | 127,460                                                       | 21,925,267             | 0.58                              |
| 2014             | 123,414                                                       | 20,400,300             | 0.60                              |
| 2013             | 136,324                                                       | 17,570,017             | 0.78                              |
| 2012             | 106,234                                                       | 17,966,367             | 0.59                              |
| 2012-2018        | \$910,438                                                     | \$152,332,087          | 0.60%                             |

**Exhibit 1 (continued)**

The assumed future general administrative expenses will be added to the normal cost contribution rate as was done for the prior three actuarial valuations. For the December 31, 2018 actuarial valuation, we recommend assuming 0.60% of payroll, the average developed above for the last seven plan years. This is the same assumption as for the prior actuarial valuation. The covered payroll was determined as the employee contributions for the plan year divided by the 6% contribution rate.

**Comparison of 12/31/2017 Actuarial Economic Assumptions  
with 12/31/2018 Actuarial Economic Assumptions**

| <u>Actuarial Assumption<sup>1</sup></u>        | <u>12/31/2017<br/>Actuarial<br/>Economic<br/>Assumptions</u> | <u>12/31/2018<br/>Actuarial<br/>Economic<br/>Assumptions</u> |
|------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Inflation (Price)                              | 2.75%                                                        | 2.75%                                                        |
| Net real rate of return <sup>2</sup>           | <u>4.50</u>                                                  | <u>4.50</u>                                                  |
| Net total investment return <sup>2</sup>       | 7.25%                                                        | 7.25%                                                        |
| Employee pay increase <sup>3</sup>             | 4.15%                                                        | 4.15%                                                        |
| Aggregate payroll increase                     | 2.75%                                                        | 2.75%                                                        |
| General administrative expenses (% of payroll) | 0.60%                                                        | 0.60%                                                        |

<sup>1</sup> All assumptions are annual rates.

<sup>2</sup> Net of investment-related expenses.

<sup>3</sup> For both 12/31/2017 and 12/31/2018, it is a 2.75% annual general pay increase plus promotion and merit pay increases that average 1.4% per year over a 25-year career.

# Rudd and Wisdom, Inc.

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July 24, 2018

Via E-Mail: [amasel@hlb-cpa.com](mailto:amasel@hlb-cpa.com)

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Report on Follow-up Special Study

Dear Trustees:

At your request, we have completed the additional special study for the City of Galveston Employees' Retirement Plan for City Employees (the Plan) based upon the discussion of our June 12, 2018 report on special studies at your July 18, 2018 special board meeting. Our understanding from that meeting is that we would determine what increased cap on benefits would be possible if the city were to approve an increase in their contribution rate to 11% and the addition of retirement eligibility provisions with 20 or more years of service and age plus service greater than or equal to 75 (rule of 75). As with the first two special studies, we limited the amortization period for the unfunded actuarial accrued liability (UAAL) to 20 years.

As summarized below, we determined that in order for the Plan to add a rule of 75 retirement eligibility provision for an unreduced benefit with 20 or more years of service and increase the cap on benefits to \$60,000 per year, the city's contribution rate would have to increase from 9% to 11% beginning January 1, 2019. This package of benefit improvements and city contribution rate increase would result in an amortization period for the UAAL of 19.8 years. The attached Exhibit 1 compares the details of this follow-up special study to the original actuarial valuation as of December 31, 2017.

|                        | Original Valuation | Follow-up Study    |
|------------------------|--------------------|--------------------|
| Retirement eligibility | Current            | 20 years + Rule 75 |
| Benefit cap            | \$50,000           | \$60,000           |
| City contribution rate | 9%                 | 11%                |
| Amortization period    | 11.6 years         | 19.8 years         |

### Retirement Eligibility and Assumed Retirement Rates

The current retirement eligibility provisions have three parts: (1) age 65 for an unreduced benefit, (2) ages 62 to 64 with at least five years of service for a reduced benefit (e.g., 80% at age 62), and (3) ages 55 to 61 with at least ten years of service for a reduced benefit (e.g., 66.7% at age 60 and 50% at age 55). For employees satisfying or projected to satisfy the rule of 75 with 20 years of service, we added assumed annual rates of retirement at ages 47-64. The assumed rates of retirement at ages 55 to 64 used in the original valuation were used in the special studies for reduced early retirement with less than 20 years of service at ages 55 to 64. The table below compares the assumed rates of retirement used in the original actuarial valuation, which we used in the special studies for those with less than 20 years of service, to the new assumed rates of retirement for those with 20 or more years of service who satisfy the rule of 75.

| Age   | Assumed Annual Rates of Retirement |                             |
|-------|------------------------------------|-----------------------------|
|       | Less Than 20 Years of Service      | 20 or More Years of Service |
| 47-49 |                                    | 5%                          |
| 50-54 |                                    | 7                           |
| 55-59 | 3%                                 | 10                          |
| 60    | 10                                 | 15                          |
| 61    | 10                                 | 15                          |
| 62    | 20                                 | 20                          |
| 63    | 20                                 | 30                          |
| 64    | 20                                 | 30                          |
| 65-69 | 30                                 | 30                          |

The results of the follow-up special study in this report are based on the Plan's actuarial valuation as of December 31, 2017 including the actuarial assumptions, except for the retirement rate assumptions described above, and census data summarized in our report to the board of trustees



Trustees  
Page 3  
July 24, 2018

dated April 25, 2018. We assumed the increase in the city's contribution rate from 9% to 11% would be effective January 1, 2019.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Please let us know if you have any questions or if you would like us to join your next board meeting by a conference call.

Sincerely,



Mark R. Fenlaw, F.S.A.



Rebecca B. Morris, A.S.A.

MRF/RBM:nlg

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## Exhibit 1

### Summary of Actuarial Valuation Results as of December 31, 2017

|                                                                         | Original<br>Valuation | Follow-up<br>Special Study |
|-------------------------------------------------------------------------|-----------------------|----------------------------|
| <b>1. Actuarial Present Value of Future Benefits</b>                    |                       |                            |
| a. Active employees                                                     | \$ 44,832,676         | \$ 54,894,220              |
| b. Terminated (vested deferred benefit or refund)                       | 2,914,709             | 2,914,709                  |
| c. Retirees and beneficiaries                                           | 31,613,701            | 31,613,701                 |
| d. Total                                                                | \$ 79,361,086         | \$ 89,422,630              |
| <b>2. Actuarial Present Value of Future Normal Cost</b>                 | \$ 15,301,928         | \$ 18,093,336              |
| <b>3. Actuarial Accrued Liability (Item 1d – Item 2)</b>                | \$ 64,059,158         | \$ 71,329,294              |
| <b>4. Actuarial Value of Assets</b>                                     | \$ 50,978,100         | \$ 50,978,100              |
| <b>5. Unfunded Actuarial Accrued Liability (UAAL) (Item 3 – Item 4)</b> | \$ 13,081,058         | \$ 20,351,194              |
| <b>6. Current Contributions (Percent of Pay)</b>                        |                       |                            |
| a. Employees                                                            | 6.00%                 | 6.00%                      |
| b. City of Galveston                                                    | 9.00                  | 11.00 <sup>1</sup>         |
| c. Total                                                                | 15.00%                | 17.00%                     |
| <b>7. Normal Cost (Percent of Payroll)</b>                              | 9.33%                 | 10.81%                     |
| <b>8. Percent of Payroll to Amortize the UAAL (Item 6c – Item 7)</b>    | 5.67%                 | 6.19%                      |
| <b>9. Years to Amortize the UAAL</b>                                    | 11.6 years            | 19.8 years                 |
| <b>10. Funded Ratio (Item 4 ÷ Item 3)<sup>2</sup></b>                   | 79.6%                 | 71.5%                      |
| <b>11. Retirement Eligibility and Provisions</b>                        | Current               | Rule of 75 with 20 years   |
| <b>12. Maximum Annual Benefit</b>                                       | \$ 50,000             | \$ 60,000                  |

<sup>1</sup> The increase in the city contribution rate from 9% to 11% was assumed to be effective January 1, 2019. The delay was reflected in the determination of item 9.

<sup>2</sup> The funded ratio is not appropriate for assessing either the need for or the amount of future contributions or the adequacy of the current contribution rates. Using the market value of assets instead of the actuarial value of assets for item 10 results in funded ratios of 80.5% for the original valuation and 72.3% for the follow-up special study.

# Rudd and Wisdom, Inc.

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June 12, 2018

**Via E-Mail: amasel@hlb-cpa.com**

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Final Report on Special Studies

Dear Trustees:

We have completed the two special studies for the City of Galveston Employees' Retirement Plan for City Employees (the Plan) you requested at your May board meeting. Our understanding from that meeting is that we would first study the combined effect of adding a retirement eligibility provision for an unreduced benefit at ages 60 to 64 with 20 or more years of service along with an increase in the current \$50,000 cap on benefits, such as to \$60,000 or \$70,000 per year. Without knowing the results of this first study, the board's hope was that these benefit improvements would not require an increase in contribution rates, but that they would be possible from increasing the amortization period for the unfunded actuarial accrued liability (UAAL) from the 11.6 years in the original actuarial valuation as of December 31, 2017 to around 20 years.

The second study you requested is to add a rule of 75 retirement eligibility provision for an unreduced benefit with 20 or more years of service. For example, an employee age 50 who had 25 years of service would be eligible to retire, satisfying the rule of 75 (age plus service greater than or equal to 75) with 20 or more years of service. This second study is to be studied in combination with the first study to determine how much the city contribution rate would have to increase to have an amortization period of 20 years for the UAAL.

### Results and Details of the First Study

The table on the following page summarizes the first study and compares it to the original actuarial valuation as well as some related alternative studies that we have included.

| Item                   | Original Valuation | First Study | Alternate Studies |            |            |
|------------------------|--------------------|-------------|-------------------|------------|------------|
|                        |                    |             | A                 | B          | C          |
| Retirement eligibility | Current            | 60 + 20     | 60 + 20           | 60 + 20    | Current    |
| Benefit cap            | \$50,000           | \$55,000    | \$60,000          | \$60,000   | \$85,000   |
| City contribution rate | 9.00%              | 9.00%       | 9.00%             | 9.25%      | 9.00%      |
| Normal cost            | 9.33%              | 9.91%       | 10.06%            | 10.06%     | 10.04%     |
| Amortization period    | 11.6 years         | 19.2 years  | 21.6 years        | 20.0 years | 19.6 years |

The current retirement eligibility provisions have three parts: (1) age 65 for an unreduced benefit, (2) ages 62 to 64 with at least five years of service for a reduced benefit (e.g., 80% at age 62), and (3) ages 55 to 61 with at least ten years of service for a reduced benefit (e.g., 66.7% at age 60 and 50% at age 55). For the first study, we changed the retirement eligibility provisions to add an unreduced benefit at ages 60 to 64 with 20 or more years of service and left the other provisions unchanged for retirement with less than 20 years of service at ages 55 to 64 and for retirement at ages 55 to 59 with 20 or more years of service. Therefore we added new assumed rates of retirement at ages 60 to 64 for those with 20 or more years of service at those ages. The table below compares the assumed rates of retirement used in the original actuarial valuation, which we used in the first study for those with less than 20 years of service, to the new assumed rates of retirement for those with 20 or more years of service.

| Age   | Assumed Annual Rates of Retirement |                             |
|-------|------------------------------------|-----------------------------|
|       | Less Than 20 Years of Service      | 20 or More Years of Service |
| 55-59 | 3%                                 | --                          |
| 60    | 10                                 | 15%                         |
| 61    | 10                                 | 15                          |
| 62    | 20                                 | 20                          |
| 63    | 20                                 | 30                          |
| 64    | 20                                 | 30                          |
| 65-69 | 30                                 | --                          |



### **Results and Details of the Second Study**

We determined that in order for the Plan to add a rule of 75 retirement eligibility provision for an unreduced benefit with 20 or more years of service and increase the cap on benefits to \$55,000 per year, the city's contribution rate would have to increase from 9% to 10.6% beginning January 1, 2019. This package of benefit improvements and city contribution rate increase would result in an amortization period for the UAAL of 19.8 years.

For employees satisfying or projected to satisfy the rule of 75 with 20 years of service, we added assumed annual retirement rates of 5% at ages 47 to 49, 7% at ages 50 to 54, and 10% at ages 55 to 59. The assumed retirement rates for ages 60-64 with 20 years of service are the same as for the first study shown above. Similarly, the assumed retirement rates with less than 20 years of service are the same as for the first study shown above.

\* \* \* \* \*

The results of the special studies in this report are based on the Plan's actuarial valuation as of December 31, 2017, including the actuarial assumptions and census data summarized in our report to the board of trustees dated April 25, 2018. For the alternative study B, we assumed the 0.25% increase in the city's contribution rate would be effective January 1, 2019 and recognized that timing in calculating the amortization period. Similarly for the second study, we assumed the 1.6% increase in the city's contribution rate would be effective January 1, 2019.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Please let us know if you have any questions or if you would like us to join your next board meeting by a conference call.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

# Rudd and Wisdom, Inc.

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David G. Wilkes, F.S.A.

June 8, 2018

**Via E-Mail: amasel@hlb-cpa.com**

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Report on Special Studies

Dear Trustees:

We have completed one of the special studies for the City of Galveston Employees' Retirement Plan for City Employees (the Plan) you requested at your May board meeting. Our understanding from that meeting is that we would first study the combined effect of adding a retirement eligibility provision for an unreduced benefit at ages 60 to 64 with 20 or more years of service along with an increase in the current \$50,000 cap on benefits, such as to \$60,000 or \$70,000 per year. Without knowing the results of this first study, the board's hope was that these benefit improvements would not require an increase in contribution rates, but that they would be possible from increasing the amortization period for the unfunded actuarial accrued liability (UAAL) from the 11.6 years in the original actuarial valuation as of December 31, 2017 to around 20 years.

The second study you requested is to add a rule of 75 retirement eligibility provision for an unreduced benefit with 20 or more years of service. For example, an employee age 50 who had 25 years of service would be eligible to retire, satisfying the rule of 75 (age plus service greater than or equal to 75) with 20 or more years of service. This second study is to be studied in combination with the first study to determine how much the city contribution rate would have to increase to have an amortization period of 20 years for the UAAL.

### Results of the First Study

We have completed the first study but not the second one. The table on the following page summarizes the first study and compares it to the original actuarial valuation as well as some related alternative studies that we have included.

| Item                   | Original Valuation | First Study | Alternate Studies |            |            |
|------------------------|--------------------|-------------|-------------------|------------|------------|
|                        |                    |             | 1                 | 2          | 3          |
| Retirement eligibility | Current            | 60 + 20     | 60 + 20           | 60 + 20    | Current    |
| Benefit cap            | \$50,000           | \$55,000    | \$60,000          | \$60,000   | \$85,000   |
| City contribution rate | 9.00%              | 9.00%       | 9.00%             | 9.25%      | 9.00%      |
| Normal cost            | 9.33%              | 9.91%       | 10.06%            | 10.06%     | 10.04%     |
| Amortization period    | 11.6 years         | 19.2 years  | 21.6 years        | 20.0 years | 19.6 years |

### Details of the First Study

The current retirement eligibility provisions have three parts: (1) age 65 for an unreduced benefit, (2) ages 62 to 64 with at least five years of service for a reduced benefit (e.g., 80% at age 62), and (3) ages 55 to 61 with at least ten years of service for a reduced benefit (e.g., 66.7% at age 60 and 50% at age 55). For the first study, we changed the retirement eligibility provisions to add an unreduced benefit at ages 60 to 64 with 20 or more years of service and left the other provisions unchanged for retirement with less than 20 years of service at ages 55 to 64 and for retirement at ages 55 to 59 with 20 or more years of service. Therefore we added new assumed rates of retirement at ages 60 to 64 for those with 20 or more years of service at those ages. The table below compares the assumed rates of retirement used in the original actuarial valuation, which we used in the first study for those with less than 20 years of service, to the new assumed rates of retirement for those with 20 or more years of service.

| Age   | Assumed Annual Rates of Retirement |                             |
|-------|------------------------------------|-----------------------------|
|       | Less Than 20 Years of Service      | 20 or More Years of Service |
| 55-59 | 3%                                 | --                          |
| 60    | 10                                 | 15%                         |
| 61    | 10                                 | 15                          |
| 62    | 20                                 | 20                          |
| 63    | 20                                 | 30                          |
| 64    | 20                                 | 30                          |
| 65-69 | 30                                 | --                          |

Trustees  
Page 3  
June 8, 2018

The results of the special study in this report are based on the Plan's actuarial valuation as of December 31, 2017, including the actuarial assumptions and census data summarized in our report to the board of trustees dated April 17, 2018. For the alternative study 2, we assumed the 0.25% increase in the city's contribution rate would be effective January 1, 2019, and recognized that timing in calculating the amortization period.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Please let us know if you have any questions or if you would like us to join your next board meeting by a conference call.

Sincerely,



Mark R. Fenlaw, F.S.A.



Rebecca B. Morris, A.S.A.

MRF/RBM:nlg

Enclosures

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# Rudd and Wisdom, Inc.

## CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.  
Evan L. Dial, F.S.A.  
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Chelsea E. Stewart, A.S.A.  
Raymond W. Tilotta  
Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

April 17, 2018

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Recommended Actuarial Assumptions for the  
December 31, 2017 Actuarial Valuation

Dear Trustees:

As a part of the December 31, 2017 actuarial valuation of The City of Galveston Retirement Plan for City Employees (the Plan), we have reviewed all of the actuarial assumptions used in the December 31, 2016 actuarial valuation of the Plan to see if they remain appropriate or should be revised for the December 31, 2017 actuarial valuation. The results of an actuarial valuation do not determine the ultimate cost of the Plan but a recommended funding pattern that will hopefully be well matched with the Plan's actual experience as it unfolds over the long-term future. The accuracy and usefulness of actuarial valuations depend upon the use of actuarial assumptions that will reasonably reflect the Plan's future experience observed over a long period of time.

All of the major demographic actuarial assumptions were reviewed in preparation for the first regular actuarial valuation we performed for the Fund which was as of December 31, 2015 and which the board received in May 2016. We used those assumptions for both the December 31, 2015 and the December 31, 2016 actuarial valuations. **All of those demographic assumptions continue to be appropriate for the December 31, 2017 actuarial valuation.** In our review of economic assumptions last year, we recommended a 0.25% decrease in the inflation component of the investment return assumption, the general compensation increase assumption, and the payroll increase assumption. **In this report, our review of the economic assumptions, summarized in Exhibit 1, leads us to recommend another 0.25% decrease in the general compensation increase and the payroll increase assumptions but not in the investment return assumption.**

There are two components to the investment return assumption: (1) the rate of inflation and (2) the net real rate of return. Each component represents the annual average rate expected over the long-term future. While this is a theoretical approach, it provides a reasonable basis for the selection of an investment return assumption. In addition, the other key economic assumptions, the general wage increase assumption and the payroll increase assumption, are also influenced by

the inflation assumption. These economic assumptions are consistent with each other because they contain the same assumed rate of inflation.

Last year the 7.25% investment return assumption consisted of an assumed rate of inflation of 3% and an assumed net real rate of return of 4.25%. The recommended investment return assumption for the December 31, 2017 actuarial valuation is 7.25% per year net of investment-related expenses, consisting of an assumed rate of inflation of 2.75% per year and an assumed net real rate of return of 4.50%. There are several reasons that we are increasing the assumed net real rate of return from 4.25% to 4.50%. Since last year there have been several changes in the Plan's investments as well as a slight shift in the asset allocation.

- The change in the international equities from active management to passive management lowered the investment expenses which increased the expected return.
- The addition of an emerging markets ETF as a part of the international equity allocation increased the expected return.
- There was a slight shift in the asset allocation, increasing equities by 2% and decreasing fixed income by 2%, which increased the expected return.

As a result of these changes, the weighted average net real rate of return increased from 4.47% as of December 31, 2016 to 4.69% as of December 31, 2017. The rounded down assumptions were 4.25% last year and 4.50% for the December 31, 2017 actuarial valuation.

#### **Recommended Actuarial Assumptions**

As a result of our review of all of the actuarial assumptions used in the December 31, 2016 actuarial valuation, we recommend a 0.25% reduction in the general compensation increase assumption and the payroll increase assumption from 3% to 2.75% and no changes to any of the other actuarial assumptions for the December 31, 2017 actuarial valuation. Please let us know if you have any questions.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions in this report.

Sincerely,



Mark R. Fenlaw, F.S.A.



Rebecca B. Morris, A.S.A.

MRF/RBM:nlg

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## Exhibit 1

### The City of Galveston Employees' Retirement Plan for City Employees Review of the Actuarial Investment Return Assumption for the December 31, 2017 Actuarial Valuation

#### Theoretical Investment Return Assumption Development

|                                                                        | Gross Annual<br>Real Rate of<br>Investment<br>Return (ROR) <sup>1</sup> | Estimated<br>Investment<br>Expenses <sup>2</sup> | Net<br>Real<br>ROR | Asset Allocation            |                       |          |
|------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------|--------------------|-----------------------------|-----------------------|----------|
|                                                                        |                                                                         |                                                  |                    | 12/31/<br>2017 <sup>3</sup> | Hypothetical<br>Set A | Set B    |
| <b>Domestic Equity</b>                                                 |                                                                         |                                                  |                    |                             |                       |          |
| Large cap (iShares Core S&P 500)                                       | 6.5%                                                                    | 0.25%                                            | 6.25%              | 14.2%                       | 14%                   | 15%      |
| Large cap (iShares MSCI USA<br>min. vol.)                              | 6.5                                                                     | 0.36                                             | 6.14               | 14.1                        | 14                    | 15       |
| Mid cap (Vanguard Index)                                               | 7.0                                                                     | 0.27                                             | 6.73               | 15.1                        | 14                    | 10       |
| Small cap (iShares S&P<br>Small-Cap)                                   | 7.0                                                                     | 0.28                                             | 6.72               | <u>8.7</u>                  | <u>8</u>              | <u>6</u> |
|                                                                        |                                                                         |                                                  |                    | 52.1                        | 50                    | 46       |
| <b>International Equity</b>                                            |                                                                         |                                                  |                    |                             |                       |          |
| Developed (iShares MSCI EAFE)                                          | 7.0                                                                     | 0.29                                             | 6.71               | 5.7                         | 6                     | 10       |
| Emerging (iShares MSCI Emerg.)                                         | 8.5                                                                     | 0.35                                             | 8.15               | <u>3.0</u>                  | <u>3</u>              | <u>3</u> |
|                                                                        |                                                                         |                                                  |                    | 8.7                         | 9                     | 13       |
| <b>Fixed Income</b>                                                    |                                                                         |                                                  |                    |                             |                       |          |
| Domestic Intermediate (Baird, Met<br>West, TIAA-CREF)                  | 2.0                                                                     | 0.56                                             | 1.44               | 18.9                        | 19                    | 24       |
| World (Brandywine Global)                                              | 2.5                                                                     | 0.79                                             | 1.71               | 3.9                         | 5                     | 5        |
| Multisector (PIMCO Income)                                             | 2.5                                                                     | 0.71                                             | 1.79               | <u>4.7</u>                  | <u>5</u>              | <u>5</u> |
|                                                                        |                                                                         |                                                  |                    | 27.5                        | 29                    | 34       |
| <b>Alternatives</b>                                                    |                                                                         |                                                  |                    |                             |                       |          |
| Multialternative (MFS Global)                                          | 4.0                                                                     | 1.33                                             | 2.67               | 2.5                         | 3                     | 0        |
| Absolute return (Wells Fargo)                                          | 3.5                                                                     | 0.92                                             | 2.58               | 2.8                         | 3                     | 0        |
| Balanced allocation (FPA<br>Crescent)                                  | 4.5                                                                     | 1.28                                             | 3.22               | <u>4.3</u>                  | <u>4</u>              | <u>5</u> |
|                                                                        |                                                                         |                                                  |                    | 9.6                         | 10                    | 5        |
| <b>Cash</b>                                                            | 0.5                                                                     | 0.31                                             | 0.19               | <u>2.1</u>                  | <u>2</u>              | <u>2</u> |
|                                                                        |                                                                         |                                                  |                    | 100.0%                      | 100%                  | 100%     |
| <b><u>Weighted Average Net Real ROR Assumption</u></b>                 |                                                                         |                                                  |                    | 4.69%                       | 4.60%                 | 4.54%    |
| <b><u>Possible Theoretical Annual Investment Return Assumption</u></b> |                                                                         |                                                  |                    |                             |                       |          |
| <b><u>– Net Real ROR Plus Assumed Annual Rate of Inflation</u></b>     |                                                                         |                                                  |                    |                             |                       |          |
| Assumed 3.00% Inflation                                                |                                                                         |                                                  |                    | 7.69%                       | 7.60%                 | 7.54%    |
| Assumed 2.75% Inflation                                                |                                                                         |                                                  |                    | 7.44                        | 7.35                  | 7.29     |

<sup>1</sup> A gross annual real rate of investment return is the long-term total annual rate of investment return, before any expenses, that is in excess of the assumed annual inflation rate. These are assumptions made by Rudd and Wisdom, Inc.

<sup>2</sup> These assumed investment-related expenses as a percent of assets are based on the larger of expense ratios from the Quantitative Group and from Morningstar and include both direct and indirect expenses, with an addition of 0.07% for the fees of the custodial bank and 0.14% for the fees of The Quantitative Group.

<sup>3</sup> From the December 31, 2017 report of the Quantitative Group.

### Price Inflation in the USA - Average Annual Rates of Increase in the CPI-U

| <u>Years<br/>(Dec. to Dec.)</u> | <u>Number<br/>of Years</u> | <u>Average<br/>Annual Increase</u> |
|---------------------------------|----------------------------|------------------------------------|
| 1952 – 2017                     | 65                         | 3.48%                              |
| 1957 – 2017                     | 60                         | 3.67                               |
| 1962 – 2017                     | 55                         | 3.88                               |
| 1967 – 2017                     | 50                         | 4.05                               |
| 1972 – 2017                     | 45                         | 3.98                               |
| 1977 – 2017                     | 40                         | 3.51                               |
| 1982 – 2017                     | 35                         | 2.68                               |
| 1987 – 2017                     | 30                         | 2.56                               |
| 1992 – 2017                     | 25                         | 2.23                               |
| 1997 – 2017                     | 20                         | 2.14                               |

Most inflation forecasts are for 10 years or less. For example, the 10-year forecast in the December 2017 Livingston Survey published by the Federal Reserve Bank of Philadelphia was 2.34%. Similarly, the 2018 Wall Street Censuses Survey for the next decade included an average inflation forecast of 2.4%. However, 10 years is much too short a forecast period for a public employee defined benefit pension plan. In the 2017 annual report of the OASDI Trust Funds (Social Security), the ultimate inflation assumptions for their 75-year projections were 3.2%, 2.6%, and 2.0% for the low-cost, intermediate, and high-cost assumptions, respectively. Looking at the average annual increase in the CPI-U over historical periods of 30 to 65 years above and considering the Social Security forecasts, **we believe that reasonable assumed rates of inflation for the long-term future would range from 2.5% to 3.5%. Shorter term considerations make the bottom half of that range more desirable.**

### General Administrative Expenses Paid from the Plan Assets

| <u>Plan Year</u> | <u>General Administrative<br/>Expenses Paid from the Plan</u> | <u>Covered Payroll</u> | <u>% of Payroll<br/>(2) ÷ (3)</u> |
|------------------|---------------------------------------------------------------|------------------------|-----------------------------------|
| (1)              | (2)                                                           | (3)                    | (4)                               |
| 2017             | \$133,006                                                     | \$25,308,650           | 0.53%                             |
| 2016             | 145,136                                                       | 22,853,063             | 0.64                              |
| 2015             | 127,460                                                       | 21,925,267             | 0.58                              |
| 2014             | 123,414                                                       | 20,400,300             | 0.60                              |
| 2013             | 136,324                                                       | 17,570,017             | 0.78                              |
| 2012             | 106,234                                                       | 17,966,367             | 0.59                              |
| 2012-2017        | \$771,574                                                     | \$126,023,664          | 0.61%                             |
| All but 2013     | \$635,250                                                     | \$108,453,647          | 0.59%                             |

The assumed future general administrative expenses will be added to the normal cost contribution rate as was done for both the December 31, 2015 and the December 31, 2016 actuarial valuations. For the December 31, 2017 actuarial valuation, we recommend



assuming 0.60% of payroll, the average developed above for five of the last six plan years (all but 2013) rounded up. This is the same assumption as was used for the December 31, 2016 actuarial valuation. The covered payroll was determined as the employee contributions for the plan year divided by the 6% contribution rate.

**Comparison of 12/31/2016 Actuarial Economic Assumptions  
with 12/31/2017 Actuarial Economic Assumptions**

| <u>Actuarial Assumption<sup>1</sup></u>        | <u>12/31/2016<br/>Actuarial<br/>Economic<br/>Assumptions</u> | <u>12/31/2017<br/>Actuarial<br/>Economic<br/>Assumptions</u> |
|------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Inflation (Price)                              | 3.00%                                                        | 2.75%                                                        |
| Net real rate of return <sup>2</sup>           | <u>4.25</u>                                                  | <u>4.50</u>                                                  |
| Net total investment return <sup>2</sup>       | 7.25%                                                        | 7.25%                                                        |
| Employee pay increase <sup>3</sup>             | 4.40%                                                        | 4.15%                                                        |
| Aggregate payroll increase                     | 3.00%                                                        | 2.75%                                                        |
| General administrative expenses (% of payroll) | 0.60%                                                        | 0.60%                                                        |

<sup>1</sup> All assumptions are annual rates.

<sup>2</sup> Net of investment-related expenses.

<sup>3</sup> For 12/31/2016, it is a 3% annual general pay increase plus promotion and merit pay increases that average 1.4% per year over a 25-year career. For 12/31/2017, it is a 2.75% annual general pay increase plus promotion and merit pay increases that average 1.4% per year over a 25-year career.

# Rudd and Wisdom, Inc.

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David G. Wilkes, F.S.A.

November 6, 2017

Via E-Mail: [KEtienne@GalvestonTx.gov](mailto:KEtienne@GalvestonTx.gov)

Mr. Kent Etienne, Jr.  
Executive Director of Human Resources  
and Civil Service  
City of Galveston  
823 Rosenberg  
Galveston, Texas 77550

Re: Information on Pensioners of the Civilian  
and Firefighter Retirement Plans

Dear Mr. Etienne:

At your request, we are providing information on pensioners of the City of Galveston Employees Retirement Plan for City Employees and the Galveston Firefighters' Pension Fund. We provided the actuarial services for the boards of these plans this year and have the census data on their pensioners as of December 31, 2016.

You shared with us last week what information you are wanting, and we said we could provide all of the items except salary information. The salary at retirement is not available to us in the data we use for the actuarial valuation. Because of the personal nature of the information, we have uploaded two spreadsheets on our secure server for your accessing the information.

Even if we could have provided you the salary in the year prior to retirement, there are some characteristics of the current monthly benefits that would limit the comparability of the information provided by the monthly benefit as a percentage of salary. The monthly benefit is not only a function of the average compensation in the last five years of employment but also of the years of service. We had the service for most of the retirees in the firefighter plan but had no service data in the civilian plan. Some of the benefits in the civilian plan reflect a reduced benefit after the terminating employee elected a lump sum payment of their contributions to the plan. Other benefits reflect the election of early retirement, with the benefit reduced for the number of years remaining to age 65. In addition, the benefits to beneficiaries are 50% of the original benefit to the deceased civilian member. For the firefighters' plan, many of the retirees took a partial lump sum and a reduced monthly benefit, and the benefits of the beneficiaries are two-thirds of the benefit of the deceased firefighter.

Mr. Kent Etienne, Jr.

Page two

November 6, 2017

On the two spreadsheets, we determined the age as of December 31, 2017 for all of the pensioners. The age at date of retirement was determined for only the retirees for which we had the date of retirement and not for disability retirements or beneficiaries. As shown at the top of the spreadsheets, the average age at retirement for the civilian plan was 59.2 and 54.9 for the fire plan. The average length of service for the fire plan was 29.5 years.

Following this letter is a table of remaining years of life expectancy for the pensioners in the two plans based on the mortality assumption used in actuarial valuations of each of the plans as of December 31, 2016. The mortality assumption is the same for both plans, the RP-2000 Combined Healthy Mortality Table projected to 2024 by Scale AA for males and for females (sex distinct). The projection is to reflect anticipated mortality improvement from 2000 to 2024, i.e. people expected to be living longer in 2024 than in 2000, the base year of the mortality table published in 2000.

Please let us know if you have any questions about the pensioner information or the table of remaining years of life expectancy.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF/RBM:lb

Enclosure

cc: Ms. Ann Masel, Plan Administrator

Ms. Rebecca Johnson, Plan Administrator

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**Table of Remaining Years of Life Expectancy  
for Pensioners in the Civilian and Firefighter Retirement  
Plans for the City of Galveston<sup>1</sup>**

| <u>Attained<br/>Age</u> | <u>Remaining Years of Life Expectancy</u> |               |
|-------------------------|-------------------------------------------|---------------|
|                         | <u>Male</u>                               | <u>Female</u> |
| 50                      | 33.09                                     | 34.79         |
| 51                      | 32.14                                     | 33.83         |
| 52                      | 31.19                                     | 32.87         |
| 53                      | 30.24                                     | 31.92         |
| 54                      | 29.29                                     | 30.97         |
| 55                      | 28.35                                     | 30.03         |
| 56                      | 27.41                                     | 29.10         |
| 57                      | 26.48                                     | 28.17         |
| 58                      | 25.57                                     | 27.26         |
| 59                      | 24.66                                     | 26.35         |
| 60                      | 23.75                                     | 25.46         |
| 61                      | 22.86                                     | 24.57         |
| 62                      | 21.98                                     | 23.69         |
| 63                      | 21.11                                     | 22.83         |
| 64                      | 20.26                                     | 21.98         |
| 65                      | 19.42                                     | 21.15         |
| 66                      | 18.60                                     | 20.33         |
| 67                      | 17.79                                     | 19.52         |
| 68                      | 16.99                                     | 18.73         |
| 69                      | 16.21                                     | 17.95         |
| 70                      | 15.43                                     | 17.19         |
| 71                      | 14.67                                     | 16.44         |
| 72                      | 13.92                                     | 15.70         |
| 73                      | 13.18                                     | 14.98         |
| 74                      | 12.45                                     | 14.26         |
| 75                      | 11.74                                     | 13.57         |
| 76                      | 11.05                                     | 12.88         |
| 77                      | 10.38                                     | 12.20         |
| 78                      | 9.73                                      | 11.55         |
| 79                      | 9.11                                      | 10.92         |
| 80                      | 8.51                                      | 10.30         |
| 81                      | 7.94                                      | 9.69          |
| 82                      | 7.40                                      | 9.11          |
| 83                      | 6.90                                      | 8.54          |
| 84                      | 6.41                                      | 7.99          |

<sup>1</sup> The mortality assumption for both plans is the RP-2000 Combined Healthy Mortality Table projected to 2024 by Scale AA for males and for females (sex distinct).



# Rudd and Wisdom, Inc.

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David G. Wilkes, F.S.A.

July 26, 2017

Ms. Ann Masel, CPA  
Plan Administrator  
1011 Tremont Street  
Galveston, Texas 77550

Re: Suggested Wording for Section 4.1

Dear Ann:

At your request, we are providing the two sentences below as our suggested replacement of the current first two sentences in Section 4.1 of the current plan document for The City of Galveston Employees' Retirement Plan for City Employees. The current third sentence in Section 4.1 could remain.

"The Employer, acting under the advice of the Actuary for the Plan, intends to make contributions to the Fund in such amounts and at such time as are required to pay the Employer normal cost and to amortize the unfunded actuarial accrued liability in a reasonable period as indicated in the pension funding guidelines of the Texas Pension Review Board. The Employer contributions shall include the anticipated costs of administering the Fund in order to comply with all fiduciary, legal, and accounting requirements."

We are copying the Plan's legal counsel, Mr. Stefan Smith. Please let us know if you have any questions.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

MRF:lb

cc: Mr. Stefan Smith

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**Pension Review Board**  
**Pension Funding Guidelines**  
**(Adopted 01/26/17; Effective 06/30/17)**

The purpose of the Pension Review Board's Pension Funding Guidelines is to provide guidance to public retirement systems and their sponsoring governmental entities in meeting their long-term pension obligations. The Guidelines are intended to foster communication between plans and their sponsors as they determine a reasonable approach to responsible funding, whether the contribution rate is fixed or actuarially determined.

Public retirement systems should develop a funding policy, the primary objective of which is to fund the obligations over a time frame that ensures benefit security while balancing the additional, and sometimes competing, goals of intergenerational equity and a stable contribution rate.

1. The funding of a pension plan should reflect all plan obligations and assets.
2. The allocation of the normal cost portion of the contributions should be level or declining as a percentage of payroll over all generations of taxpayers, and should be calculated under applicable actuarial standards.
3. Funding of the unfunded actuarial accrued liability should be level or declining as a percentage of payroll over the amortization period.
4. Actual contributions made to the plan should be sufficient to cover the normal cost and to amortize the unfunded actuarial accrued liability over as brief a period as possible, but not to exceed 30 years, with 10 - 25 years being a more the preferable target range.\* For plans that use multiple amortization layers, the weighted average of all amortization periods should not exceed 30 years.\* Benefit increases should not be adopted if all plan changes being considered cause a material increase in the amortization period and if the resulting amortization period exceeds 25 years.
5. The choice of assumptions should be reasonable, and should comply with applicable actuarial standards.
6. Retirement systems should monitor, review, and report the impact of actual plan experience on actuarial assumptions at least once every five years.

\*Plans with amortization periods that exceed 30 years as of 06/30/2017 should seek to reduce their amortization period to 30 years or less as soon as practicable, but not later than 06/30/2025.

**Jacque Vasquez**

**From:** Mark Fenlaw <mfenlaw@ruddwisdom.com>  
**Sent:** Wednesday, July 26, 2017 9:18 AM  
**To:** Ann Masel  
**Cc:** 'Kent Etienne'; Jacque Vasquez; 'Smith, Stefan'; 'Rebecca Morris'  
**Subject:** Section 4.1 of Galveston Employees' Plan Document  
**Attachments:** plan-doc-1tr.pdf, PRBFunding guidelines.pdf

Ann,

Attached is a PDF of a letter to you suggesting new wording for Section 4.1. The second PDF contains the Pension Review Board Pension Funding Guidelines, amended in January to be effective June 30, 2017. Please let me know if there are any questions.

Mark

Mark R. Fenlaw, F.S.A.



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# Rudd and Wisdom, Inc.

## CONSULTING ACTUARIES

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Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

January 11, 2017

Via E-Mail: MLoftin@GalvestonTx.Gov

Mr. Mike Loftin  
Assistant City Manager Finance  
City of Galveston  
823 Rosenberg  
Galveston, Texas 77553

Re: Cash Flow Projection

Dear Mr. Loftin:

At your request, we are providing this cash flow projection to help the city better understand the calculations in our September 26, 2016 report of a special actuarial analysis of the City of Galveston Employees' Retirement Plan for City Employees (the Plan) as if the Plan had been frozen on December 31, 2015. Even though the request for this cash flow projection did not come directly from the Plan Board of Trustees, the request for the analysis in 2016 did come from the board, and this work is an extension of that special report.

Attached to this cover letter is a hard copy of a spreadsheet showing year by year projections of benefits that would have been expected to be paid from the Plan if it had been frozen on December 31, 2015. The first column contains projected benefits for the 459 active participants of their frozen accrued benefits. For those actives who had five or more completed years as of December 31, 2015, the vested accrued benefit was projected to commence when they would attain age 65 or in 2016 if already 65 or above. The 232 active participants with less than five completed years had no vested accrued benefit, so their accumulated contributions (derived from the 6% contributions of their total pay) were projected to be paid in 2016. The below total of the refunds of non-vested employee contributions of \$1,111,093 is included in the \$1,379,538 total for 2016 shown on the attached projection. At your request, we have shown those contributions by year of hire.

| <u>Year of Hire</u> | <u>Number</u> | <u>Accumulated Contributions</u> |
|---------------------|---------------|----------------------------------|
| 2015                | 77            | \$ 88,600                        |
| 2014                | 58            | 212,447                          |
| 2013                | 50            | 312,618                          |
| 2012                | 26            | 222,091                          |
| 2011                | 21            | 275,337                          |
|                     | 232           | \$1,111,093                      |

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Post Office Box 204209  
Austin, Texas 78720-4209



Mr. Mike Loftin  
Page 2  
January 11, 2017

The second column of the spreadsheet contains projected benefits for the 329 pensioners and projected benefits deferred to age 65 for the 55 vested terminated participants. The amount shown for 2016 also includes amounts that were payable but had not yet been requested by 154 terminated non-vested participants due only a refund of their contributions. The 2016 amount for the 329 pensioners is \$3,390,976, while the payable refunds total is \$511,621. The third column is the sum of the first two columns.

The fourth column is the present value as of December 31, 2015 of the third column projected amount for each year. To simplify the spreadsheet, the sum of the monthly benefit payments in each year is discounted from the middle of that year to December 31, 2015 using the assumed discount rate of 6.25% that was the assumption in the special actuarial analysis. The sum of the accumulated contributions and the payable refunds included in the 2016 projected payments is not discounted. The grand total of the fourth column of \$59.05 million is less than the total of \$61.55 million in our September 26, 2016 report of the special actuarial analysis primarily because the fourth column does not include the present value of administrative expenses of \$1.94 million. In addition, the fourth column does not include some relatively small refinements that were reflected in the September 26, 2016 report calculations.

Attached to the e-mail of this report is an electronic version of the spreadsheet which follows this cover letter. Please let us know if there are any questions about this report. We are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF:bb

Enclosures

cc w/encl.: Ms. Ann Masel, Plan Administrator

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January 11, 2017

**The City of Galveston Employees' Retirement Plan for City Employees**  
**Benefit Payment Projection**  
**Based on the Special Actuarial Analysis as of December 31, 2015**

| <b>Projected Future Benefit Payments</b> |                                       |                                        |              |                                     |
|------------------------------------------|---------------------------------------|----------------------------------------|--------------|-------------------------------------|
| <b>Year</b>                              | <b>Employees as of<br/>12/31/2015</b> | <b>Pensioners as of<br/>12/31/2015</b> | <b>Total</b> | <b>Discounted Present<br/>Value</b> |
| 2016                                     | 1,379,538                             | 3,902,597                              | 5,282,135    | 5,172,857                           |
| 2017                                     | 294,410                               | 3,345,693                              | 3,640,103    | 3,323,688                           |
| 2018                                     | 391,756                               | 3,296,327                              | 3,688,083    | 3,169,409                           |
| 2019                                     | 452,147                               | 3,276,539                              | 3,728,686    | 3,015,814                           |
| 2020                                     | 571,105                               | 3,205,262                              | 3,776,367    | 2,874,710                           |
| 2021                                     | 681,280                               | 3,200,107                              | 3,881,387    | 2,780,851                           |
| 2022                                     | 798,126                               | 3,117,562                              | 3,915,688    | 2,640,402                           |
| 2023                                     | 959,566                               | 3,062,792                              | 4,022,358    | 2,552,782                           |
| 2024                                     | 1,214,272                             | 2,993,455                              | 4,207,727    | 2,513,342                           |
| 2025                                     | 1,526,082                             | 2,907,605                              | 4,433,687    | 2,492,528                           |
| 2026                                     | 1,758,402                             | 2,831,147                              | 4,589,549    | 2,428,377                           |
| 2027                                     | 1,809,031                             | 2,740,551                              | 4,549,582    | 2,265,629                           |
| 2028                                     | 1,882,753                             | 2,640,449                              | 4,523,202    | 2,119,992                           |
| 2029                                     | 1,929,360                             | 2,516,442                              | 4,445,802    | 1,961,144                           |
| 2030                                     | 1,995,045                             | 2,416,020                              | 4,411,065    | 1,831,361                           |
| 2031                                     | 2,107,269                             | 2,302,504                              | 4,409,773    | 1,723,129                           |
| 2032                                     | 2,157,616                             | 2,194,806                              | 4,352,422    | 1,600,676                           |
| 2033                                     | 2,195,204                             | 2,075,336                              | 4,270,540    | 1,478,177                           |
| 2034                                     | 2,210,593                             | 1,973,420                              | 4,184,013    | 1,363,037                           |
| 2035                                     | 2,228,602                             | 1,853,245                              | 4,081,847    | 1,251,533                           |
| 2036                                     | 2,252,318                             | 1,729,189                              | 3,981,507    | 1,148,958                           |
| 2037                                     | 2,296,342                             | 1,615,295                              | 3,911,637    | 1,062,396                           |
| 2038                                     | 2,277,701                             | 1,491,856                              | 3,769,557    | 963,583                             |
| 2039                                     | 2,226,516                             | 1,401,399                              | 3,627,915    | 872,825                             |
| 2040                                     | 2,186,053                             | 1,286,956                              | 3,473,009    | 786,406                             |
| 2041                                     | 2,145,066                             | 1,170,645                              | 3,315,711    | 706,625                             |
| 2042                                     | 2,068,443                             | 1,058,694                              | 3,127,137    | 627,235                             |
| 2043                                     | 1,997,819                             | 951,879                                | 2,949,698    | 556,842                             |
| 2044                                     | 1,944,223                             | 850,863                                | 2,795,086    | 496,616                             |
| 2045                                     | 1,872,862                             | 756,506                                | 2,629,368    | 439,691                             |
| 2046                                     | 1,839,725                             | 669,214                                | 2,508,939    | 394,873                             |
| 2047                                     | 1,763,831                             | 589,158                                | 2,352,989    | 348,545                             |
| 2048                                     | 1,664,862                             | 516,587                                | 2,181,449    | 304,127                             |
| 2049                                     | 1,565,271                             | 451,408                                | 2,016,679    | 264,617                             |
| 2050                                     | 1,467,992                             | 397,095                                | 1,865,087    | 230,330                             |
| 2051                                     | 1,363,328                             | 345,814                                | 1,709,142    | 198,656                             |
| 2052                                     | 1,265,126                             | 300,765                                | 1,565,891    | 171,299                             |
| 2053                                     | 1,162,181                             | 261,426                                | 1,423,607    | 146,573                             |
| 2054                                     | 1,063,040                             | 227,210                                | 1,290,250    | 125,029                             |
| 2055                                     | 968,431                               | 197,456                                | 1,165,887    | 106,332                             |
| 2056                                     | 880,478                               | 171,586                                | 1,052,064    | 90,307                              |
| 2057                                     | 796,170                               | 149,094                                | 945,264      | 76,366                              |
| 2058                                     | 717,494                               | 129,475                                | 846,969      | 64,400                              |
| 2059                                     | 644,458                               | 112,280                                | 756,738      | 54,155                              |
| 2060                                     | 576,975                               | 97,156                                 | 674,131      | 45,405                              |
| 2061                                     | 514,810                               | 83,818                                 | 598,628      | 37,948                              |
| 2062                                     | 457,752                               | 72,031                                 | 529,783      | 31,608                              |
| 2063                                     | 405,592                               | 61,601                                 | 467,193      | 26,234                              |
| 2064                                     | 358,106                               | 52,400                                 | 410,506      | 21,695                              |
| 2065                                     | 315,008                               | 44,329                                 | 359,337      | 17,874                              |
| 2066                                     | 275,997                               | 37,295                                 | 313,292      | 14,667                              |
| 2067                                     | 240,761                               | 31,212                                 | 271,973      | 11,984                              |
| 2068                                     | 209,028                               | 26,000                                 | 235,028      | 9,747                               |
| 2069                                     | 180,523                               | 21,589                                 | 202,112      | 7,888                               |

|      |            |            |             |            |
|------|------------|------------|-------------|------------|
| 2070 | 155,008    | 17,894     | 172,902     | 6,351      |
| 2071 | 132,236    | 14,829     | 147,065     | 5,085      |
| 2072 | 112,006    | 12,307     | 124,313     | 4,045      |
| 2073 | 94,137     | 10,241     | 104,378     | 3,197      |
| 2074 | 78,461     | 8,558      | 87,019      | 2,508      |
| 2075 | 64,820     | 7,189      | 72,009      | 1,954      |
| 2076 | 53,065     | 6,068      | 59,133      | 1,510      |
| 2077 | 43,016     | 5,148      | 48,164      | 1,157      |
| 2078 | 34,519     | 4,385      | 38,904      | 860        |
| 2079 | 27,425     | 3,751      | 31,176      | 664        |
| 2080 | 21,576     | 3,218      | 24,794      | 497        |
| 2081 | 16,813     | 2,763      | 19,576      | 369        |
| 2082 | 12,977     | 2,370      | 15,347      | 272        |
| 2083 | 9,919      | 2,030      | 11,949      | 200        |
| 2084 | 7,514      | 1,733      | 9,247       | 145        |
| 2085 | 5,642      | 1,470      | 7,112       | 105        |
| 2086 | 4,197      | 1,239      | 5,436       | 76         |
| 2087 | 3,091      | 1,037      | 4,128       | 54         |
| 2088 | 2,255      | 859        | 3,114       | 38         |
| 2089 | 1,628      | 702        | 2,330       | 27         |
| 2090 | 1,163      | 568        | 1,731       | 19         |
| 2091 | 822        | 455        | 1,277       | 13         |
| 2092 | 575        | 359        | 934         | 9          |
| 2093 | 397        | 280        | 677         | 6          |
| 2094 | 271        | 216        | 487         | 4          |
| 2095 | 183        | 165        | 348         | 3          |
| 2096 | 122        | 125        | 247         | 2          |
| 2097 | 81         | 93         | 174         | 1          |
| 2098 | 53         | 69         | 122         | 1          |
| 2099 | 34         | 50         | 84          | 1          |
| 2100 | 22         | 36         | 58          | 0          |
| 2101 | 14         | 25         | 39          | 0          |
| 2102 | 8          | 17         | 25          | 0          |
| 2103 | 5          | 11         | 16          | 0          |
| 2104 | 3          | 7          | 10          | 0          |
| 2105 | 2          | 5          | 7           | 0          |
| 2106 | 1          | 3          | 4           | 0          |
| 2107 | 1          | 2          | 3           | 0          |
| 2108 | -          | 1          | 1           | 0          |
| 2109 | -          | 1          | 1           | 0          |
| 2110 | -          | -          | -           | -          |
|      | 71,390,501 | 73,321,419 | 144,711,920 | 59,050,465 |

# Rudd and Wisdom, Inc.

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Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

November 11, 2016

Via E-Mail: [amasel@hlb-cpa.com](mailto:amasel@hlb-cpa.com)

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Follow-up Questions

Dear Trustees:

At your request during your November 1 board meeting, we have determined the answers to these two questions:

1. What increase in the city contribution rate would be required to remove the cap on monthly benefits, currently at the annual rate of \$50,000?
2. If the plan were to be frozen, what annual contribution would be required to fully fund the plan over these periods: 15, 20, 25, or 30 years?

For the first question above, we believe that because of the significant size of the net deferred investment losses in the December 31, 2015 actuarial valuation, it is important to recognize those losses in answering the question. In the report to you of the actuarial valuation, we reported that the amortization period for the UAAL was only 13.7 years. But we also disclosed that if we had fully recognized the net deferred investment losses by using the market value of assets (MVA) in place of the actuarial value of assets (AVA), the period would have been 18.1 years. The easiest way to recognize the net deferred investment losses of \$2,841,775 is to use the MVA in place of the AVA, and that is what we have done for the first question above, just as we did for the related special studies report dated June 28, 2016. Similarly, we used a 20-year amortization period in determining the answer to the first question and assumed the increased rate would begin January 1, 2017, just as we did for the special studies in the June 28 report.

The second question is a follow-up to our special actuarial analysis dated September 26, 2016. In that report, we recommended fully funding a frozen plan over 15 years using level dollar amortization. Because of the expected change in the retirement plan's net cash flow if it were to



be changed from an ongoing plan to a frozen plan, we recommend against using a longer period than 15 years to fully fund the plan. However, at your request we have provided the answer to the second question.

### Summary of Answers

| Question                                                                                                                                         | Answer             |                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------|
| 1. What increase in the city contribution rate would be required to remove the benefit cap?                                                      | from 9% to 11.33%  |                                     |
| 2. If the plan were to be frozen, what annual contribution would be required to fully fund the plan over these periods: 15, 20, 25, or 30 years? | Period in<br>Years | Annual Contribution<br>Paid Monthly |
|                                                                                                                                                  | 15                 | \$ 1,894,097                        |
|                                                                                                                                                  | 20                 | 1,610,140                           |
|                                                                                                                                                  | 25                 | 1,449,644                           |
|                                                                                                                                                  | 30                 | 1,350,247                           |

### Summary of Other Considerations for Freezing the Defined Benefit (DB) Pension Plan and Shifting to a Defined Contribution (DC) Plan

| Characteristics of the Shift from DB to DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Likely Result of DC Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Change from DB plan pooling assets and collectively bearing investment risk and expense to the participants individually bearing them</li> <li>Change in responsibility and level of expertise for asset allocation and selection of money managers from board to participants</li> <li>Change from employer bearing longevity risk to the retirees bearing it</li> <li>Accelerated vesting with DC plan compared to DB plan</li> <li>Pre-retirement death and disability benefits</li> <li>Total city contributions for both the frozen DB plan and a DC plan without reducing anyone's expected benefit</li> </ul> | <p>Lower investment return for the participants; reduction in retirement benefits</p> <p>Lower investment return for the participants; reduction in retirement benefits</p> <p>Some retirees will outlive their DC plan benefits</p> <p>More city contributions paid to employees who work for city less than 10 years</p> <p>Same as termination benefit (vested account balance), a reduction in benefits, especially for an early career death or disability</p> <p>Increase in city contributions</p> |

Trustees  
Page 3  
November 11, 2016

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF:lb  
Enclosures  
i:\clients\galvees\2016\specstudies4.docx

**Jacque Vasquez**

---

**From:** Mark Fenlaw <mfenlaw@ruddwisdom.com>  
**Sent:** Friday, November 11, 2016 3:47 PM  
**To:** Ann Masel  
**Cc:** Jacque Vasquez; 'Rebecca Morris'  
**Subject:** Board's Follow-up Questions  
**Attachments:** specstudies4.pdf

Ann,

Attached is the PDF of a three-page letter from us answering the questions that arose during the board's November 1 meeting. Please let us know if you have any questions about this letter. In addition, please let us know if the board sets a date for a special board meeting to discuss further the various special studies we provided and discussed with them at their November 1 meeting. We would be glad to be available to receive a call during such a meeting to answer any questions that might arise.

Mark

Mark R. Fenlaw, F.S.A.

 **Rudd and Wisdom, Inc.**

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David G. Wilkes, F.S.A.

September 26, 2016

Board of Trustees  
The City of Galveston Employees' Retirement  
Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Special Actuarial Analysis as of  
December 31, 2015

Dear Trustees:

At your request, we have prepared this report which presents the results of our actuarial analysis of the City of Galveston Employees' Retirement Plan for City Employees based on the assumption that the plan was frozen on December 31, 2015. We have determined the plan's actuarial accrued liability assuming that no service rendered or compensation earned after December 31, 2015 would be reflected in the active members' ultimate benefit from the plan. The purpose of this special actuarial analysis is to determine what level of financing would be required by the City of Galveston over an appropriate number of years to fully fund the plan if it were frozen.

### Recommended Financing Commitment

The current financing commitment to the plan is 6% of pay by the covered employees and 9% of the covered payroll of the active contributing members by the City of Galveston. Since there would be no more employees contributing to the plan if it were to be frozen, there would be no covered payroll. So the recommended financing by the city is not a percent of payroll but an annual dollar amount.

As shown below, we have determined the unfunded actuarial liability (UAL) which is the actuarial present value of future benefits and expenses of the frozen plan less the market value of assets of the plan as of December 31, 2015. We recommend that the city pay an amount each year that would be expected to amortize the UAL with level dollar contributions over a closed 15-year period that would begin on the effective date of the freeze. More details are shown on page 7.

| The City of Galveston Employees' Retirement Plan<br>Assuming the Plan is Frozen as of December 31, 2015 |               |
|---------------------------------------------------------------------------------------------------------|---------------|
| Unfunded Actuarial Liability (UAL)                                                                      | \$ 18,611,927 |
| UAL Amortization Period (closed period)                                                                 | 15 Years      |
| Recommended Annual City Contribution Paid Monthly                                                       | \$ 1,894,097  |



In subsequent annual actuarial valuations, if experience is found to be adverse compared to our assumptions then the amount would be increased to stay with the expected amortization by the end of the closed 15-year period. If experience is found to be better than expected, then we recommend that the dollar amount stay unchanged for one year (as a hedge against future adverse experience).

### **Changes from the Prior Actuarial Analysis of Plan Freeze as of January 1, 2015**

This current actuarial analysis of the plan freeze as of December 31, 2015 is an update one-year later of our prior actuarial analysis of the plan freeze as of January 1, 2015 dated August 19, 2015. In the prior freeze report, we disclosed that the 15-year recommended annual city contribution paid monthly was \$1,567,264. In this current report, the annual city contribution increases by \$326,833 to \$1,894,097. The primary reason for this increase is that the UAL increased by \$3.2 million (from \$15,400,376 to \$18,611,927), primarily the result of the market value of assets declining by \$1.8 million (from \$44,745,232 to \$42,942,347). No significant actuarial assumption changed between the two studies. The investment return assumption for both was 6.25%.

In contrast, the results of the most recent ongoing plan actuarial valuation as of December 31, 2015 reflected a significant improved position compared to the January 1, 2015 actuarial valuation. In both of those valuations a smoothed actuarial value of assets was used and, thereby resulted in the assets used in the two valuations only declining from \$46,070,101 to \$45,784,122. In addition, many assumption changes were made between the two valuations as well as calculation and valuation software system methodology changes as a result of the change in actuarial firms. These are the significant reasons that the December 31, 2015 ongoing plan actuarial valuation results reflected significant improvement from the year earlier actuarial valuation.

### **Key Assumption**

The actuarial investment return assumption for an ongoing public employee pension plan is the long-term average annual expected rate of return from the plan assets. Because it is an on-going plan, its investment time horizon is long (e.g., 40 or 50 years) and continues to stay long with the passage of time. As a result, such a plan can withstand the ups and downs of the investment markets. In addition, the asset allocation of such an ongoing plan can take on more investment risks than a frozen plan because the investment time horizon of the frozen plan is getting shorter every year.

Another consideration for the actuarial investment return assumption is the plan's cash flow, the net result of contributions made to the plan and benefits paid from the plan each month. In recent years, the plan's cash flow has been slightly negative, that is, more benefits paid than contributions received. This is a common characteristic for a mature plan like yours. Expressed as a percentage of assets, the net negative cash flow in a year has averaged around 2%. The board has easily managed this amount with a relatively small allocation to cash and short-term fixed income investments. If the plan were to be frozen, the absence of contributions from the employees and the reduction of the contributions from the city would increase the net negative cash flow in the first year to over 5% of assets and would steadily increase to a range of 8% to 11% by the end of the 15-year contribution period. In the first year after city contributions stop, it is estimated that the percent would jump to a range of 12% to 15% and then continue to steadily increase.

As a result of both the decreasing investment time horizon and the increasing net negative cash flow, the plan's asset allocation would have more dedicated to cash and fixed income securities and less to equity investments. Therefore, the expected average annual long-term rate of return of the frozen plan would be significantly less than what it currently is as an ongoing plan (7.5%). We have used an actuarial investment return assumption of 6.25%, net of investment-related expenses, which we believe would be appropriate for this plan over its gradually decreasing investment time horizon that would result if the plan were to be frozen. As with any actuarial assumption, the assumed rate of investment return would be monitored in the future and would be subject to review and change as needed.

In addition, we did a sensitivity analysis of a change in the investment return assumption on the results of this frozen plan analysis. Section II shows the detailed results of a change in the investment return assumption from 6.25% to 5.5%. The UAL would increase and, in turn, the annual contribution would increase by 22% from \$1,894,097 to \$2,313,251.

#### **Actuarial Value of Assets Method**

For this special frozen plan actuarial analysis, we have used the market value of assets (MVA) of the plan as of December 31, 2015. This is a departure in two ways from the actuarial value of assets (AVA) used in the ongoing plan actuarial valuation as of December 31, 2015. In that valuation, the AVA developed by the five-year smoothing method was greater than the MVA (by \$2,841,775). However, we believe it would be appropriate to use the actual MVA in this valuation and not an AVA that is the MVA adjusted by a smoothing method. Then if the plan is actually frozen, we would recommend phasing into the five-year smoothing methodology currently used for the ongoing plan actuarial valuations.

#### **Administrative Expenses**

Our investment return assumption of 6.25% is net of investment-related expenses. In the ongoing plan actuarial valuation as of December 31, 2015, we recognized administrative expenses as a percent of covered payroll and added that percent to the ongoing normal cost contribution rate. We believe the non-investment-related administrative expenses should be recognized separately as a dollar amount for this special analysis since there would be no covered payroll and no normal cost contribution rate.

For this special analysis of the plan as if it were frozen, we have looked at recent history and assumed that the annual administrative expenses would be \$135,000 in 2016 and increase at the underlying inflation assumption of 2.75% per year for 20 years. Then we calculated the present value of those projected assumed expenses and added it to the present value of plan benefits.

#### **Variability in Future Actuarial Measurement**

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- Plan experience differing from that anticipated by the current economic or demographic assumptions;

- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Analysis of the potential range of such future measurements resulting from the possible sources of measurement variability is typically outside the scope of the annual actuarial valuation or of a special actuarial analysis. However, we provided the sensitivity of a change in the investment return assumption, and we could perform other sensitivity analysis in a subsequent report if desired by the Board of Trustees.

### Other Considerations

While the freezing of this plan would bring some reduction in the required contributions by the city, there are other considerations that should enter into the discussions of such a significant potential decision. Section III of this report (pages 9 and 10) outlines some of the major implications of changing how retirement benefits would be provided if the plan were to be frozen. **This special analysis has not addressed the additional city contributions that would be required for a replacement plan.**

There is one other consideration not mentioned in Section III. There was an Attorney General's opinion in 2008 (AG-0615) that interpreted in a surprising way the protection of vested accrued benefits in article XVI, section 66(d) of the Texas Constitution. Some pension attorneys and interested parties believe this AG opinion restricts the ability to cease considering the effect of the current benefit formula and future service and pay for vested participants as of the date of a plan amendment that would freeze the plan. Other pension attorneys and interest parties do not believe it would restrict the ability to freeze the plan so that no service or compensation after the date of the plan amendment would be recognized in determining the vested accrued benefit.

The City of Fort Worth is still engaged in two law suits over the application of AG-0615 to the public employee retirement system for their employees. So far, the lower courts have been finding in favor of the plain sense interpretation of the wording in the Texas Constitution. Therefore, we have assumed for this special actuarial analysis that the AG opinion would not restrict the city from freezing the plan so that no service or compensation after the assumed freeze date would be recognized.

Respectfully submitted,

RUDD AND WISDOM, INC.

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.



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# **The City of Galveston Employees' Retirement Plan for City Employees**

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## **Special Actuarial Analysis as of December 31, 2015**

**September 26, 2016**



**Rudd and Wisdom, Inc.**  
CONSULTING ACTUARIES



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## *Section I – Certification of Special Actuarial Analysis as of December 31, 2015*

At the request of the Board of Trustees, we have performed a special actuarial analysis of The City of Galveston Employees' Retirement Plan as of December 31, 2015. The purpose of this report is to present our actuarial analysis of the plan reflecting the scenario that the plan is frozen as of December 31, 2015. The frozen plan would only provide monthly benefits to those vested as of December 31, 2015, determined using only frozen service and compensation as of December 31, 2015. For those not vested, the liability reflects the value of their employee accumulated contributions. The purpose of this report is to also recommend an annual contribution which would be part of a funding policy expected to be an adequate contribution arrangement if the plan had been frozen on December 31, 2015.

We have based our analysis on active participant data as of December 31, 2015 provided by Ms. Debbie Jones of the City of Galveston and on pensioner participant data and preliminary asset information for the plan as of December 31, 2015 provided by Ms. Ann S. Masel, the board's administrator for the plan. We have relied on the accuracy of the participant data and the unaudited assets provided. We have used the actuarial methods and assumptions described in Section IV of this report. The actuarial analysis has been performed on the basis of the plan benefits described in Section V.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. In our opinion the assumptions used, in the aggregate and individually, are reasonable expectations of future experience if the plan had been frozen on December 31, 2015. The assumptions represent a reasonable estimate of anticipated experience of the plan over the future if the plan were to be frozen, and their selection complies with the applicable actuarial standards of practice.

The actuarial analysis of the plan reported herein has been performed in accordance with appropriate actuarial methodology and standards of practice.

We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.  
Member of American Academy of Actuaries

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.  
Member of American Academy of Actuaries

## *Section II – Summary of Actuarial Analysis of Plan Freeze as of December 31, 2015*

|                                                                                                | December 31, 2015         |
|------------------------------------------------------------------------------------------------|---------------------------|
| <b>1. Participant Census at Valuation Date</b>                                                 |                           |
| a. Covered employees                                                                           | 459                       |
| b. Vested terminated due deferred benefit                                                      | 55                        |
| c. Terminated due refund                                                                       | 154                       |
| d. Retirees and beneficiaries in pay status                                                    | 329                       |
| e. Total                                                                                       | 997                       |
| <b>2. Projected Active Participant Compensation for Plan Year Following the Valuation Date</b> | \$ 0                      |
| <b>3. Actuarial Present Value of Future Benefits and Expenses</b>                              |                           |
| a. Accrued benefits for employees                                                              | \$ 21,521,951             |
| b. Terminated (vested deferred benefit and refund)                                             | 3,158,261                 |
| c. Retirees and beneficiaries                                                                  | 34,932,852                |
| d. Administrative expenses                                                                     | 1,941,210                 |
| e. Total                                                                                       | \$ 61,554,274             |
| <b>4. Actuarial Present Value of Future Normal Cost</b>                                        | \$ 0                      |
| <b>5. Actuarial Liability (Item 3e – Item 4)</b>                                               | \$ 61,554,274             |
| <b>6. Actuarial Value of Assets (Market Value)</b>                                             | \$ 42,942,347             |
| <b>7. Unfunded Actuarial Liability (UAL) (Item 5 – Item 6)</b>                                 | \$ 18,611,927             |
| <b>8. Recommended Annual City Contributions Each January 1 for the Amortization Period</b>     | \$ 1,833,187 <sup>1</sup> |
| <b>9. Recommended Annual City Contributions Paid Monthly</b>                                   | \$ 1,894,097 <sup>1</sup> |
| <b>10. UAL Amortization Period (Closed Period)<sup>2</sup></b>                                 | 15 years                  |
| <b>11. Funded Ratio (Item 6 ÷ Item 5)<sup>3</sup></b>                                          | 69.8%                     |

<sup>1</sup> Level annual amount required to amortize Item 7 over the period of years in Item 10.

<sup>2</sup> Level dollar amortization over 15-year closed period that began January 1, 2016.

<sup>3</sup> The funded ratio is not appropriate for assessing either the need for or the amount of future contributions or the adequacy of the funding policy of an ongoing plan. However, for a frozen plan, a funded ratio of 100% or more would indicate that contributions could cease. Subsequent experience would determine whether or not any additional contributions might be required.

**Sensitivity of Results to a Change in the  
Investment Return Assumption**

How sensitive is the recommended annual contribution to the investment return assumption? The table below shows the liability components as of December 31, 2015 and the recommended annual contribution with 6.25% and 5.50% as the investment return assumption and all other assumptions unchanged.

|                                                        | Investment Return Assumption |               |
|--------------------------------------------------------|------------------------------|---------------|
|                                                        | 6.25%                        | 5.50%         |
| <b>1. Actuarial present value of</b>                   |                              |               |
| a. Accrued benefits for employees                      | \$ 21,521,951                | \$ 24,095,469 |
| b. Benefits for terminated participants                | 3,158,261                    | 3,456,634     |
| c. Benefits for pensioners                             | 34,932,852                   | 37,120,195    |
| d. Administrative expenses                             | 1,941,210                    | 2,069,148     |
| e. Total                                               | \$ 61,554,274                | \$ 66,741,446 |
| <b>2. Market value of assets</b>                       | \$ 42,942,347                | \$ 42,942,347 |
| <b>3. Unfunded actuarial liability (UAL)</b>           | \$ 18,611,927                | \$ 23,799,099 |
| <b>4. Recommended annual contribution paid monthly</b> | \$ 1,894,097                 | \$ 2,313,251  |
| a. Increase amount                                     |                              | \$ 419,154    |
| b. Relative increase                                   |                              | 22%           |



### Section III – Other Considerations

If this plan were frozen, it is true that the city's required future contributions would be reduced because the accrual of any additional future benefits would be frozen. However, there are considerations other than the reduction in the city's required contributions. This section is not intended to be an exhaustive list or a full description of each item. Rather it is intended to objectively introduce these considerations so that the discussions of whether or not this plan should be frozen are amplified. City management has previously shared with us their thinking that a freeze of this defined benefit (DB) plan would be accompanied by the creation of a new defined contribution (DC) plan for all of the employees adversely affected by a freeze, as well as for all future hires that would otherwise have been covered by this plan. So the shift from a DB plan to a DC plan is part of the context for these considerations.

1. The investment responsibility, investment expense, and investment risk would be shifted completely to the employees, both during the period of their employment and during the years of retirement as long as they have assets in or from the DC plan. Studies have consistently shown that investment returns from DB plans exceed the investment returns from DC plans because DB plans have the benefit of investment experts, lower investment expenses from pooled assets, a longer and consistent investment time horizon, and more expertise in the management of investment risk.
2. The longevity risk would be shifted to the employees. One of the other strengths of a DB plan compared to a DC plan is the normal form of the retirement benefit. DB plans pay monthly benefits for the lifetime of the pensioner while DC plans generally pay a lump sum distribution. So a pensioner in a DB plan does not have to be concerned about outliving plan assets, a major concern for someone retiring with a DC plan lump sum distribution.
3. The table below gives a summary comparison of DB plans and DC plans. Some of the comparisons below are why the large majority of state and local government public employees are still covered by DB plans in spite of a trend toward DC plans for federal employees and employees in the private sector.

| DB Plans vs. DC Plans                                                           |                  |                  |
|---------------------------------------------------------------------------------|------------------|------------------|
|                                                                                 | DB Plan          | DC Plan          |
| Bears investment risk and benefits from investment gains                        | Employer         | Employee         |
| Bears inflationary risk during working career                                   | Employer         | Employee         |
| Usual form of benefit                                                           | Monthly for life | Single sum       |
| Bears longevity risk in retirement years                                        | Employer         | Retiree          |
| Selects investment managers and asset allocation during working years           | Board            | Employee         |
| Selects investment managers and asset allocation during retirement years        | Board            | Retiree          |
| Generally provides more benefits than the other type of plan to these employees | Long term        | Short term       |
| Generally understood by most employees                                          | No               | Yes              |
| Usually pays for administrative expenses                                        | Employer         | Employee/retiree |
| Usually pays for investment expenses                                            | Employer         | Employee/retiree |

4. In order to know what the city and the covered employees would be getting by freezing the DB plan and switching to a DC plan, a comparison of projected retirement benefits (ongoing DB plan vs. the sum of frozen DB plan and new DC plan) should be made for representative employees. Such a study would show the reduction in benefits, especially to those current younger employees and future hires who will work a long career for the city.
5. Pre-retirement death or disability usually results in a lower benefit with a DC plan compared to the benefit with a DB plan. In the event of freezing your DB plan, the day after the effective date of the freeze the DB plan death and disability benefits would drop dramatically for most employees because they would be effectively considered terminated employees after the freeze date and not active employees. Pre-retirement death and disability benefits usually become vested only upon dying or becoming disabled.
6. The large majority of public employees still contribute to and are covered by defined benefit plans. While the benefit formulas vary from plan to plan, the contribution rates are a rough indicator of the level of benefits. The table below compares the employer and employee contribution rates to the DB plans for a sample of cities and counties with neighboring employees to the City of Galveston. Consideration should be given to the effect of replacing the DB plan with a DC plan on hiring and retaining employees.

| Employer    | Contribution Rates |             |    |
|-------------|--------------------|-------------|----|
|             | Employer           | Employee    |    |
| A. Cities   | <u>2016</u>        | <u>2017</u> |    |
| Alvin       | 17.04%             | 17.96%      | 7% |
| Angleton    | 12.13              | 12.09       | 6  |
| Dickinson   | 8.63               | 9.13        | 7  |
| Friendswood | 15.65              | 15.67       | 7  |
| Hitchcock   | 4.02               | 4.47        | 5  |
| LaMarque    | 14.68              | 15.63       | 7  |
| Sana Fe     | 12.31              | 12.07       | 7  |
| Texas City  | 16.67              | 16.84       | 7  |
| B. Counties |                    |             |    |
| Brazoria    | 12.14              | 12.05       | 7  |
| Chambers    | 13.78              | 13.70       | 7  |
| Galveston   | 11.21              | 11.46       | 7  |
| Harris      | 13.55              | 13.76       | 7  |
| Jefferson   | 17.61              | 17.20       | 7  |
| Matagorda   | 14.83              | 14.14       | 7  |

7. If the current DB plan were to be frozen, plan administration would continue, but after a few years the board composition would probably have to change. It might be more challenging to find people willing to serve on a board of a frozen plan with no active employee plan members.
8. There would be an increase in administrative activity and cost as close to 200 employees who are not vested as of the plan freeze date would receive a cash out of their employee accumulated contributions. Ultimately, when there is only a moderate number of individuals receiving a monthly benefit from the frozen plan, it would make sense to close the plan and purchase annuities for those remaining recipients. At that time, there would be a large amount of administrative time and cost in order to complete that process.

## *Section IV – Actuarial Methods and Assumptions*

### **A. Actuarial Methods**

#### **1. Actuarial Cost Method**

For a frozen plan, no actuarial cost method is required. The primary calculations are the actuarial present value of future benefits and expenses. The unfunded actuarial liability (UAL) is the amount by which the present value of future benefits and expenses exceeds the current plan assets. The UAL is recalculated each time a valuation is performed. Experience gains and losses, which represent deviations of the UAL from its expected value based on the prior valuation, are determined at each valuation and are amortized as part of the newly calculated UAL.

#### **2. Amortization Method**

For this analysis of the plan frozen as of December 31, 2015, the UAL would be amortized with level dollar payments over a 15-year closed period beginning January 1, 2016, in accordance with the funding policy recommended by Rudd and Wisdom, Inc. in this report.

#### **3. Actuarial Value of Assets Method**

All assets are valued at market value as of December 31, 2015. Subsequent actuarial valuations following the freeze date of the plan would use a smoothed market value. This smoothed value would begin with market value and make an adjustment made to uniformly spread actuarial gains or losses after December 31, 2015 (as measured by actual market value investment return vs. expected market value investment return) over a five-year period. The total adjustment amount shall be limited as necessary such that the actuarial value of assets shall not be less than 80% of market value nor greater than 120% of market value. This method is similar to that currently used for the ongoing valuations of the plan.

### **B. Actuarial Assumptions**

#### **1. Mortality**

- |                              |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| a. Pre-retirement Mortality  | RP-2000 Combined Healthy Mortality Table projected to 2024 for males and females (sex distinct) |
| b. Post-retirement Mortality | RP-2000 Combined Healthy Mortality Table projected to 2024 for males and females (sex distinct) |
| c. Post-disability Mortality | RP-2000 Combined Healthy Mortality Table projected to 2024 for males and females (sex distinct) |

2. **Termination** There would be no need for assumed termination rates with a plan assumed to be frozen. All employees are assumed to have terminated employment as of December 31, 2015.

3. **Investment Return** Current and future plan assets are assumed to reflect an annual investment return of 6.25% net of investment-related expenses. See item B.10 for general administrative expenses.

4. **Earnings Progression** There would be no need to recognize projected earnings after 2015 if the plan had been frozen December 31, 2015.

5. **Retirement Rates** All terminated participants and employees assumed to have terminated employment as of December 31, 2015 who are eligible for a deferred monthly benefit are assumed to commence the benefit at age 65 or as of January 1, 2016 if over age 65.
6. **Disability** There would be no need for assumed rates of disability with a plan assumed to be frozen in such a way to preclude any new disability benefits.
7. **Inflation Component in Investment Return Assumption** 2.75%
8. **Form of Payment**
  - a. Married participants: Joint and 50% to surviving spouse form of payment.
  - b. Single participants: Life only form of payment.
  - c. Monthly benefits are payable the first of each month.
9. **Percent Married** We used actual provided marital status and spouse date of birth for the retirees. For the vested terminated participants and the employees, we assumed that 85% will be married at commencement of the monthly benefit, with male retirees having a spouse three years younger and female retirees having a spouse three years older.
10. **General Administrative Expenses** The expenses paid from plan assets for other than investment-related expenses are assumed to be \$135,000 in 2016 and are assumed to increase 2.75% per year. For determining the present value of future general administrative expenses, we assumed the plan, if frozen, would continue its current form of operation for 20 years and then be terminated.



## ***Section V – Outline of Principal Plan Eligibility and Benefit Provisions as of December 31, 2015***

### **1. Identifying Data**

- a. Plan name: The City of Galveston Employees' Retirement Plan for City Employees
- b. Type of plan: Defined benefit pension benefits
- c. Plan sponsor: City of Galveston
- d. Plan Year: January 1 - December 31

### **2. Participation**

- a. Minimum Age: none
- b. Maximum Age at Hire: none
- c. Eligible Employee: All full-time employees except for those (i) covered by the separate retirement plans for police and for firefighters, (ii) performing emergency services as temporary employees, (iii) compensated on a fee basis; or (iv) leased.

### **3. Contributions**

- a. Active Member: 6% of pay
- b. City: all amounts necessary to adequately finance plan benefits, currently 9% of pay

### **4. Eligibility for Retirement**

- a. Normal Retirement: age 65 plus five or more years of service
- b. Early Retirement: age 55 or above plus ten or more years of service or age 62 plus five or more years of service
- c. Disability: eligible for Social Security disability benefits

### **5. Retirement Benefit Monthly Amounts**

- a. Normal Retirement: 2.25% of average monthly compensation per year of service assumed frozen as of December 31, 2015, payable the first of each month, not to exceed \$4,166.67 per month
- b. Late Retirement: same as Normal Retirement
- c. Early Retirement: amount equal to monthly normal retirement benefit accrued at early retirement date reduced by  $1/180^{\text{th}}$  for each of the first 60 months and  $1/360^{\text{th}}$  for each additional month by which early retirement precedes his normal retirement.

### **6. Payment Options**

- a. The normal form of monthly payment for life is joint and 50% to surviving spouse for the member leaving a surviving spouse at date of death.
- b. The member eligible to commence a monthly benefit may elect a lump sum distribution of the member's accumulated contributions and an actuarially reduced monthly benefit.

**7. Vested Termination Benefits**

- a. Benefit: vested percentage of accrued benefit at normal retirement age.
- b. Vesting Schedule:

| Years of Service | Vested Percent |
|------------------|----------------|
| less than 5      | 0%             |
| 5                | 50             |
| 6                | 60             |
| 7                | 70             |
| 8                | 80             |
| 9                | 90             |
| 10 or more       | 100            |

A member is always 100% vested in the portion of the accrued benefit attributable to his employee contributions.

- c. Accrued Benefit: a monthly benefit payable in the normal form of payment beginning at normal retirement age; the amount of the accrued benefit would be determined as if the member had terminated employment December 31, 2015 and calculated using the normal retirement benefit formula but using only years of benefit service and compensation credited at date of termination. For employees not vested on December 31, 2015, the accrued benefit would equal the return of the employee accumulated contributions.
- 8. Average Monthly Compensation** Plan compensation averaged over the five calendar years of service covered by the plan through 2015 which produce the highest average monthly compensation.

## *Section VI – Participant Census Summary*

|                                                | December 31, 2015 |
|------------------------------------------------|-------------------|
| <b>1. Covered Employee Count</b>               |                   |
| a. Vested                                      | 243               |
| b. Nonvested                                   | 216               |
| c. Total                                       | 459               |
| <b>2. Age and Service of Covered Employees</b> |                   |
| a. Average attained age                        | 46.8 years        |
| b. Average benefit service earned              | 8.0 years         |
| <b>3. Immediate Retirement Benefits</b>        |                   |
| a. Retirees and beneficiaries in pay status    | 329               |
| b. Aggregate monthly benefit                   | \$ 284,310        |
| c. Average monthly benefit                     | \$ 864            |
| <b>4. Deferred Retirement Benefits</b>         |                   |
| a. Vested terminated participants              | 55                |
| b. Aggregate monthly benefit                   | \$ 30,357         |
| c. Average monthly benefit                     | \$ 552            |
| <b>5. Refund of Contributions Payable</b>      |                   |
| a. Terminated participants                     | 154               |
| b. Aggregate amount payable                    | \$ 511,621        |

## **Jacque Vasquez**

**From:** Ann Masel  
**Sent:** Thursday, July 07, 2016 1:41 PM  
**To:** Smith, Stefan (SSmith@lockelord.com)  
**Cc:** 'Ryan Young'; Ryan Young (youngrya@cityofgalveston.org); Jacque Vasquez Galveston Employees  
**Subject:** SKMBT\_C45416070712240.pdf; SKMBT\_C45416070712241.pdf; SKMBT\_C45416070712242.pdf  
**Attachments:**

Hi Stefan,

As I mentioned on the phone, these are changes which need to be made to the City of Galveston Plan. The letter from Rudd and Wisdom is for housecleaning issues, which should clarify the manner in which the distributions are calculated. The additional attachment is merely an excerpt from the minutes and speaks to changing the annual meeting from August to May and changing the date of the quarterly meeting to read the first Tuesday of the second month after the end of the quarter. This should bring the Plan and the Bylaws in to compliance and reflect what is actually occurring.

I've also sent a copy of the bylaws. I'm unsure whether this is an amendment to the Plan or to just bylaws.

Thanks so much!

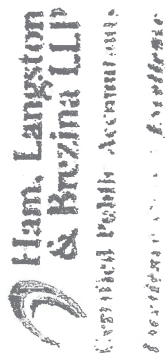
Ann

Ann S. Masel, CPA  
Partner  
Ham, Langston & Brezina, LLP  
1011 Tremont  
Galveston, Texas 77550  
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[amasel@hlb-cpa.com](mailto:amasel@hlb-cpa.com)

**From:** Kathi Ashy  
**Sent:** Thursday, July 07, 2016 1:27 PM  
**To:** Ann Masel  
**Subject:** FW: Message from KMBT\_C454



*Kathi A. Ashy*  
Ham, Langston & Brezina, LLP  
1011 Tremont Street  
Galveston, TX 77550  
Main: 409-765-9311  
Direct: 409-443-5007  
Email: [kashy@hlb-cpa.com](mailto:kashy@hlb-cpa.com)



31 CFR Part 10, section 10.35, requires us to notify you that any tax advice included in this written or electronic communication was not intended or written to be used, and cannot be used by the taxpayer, for the purpose of avoiding penalties that may be imposed on the taxpayer by any governmental taxing authority or agency.

**From:** [BizhubGL1@hlb-cpa.com](mailto:BizhubGL1@hlb-cpa.com) [<mailto:BizhubGL1@hlb-cpa.com>]  
**Sent:** Thursday, July 07, 2016 1:25 PM  
**To:** Kathi Ashy  
**Subject:** Message from KMBT\_C454

# Rudd and Wisdom, Inc.

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David G. Wilkes, F.S.A.

August 1, 2016

**Via E-Mail: [amasel@hlb-cpa.com](mailto:amasel@hlb-cpa.com)**

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Second Report on Special Studies

Dear Trustees:

At your request, we have studied seven questions. In our first report dated June 28, 2016, we discussed the first three questions and the answers we had determined. In this second report, we are presenting the answers to these next four questions:

- What increase in contributions would be required to increase the multiplier in the benefit formula from 2.25% of the average monthly compensation per year of service to 2.5% per year?
- What would be the effect of removing unused sick pay from the determination of average monthly compensation on the ability to increase the cap on monthly benefits?
- What increase in contributions would be required to add a retirement eligibility provision known as "20 and out" that would allow a member with 20 or more years to terminate employment and begin receiving an unreduced monthly benefit?
- Is there any way to make service in our plan transferable with other governmental entities in Texas?

For the first three questions above, we believe that because of the significant size of the net deferred investment losses in the December 31, 2015 actuarial valuation, it is important to recognize those losses in answering the questions. In the report to you of the actuarial valuation, we brought you the good news that the amortization period for the unfunded actuarial accrued liability (UAAL) was only 13.7 years. But we also disclosed that if we had fully recognized the

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net deferred investment losses by using the market value of assets (MVA) in place of the actuarial value of assets (AVA), the period would have been 18.1 years. The easiest way to recognize the net deferred investment losses of \$2,841,775 is to use the MVA in place of the AVA, and that is what we have done for these special studies. Except for using the MVA instead of the AVA and for revised assumed retirement rates for answering the question about "20 and out", these special studies are based on the actuarial assumptions and methods reflected in the December 31, 2015 actuarial valuation, as well as the census data.

### Summary of Answers

| Question                                                                                                                                                                                      | Answer                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| • What increase in the city contribution rate would be required to increase the multiplier from 2.25% to 2.5%?                                                                                | from 9% to 10.43%                                                                               |
| • What additional increase in the benefits cap could the plan afford without an increase in contributions if unused sick pay were to be excluded in determining average monthly compensation? | from annual rate of \$55,000 (assuming the cap is increased per the June 28 report) to \$57,400 |
| • What increase in the city contribution rate would be required to add "20 and out" retirement eligibility?                                                                                   | from 9% to 12.21%                                                                               |
| • Is there any way to make service in our plan transferable?                                                                                                                                  | merge the plan into TMRS or elect to participate in the statewide PRP                           |

### Selection of Appropriate Maximum Amortization Period for UAAL

An important element for these special studies in 2016 was to determine what the maximum UAAL amortization period should be for approving increases in benefits. Before the bear market of 2000-2002, we would use a 30-year period as the maximum period for our public employee pension plan clients. At that time, the Pension Review Board (PRB) guidelines for actuarial soundness said that the preferred range for the UAAL amortization period was 25-30 years. After 2002, we began using a 25-year period because we realized that the 30-year period had little cushion for adverse investment experience. Then after the great recession of 2008, public employee pension plans began to come under more scrutiny with their inadequate contribution arrangements because of the significant investment losses. After the market had rebounded for several years and some of our clients could afford some benefit improvements, usually because of contribution increases as well as the market rebound, we began thinking that a period less than 25 years should be used.

The PRB modified their guidelines in 2011, changing the preferred range for the UAAL amortization period to 15-25 years and adding that no benefit improvement should be adopted that would increase the amortization above 25 years. We have encouraged a number of public plan boards to consider a strategy of gradually reducing the maximum period for approving benefit increases from the formerly used 25-year period to an ultimate target such as 15 years, with reductions in two or three year increments. So the strategy incorporates periodic benefit improvements by allowing an increase in the UAAL amortization period up to a maximum period and then waits until there is a reduction in the amortization period below a new lower maximum. How long it would take for the strategy to eventually get to the 15-years target would depend primarily upon the plan's investment returns and the financial health of the employer.

For the studies you have requested, we believe an appropriate initial maximum period is 20 years, the midpoint of the preferred range of 15 to 25 years in the PRB guidelines. For part of an ongoing strategy, we would want to use the lesser of the MVA and AVA for approving benefit increases. In effect we want to recognize any deferred net investment losses but to not recognize deferred net investment gains. For these studies, the lesser of the two is the MVA. In addition, for the studies determining additional funding, we have assumed it would begin in January 2017, a year after the valuation date, and that it would be provided by the city.

#### **Increase in Multiplier with an Increase in Contributions**

Increasing the benefit formula multiplier from 2.25% to 2.5% per year of service using the cap on monthly benefits at the level of \$4,583.33 (an annual total of \$55,000) we approved in our June 28 report would require an increase in the city contribution rate of 1.43% beginning in January 2017 in order to maintain the UAAL amortization period of 20 years. However, the increased multiplier would make it more expensive to increase the cap on monthly benefits above the annual total of \$55,000.

#### **Additional Increase in Cap Without an Increase in Contributions**

In the special studies report dated June 28, we said that increasing the cap on monthly benefits from \$4,166.67 (an annual total of \$50,000) to \$4,583.33 (an annual total of \$55,000) would increase the UAAL amortization period to 20 years and that we would approve this change in benefits with no additional contributions. In this study, we determined that removing unused sick pay from the calculation of the average monthly contribution would allow an additional increase in the cap from an annual total of \$55,000 to \$57,400 (from a monthly rate of \$4,583.33 to \$4,783.33). These offsetting changes would maintain the UAAL amortization period of 20 years with the current city contribution rate of 9% of covered pay.



### **Increase in Contributions to Add "20 and Out"**

If the "20 and out" provision were to be added to the plan, it would be reasonable to expect that after serving 20 years or more some employees would terminate at an earlier age than they would under the current plan provisions. There are two reasons for the expected change in behavior. First, those hired before age 35 would be able to attain 20 years of service before age 55, the first age that retirement is possible under the current plan provisions. The ability to terminate employment with the city and begin receiving a monthly benefit in their forties or early fifties would cause some people to change jobs. The second reason is that the benefit with "20 and out" would be unreduced for age. For example, the unreduced feature would be a 100% increase in benefit at age 55 compared to the present plan provisions with reduction for leaving before age 65. The increase would be 50% at age 60.

For these reasons, we developed a new set of assumed retirement rates at ages before 65 for valuing the "20 and out" provision. These new rates would apply once a member had 20 or more years of service. The table below compares the new and the current assumed retirement rates. The current rates would continue to apply for members with less than 20 years of service when they meet current plan eligibility requirements.

| <u>Attained<br/>Age</u> | <u>New<br/>Annual Rates of<br/>Retirement</u> | <u>Current<br/>Annual Rates of<br/>Retirement</u> |
|-------------------------|-----------------------------------------------|---------------------------------------------------|
| 40-49                   | 5%                                            | N/A                                               |
| 50-52                   | 7%                                            | N/A                                               |
| 53-54                   | 8%                                            | N/A                                               |
| 55-59                   | 10%                                           | 3%                                                |
| 60                      | 15%                                           | 10%                                               |
| 61                      | 20%                                           | 10%                                               |
| 62-64                   | 25%                                           | 20%                                               |
| 65-69                   | 30%                                           | 30%                                               |
| 70-74                   | 95%                                           | 95%                                               |
| 75                      | 100%                                          | 100%                                              |

With the generous increase in benefits and the availability of immediate benefits before age 55 for a number of members that would accompany the "20 and out" provision, it should not be surprising that the average age at retirement would decrease. Since the normal cost is based on the expected working career for each member, the total normal cost would be higher due to both higher benefits and a shorter expected working career for many of the employees hired before 45. The increase in the city contribution rate required to add "20 and out" would be 3.21%, an increase from 9% to 12.21% beginning in January 2017.

### **Making Service in the Plan Transferable**

The Texas Municipal Retirement System (TMRS) has a separate plan for each of its almost 900 participating cities. Each plan has its own plan design within the options available, and has its own accounts for the investments of the contributions by the city and the active plan members. There are two features of TMRS that have probably caused the question to be asked, is there any way to make service in our plan transferable with other governmental entities in Texas. The first feature is that if an employee works for two cities in TMRS, his service in one plan can be combined with service in the other plan to meet the retirement eligibility requirements in each plan. This feature applies to all member cities. The second feature is optional so that an employing city can elect to treat all employees with service in another TMRS city as if their combined service were all with the current employing city for determining a retirement benefit. These features are attractive for employees who may work for two or more TMRS member cities, such as city managers or chief financial officers.

The only way for the City of Galveston to have service by their employees, other than the fire and police, be transferable as it can be in TMRS is to merge the plan into TMRS and to become a participating city in TMRS. That would probably take much time and effort of both the City of Galveston and the TMRS staff to accomplish a merger. Attorneys for each side would have to be involved in the process and in document preparation. The City of Galveston would have to agree to contribute at the actuarially determined contribution rate, which would be determined annually about seven months before the rate would go into effect in January.

Another option for transferability similar to the first feature in TMRS is for the board of trustees to elect to participate in the Proportionate Retirement Program (PRP) in state law (Chapter 803 of Title 8, Subtitle A of the Texas Government Code, which follows this letter), subject to the approval of the city council of the City of Galveston [Section 803.101(f)]. The PRP applies to the Employees Retirement System of Texas, the Teacher Retirement System of Texas, the Texas County and District Retirement System, the Judicial Retirement System of Texas, TMRS, and any retirement system that elects to participate. Participation in the PRP would allow combining of service in two or more participating governmental entities in Texas for satisfying retirement eligibility provisions of each entity's retirement plan. However, service may not be combined for determining the amount of a benefit.

If the board of trustees is interested in this option, the next steps would probably be for the board or a subcommittee of the board to ask the large statewide retirement systems about the administrative issues related to the PRP, and then to ask the city attorney to review the state law describing the PRP. Pursuing this option would take time and effort, first from the board of trustees and then from the city, before the board and the city would each have become familiar enough with the PRP to know whether or not to move forward with the formal election.

Trustees

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August 1, 2016

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

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GOVERNMENT CODE

TITLE 8. PUBLIC RETIREMENT SYSTEMS

SUBTITLE A. PROVISIONS GENERALLY APPLICABLE TO PUBLIC RETIREMENT  
SYSTEMS

CHAPTER 803. PROPORTIONATE RETIREMENT PROGRAM

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 803.001. DEFINITIONS. In this chapter:

(1) "Combined service credit" means the total of a person's service credit in only those retirement systems to which this chapter applies for which the total satisfies the length-of-service requirements for service retirement at the person's attained age, and does not include:

(A) any service credit in a retirement system for which the total of a person's service credit does not satisfy the length-of-service requirements for service retirement at the person's attained age; or

(B) service credit earned with or allowed by a subdivision or municipality not participating in the program provided by this chapter or, as applicable, a subdivision or municipality whose participation is limited as provided by Section 803.103.

(2) "Service credit" means service that is in a person's account in a retirement system to which this chapter applies and that may be used to meet length-of-service requirements for service retirement in that system.

(3) Repealed by Acts 1991, 72nd Leg., ch. 131, Sec. 9, eff. Sept. 1, 1991.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981.  
Amended by Acts 1985, 69th Leg., ch. 602, Sec. 3, eff. Sept. 1, 1985.  
Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.001 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 2, 9, eff. Sept. 1, 1991.



Sec. 803.002. PURPOSE OF CHAPTER. The purpose of this chapter is to implement the authority granted the legislature by Article XVI, Section 67, of the Texas Constitution to provide a program of proportionate benefits to qualified members of more than one retirement system to which this chapter applies. It is contrary to the purpose of this chapter for a person or class of persons to receive, because of service in more than one retirement system to which this chapter applies, proportionately greater benefits from a particular system than a person who has rendered faithful career service under that one system.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.002 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 3, eff. Sept. 1, 1991.

Sec. 803.0021. APPLICATION OF CHAPTER. This chapter applies only to:

(1) a retirement system for general municipal employees in a municipality with a population of not less than 750,000 nor more than 850,000;

(2) the Employees Retirement System of Texas, the Teacher Retirement System of Texas, the Judicial Retirement System of Texas Plan One, the Judicial Retirement System of Texas Plan Two, the Texas County and District Retirement System, and the Texas Municipal Retirement System; and

(3) a retirement system that makes an election under Section 803.101(f).

Added by Acts 1991, 72nd Leg., ch. 131, Sec. 1, eff. Sept. 1, 1991. Amended by Acts 1997, 75th Leg., ch. 1190, Sec. 1, eff. Sept. 1, 1997; Acts 2001, 77th Leg., ch. 669, Sec. 21, eff. Sept. 1, 2001. Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 21, eff. September 1, 2011.

Sec. 803.003. CONSTRUCTION OF CHAPTER. (a) The provisions of this chapter are exceptions to the other laws governing retirement

systems to which this chapter applies and prevail over those laws to the extent of explicit conflict, but this chapter must be construed strictly as against those laws.

(b) Notwithstanding any other law, a person who is involuntarily transferred to a position included in the coverage of a retirement system governed by Chapter 101, Acts of the 43rd Legislature, 1st Called Session, 1933 (Article 6243b, Vernon's Texas Civil Statutes), from a position included in a retirement system operated by a municipality that does not participate in a statewide retirement system governed by Chapter 101, Acts of the 43rd Legislature, 1st Called Session, 1933 (Article 6243b, Vernon's Texas Civil Statutes), may make an irrevocable election at the time of the transfer to continue membership in the municipal retirement system. An involuntary transfer is determined by the employment rules that apply to the person immediately before the time of the involuntary transfer.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.003 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 3, eff. Sept. 1, 1991; Acts 1999, 76th Leg., ch. 1296, Sec. 2, eff. Sept. 1, 1999.

#### SUBCHAPTER B. PARTICIPATION AND MEMBERSHIP

Sec. 803.101. PARTICIPATION BY RETIREMENT SYSTEMS. (a) Except as provided by Subsections (b) and (f), each retirement system to which this chapter applies is required to participate in the program of proportionate retirement benefits provided by this chapter.

(b) A subdivision participating in the Texas County and District Retirement System or a municipality participating in the Texas Municipal Retirement System is not required to participate in the proportionate retirement program if the subdivision or municipality elected not to participate under the authority of former law and has not revoked the election under Subsection (c).

(c) A subdivision or municipality that elected not to participate in the proportionate retirement program may revoke the election and elect to participate. An election to participate may be made by vote of the governing body of the subdivision or municipality

the governing body shall send notice of an election to participate to the board of trustees of the retirement system in which the subdivision or municipality participates.

(d) The effective date of participation in the proportionate retirement program by a subdivision or municipality electing to participate under Subsection (c) is the first day of the month after the month in which the appropriate board of trustees receives notice of an election.

(e) Participation in the proportionate retirement program includes all persons who are members of a retirement system to which this chapter applies and, in the case of members of the Texas County and District Retirement System or the Texas Municipal Retirement System, who are also employees or former employees of a subdivision or municipality participating in the proportionate retirement program.

(f) The governing body of a public retirement system in this state for municipal employees that is a qualified plan under Section 401(a) of the Internal Revenue Code of 1986 (26 U.S.C. Section 401) may elect to participate in the proportionate retirement program by adopting a resolution to that effect. A resolution may not be adopted under this subsection without the approval of the governing body of the municipality that finances the retirement system. The governing body of the retirement system shall notify all other participating retirement systems of the election. The effective date of participation in the proportionate retirement program by a retirement system for which an election is made under this subsection is the first day of the third month after the month in which notice is given under this subsection. An election under this subsection does not require the approval of the participants in the public retirement system making the election.

(g) The governing body of a municipality described by Section 803.0021(1) that finances a public retirement system for police officers or firefighters may not approve the retirement system's election under Subsection (f) to participate in the proportionate retirement program unless an actuary acting on behalf of the municipality reviews the initial cost to the municipality of making the election.

in the manner required for official actions of the governing body.



(h) If the governing body of a public retirement system under Subsection (g) adopts a resolution to participate in the proportionate retirement program, the governing body of the municipality that finances the retirement system shall appropriate and pay to the retirement system, at the same time the municipality makes the municipality's monthly contribution to the retirement system, the additional amount necessary, as determined by the retirement system's actuary, to fund the additional liabilities incurred by the retirement system as a result of participating in the proportionate retirement program.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.101 and amended by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 4, eff. Sept. 1, 1991; Acts 1997, 75th Leg., ch. 1190, Sec. 2, eff. Sept. 1, 1997; Acts 1999, 76th Leg., ch. 1296, Sec. 1, eff. Sept. 1, 1999.

Amended by:

Acts 2007, 80th Leg., R.S., Ch. 1427 (S.B. 1626), Sec. 1, eff. June 15, 2007.

Sec. 803.102. RETIREMENT SYSTEM MEMBERSHIP. (a) Membership in a retirement system to which this chapter applies does not terminate because of absence from service covered by that system during a period for which the member earns service credit in another retirement system to which this chapter applies for service performed for an employer other than a subdivision or municipality not participating in the program provided by this chapter.

(b) A person may continue membership in a retirement system to which this chapter applies while absent from service with all retirement systems to which this chapter applies if the person would be eligible, under the laws governing that system, to continue membership if the person's combined service credit had been earned in that system.

(c) In this section, a person's absence from service begins on the day after the last day of service covered by any retirement system to which this chapter applies.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.102 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 5, eff. Sept. 1, 1991.

Sec. 803.103. LIMITATION OF PARTICIPATION BY RETIREMENT SYSTEMS. (a) Participation in the proportionate retirement program by a subdivision participating in the Texas County and District Retirement System or a municipality participating in the Texas Municipal Retirement System does not include:

(1) participation with a retirement system described by Section 803.0021(1) if the subdivision or municipality has elected to so limit its participation and has not revoked the election under Subsection (b); or

(2) participation with a retirement system described by Section 803.0021(3).

(b) A subdivision or municipality that has elected to limit its participation in the proportionate retirement program may revoke the election and remove the limitation on participation. An election under this subsection may be made by vote of the governing body of the subdivision or municipality in the manner required for official actions of the governing body. The governing body shall send notice of an election under this subsection to the board of trustees of the retirement system in which the subdivision or municipality participates.

(c) The effective date of a removal of a limitation on participation in the proportionate retirement program by a subdivision or municipality electing under Subsection (b) is the first day of the month after the month in which the appropriate board of trustees receives notice of the election.

Added by Acts 1991, 72nd Leg., ch. 131, Sec. 6, eff. Jan. 1, 1992. Amended by Acts 1997, 75th Leg., ch. 1190, Sec. 3, eff. Sept. 1, 1997.

#### SUBCHAPTER C. CREDITABLE SERVICE

Sec. 803.201. RETIREMENT ELIGIBILITY BASED ON COMBINED SERVICE CREDIT. (a) A person who has membership in two or more retirement systems to which this chapter applies is subject to the laws governing each of those systems for determination of the person's eligibility for service retirement benefits from each system, except that, for the purpose of determining whether a person meets the length-of-service requirements for service retirement of a system, the person's combined service credit must be considered as if it were all credited in each system.

(b) A person's combined service credit is useable only in determining eligibility for service retirement benefits and may not be used in determining:

(1) eligibility for disability retirement benefits, death benefits, or any type of benefit other than service retirement benefits; nor

(2) the amount of any type of benefit.

(c) A person receiving service retirement or lifetime disability retirement benefits from one or more retirement systems to which this chapter applies may use the program provided by this chapter to qualify for subsequent service retirement under another retirement system to which this chapter applies in which the person has service credit, if the person was not eligible to retire under the latter system at the time of previous service retirement, or qualification for lifetime disability retirement benefits from a retirement system to which this chapter applies, or if the person's previous retirement was not based on combined service credit.

(d) Service credit earned with or allowed by more than one retirement system to which this chapter applies for the same service may be counted only once in determining the amount of a person's combined service credit.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.201 and amended by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1989, 71st Leg., ch. 616, Sec. 2, eff. June 14, 1989; Acts 1991, 72nd Leg., ch. 131, Sec. 7, eff. Sept. 1, 1991.

Sec. 803.202. SERVICE IN CERTAIN RETIREMENT SYSTEMS. (a) The board of trustees of the Employees Retirement System of Texas by rule may:

(1) consider the classes of service in the Employees Retirement System of Texas as if they were, for purposes of this chapter, classes in separate statewide retirement systems; or

(2) permit a person who is retiring exclusively from retirement systems administered by the board to use the shortest length-of-service requirement provided for retirement in any class in which the person has service credit.

(b) A member of a retirement system administered by the board of trustees of the Employees Retirement System of Texas may reestablish service credit previously canceled in another retirement system administered by the board if the member holds a position included in the system of which the person is a member and has held the position for at least 12 months. The method of reestablishment and the amount to be deposited are as provided by the applicable law providing for reestablishment of service credit generally in the particular retirement system.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.202 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1993, 73rd Leg., ch. 791, Sec. 1, eff. Sept. 1, 1993.

Sec. 803.203. REESTABLISHMENT OF SERVICE CREDIT BY FORMER MEMBER. (a) Except as provided by Subsection (g), a person who is a member of a retirement system participating in the program provided by this chapter may reestablish service credit, including prior service credit if applicable, previously canceled in another retirement system that is participating in the program provided by this chapter if the person:

(1) is not a current member of the system under which the service was performed;

(2) in the case of the Texas County and District Retirement System, does not have an open account with the subdivision for which the person performed the service for which the credit is sought; or



(3) in the case of an employee to whom Section 803.204 applies, does not have an open account with the employing hospital district, charitable organization, or administrative agency, as applicable, for which the person performed the service for which the credit is sought.

(b) A person may apply to reestablish service credit under this section by filing an application with the retirement system in which the service was originally credited and a certification that the applicant is currently a member of the certifying system.

(c) Except as provided by Subsection (f), the retirement system in which the service credit was originally credited shall grant the service credit after receiving an application and a certification required by Subsection (b) and:

(1) to reestablish service credit other than in the Texas County and District Retirement System, the Texas Municipal Retirement System, or the retirement system in which a hospital district, charitable organization, or administrative agency described by Section 803.204 participates, a contribution in the amount generally required to reestablish service credit in the system, including any applicable interest and membership fees;

(2) to reestablish service credit in the Texas County and District Retirement System, the Texas Municipal Retirement System, or the retirement system in which a hospital district, charitable organization, or administrative agency described by Section 803.204 participates, a statement that the applicant does not wish to make a contribution for the service credit; or

(3) at the applicant's option, to reestablish current service credit in the Texas County and District Retirement System, the actuarial present value of the additional standard service benefits that would be attributable to the credit based on rates and tables recommended by the actuary and adopted by the board of trustees of the system.

(d) A subdivision participating in the Texas County and District Retirement System under Subchapter H, Chapter 844, or a municipality participating in the Texas Municipal Retirement System may make a one-time election to authorize the reestablishment of service credit under this section by payment by an applicant of a contribution in the amount provided by Section 843.003 or 853.003, as

applicable, for reestablishment of service credit generally in the particular system. If a subdivision or municipality makes an election under this subsection, the applicant has the choice of reestablishing service credit under Subsection (c)(2), (c)(3), if applicable, or this subsection.

(e) Service credit in the Texas County and District Retirement System, the Texas Municipal Retirement System, or the retirement system in which a hospital district, charitable organization, or administrative agency described by Section 803.204 participates that is reestablished under Subsection (c)(2) may be used only to meet eligibility requirements for benefits. Service credit reestablished in the Texas County and District Retirement System or the Texas Municipal Retirement System under Subsection (c)(3) or (d) has the same value as service credit performed for the particular subdivision or municipality at the time of deposit. The credit is creditable to the member's and employer's accounts in each subdivision or municipality for which the service was performed.

(f) To reestablish service credit in a public retirement system for municipal employees that has elected under Section 803.101(f) to participate in the program provided by this chapter, a person must pay the actuarial present value, as determined by the appropriate system, of the additional standard service retirement benefits that would be attributable to the credit. A person who is a member only of a system that has made an election under Section 803.101(f) must pay the actuarial present value, as determined by the appropriate system, of the additional standard service retirement benefits that would be attributable to the service credit to be reestablished in any other public retirement system participating in the program provided by this chapter.

(g) Service credit may not be reestablished under this section:

- (1) if it is subject to Section 805.002(e); or
- (2) in a subdivision participating in the Texas County and District Retirement System or a municipality participating in the Texas Municipal Retirement System if the person who seeks to reestablish the credit is a member only of a retirement system that the subdivision or municipality excludes from participation in the proportionate retirement program under Section 803.103.

(h) This section applies to an employee described by Section 803.204 on the date the federal government establishes as the effective date of the transfer of federally qualified health center status from a municipality described by Section 803.0021(1) to a hospital district, charitable organization, or administrative agency described by Section 803.204.

Added by Acts 2001, 77th Leg., ch. 501, Sec. 1, eff. Jan. 1, 2002, Acts 2001, 77th Leg., ch. 1240, Sec. 1, eff. Jan. 1, 2002.

Amended by:

Acts 2009, 81st Leg., R.S., Ch. 217 (S.B. 1063), Sec. 1, eff. May 27, 2009.

Sec. 803.204. COMBINED SERVICE CREDIT IN CERTAIN SYSTEMS. (a) This section applies only to an employee who:

(1) is a member of a municipal retirement system described by Section 803.0021(1);

(2) is employed by a hospital district, a charitable organization supervised, overseen, and effectively controlled by the hospital district, or an administrative agency created under Section 791.013, either before or after being employed by the employing municipality located in the same county as the hospital district, charitable organization, or administrative agency; and

(3) participates in a public retirement system:

(A) that is determined to be a qualified plan under Section 401(a), Internal Revenue Code of 1986 (26 U.S.C. Section 401 (a)), of a hospital district, charitable organization, or administrative agency that is determined to be a governmental unit, or an agency or an instrumentality of a governmental unit; and

(B) that records and reports service credit as defined by Section 803.001.

(b) Any service credit earned by an employee described by Subsection (a) with a retirement system established by the hospital district, charitable organization, or administrative agency will be combined under Section 803.201 to determine whether the employee meets the length-of-service requirements for service retirement under the municipal retirement system.

(c) On retirement, an employee described by Subsection (a) will receive a benefit from the municipal retirement system as determined by Subchapter D, and if the hospital district or administrative agency has established or participates in a retirement program or the charitable organization has a retirement plan, will receive a benefit from the hospital district, administrative agency, or charitable organization as determined by the terms of the district's, agency's, or organization's retirement plan.

(d) For purposes of this section, a charitable organization supervised, overseen, and effectively controlled by a hospital district or an administrative agency created under Section 791.013 is an agency or instrumentality of a governmental unit.

Added by Acts 2007, 80th Leg., R.S., Ch. 164 (S.B. 1107), Sec. 1, eff. September 1, 2007.

Amended by:

Acts 2009, 81st Leg., R.S., Ch. 217 (S.B. 1063), Sec. 2, eff. May 27, 2009.

#### SUBCHAPTER D. BENEFITS

Sec. 803.301. COMPUTATION OF BENEFITS GENERALLY. The amount of a benefit payable by a retirement system to which this chapter applies is determined according to and in the manner prescribed by laws governing that system and is based solely on a person's service credit in that system.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.301 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 8, eff. Sept. 1, 1991.

Sec. 803.302. COMPUTATION OF CERTAIN BENEFITS. (a) If payable to or on behalf of a person who has used combined service credit to qualify for benefits from at least one retirement system to which this chapter applies, each of the following types of benefits must be computed as provided by Subsection (b):

(1) a base retirement annuity that does not vary in amount directly with the amount of a person's service credit;



(2) a fixed lump-sum death benefit payable on the death of a retiree;

(3) any death benefit payable on the death of a retiree who received service retirement benefits; and

(4) a survivor benefit payable to a beneficiary of a deceased retiree of the Teacher Retirement System of Texas.

(b) The amount of a benefit payable under Subsection (a) by a retirement system to which this chapter applies is a percentage, but not more than 100 percent, of the benefit that would be or would have been payable if the person retired or had retired on the basis of only the service that is credited in that system. The percentage applied is equal to the amount of service credit in that system, divided by the amount of service credit that would be or would have been required for the benefit if the person retired or had retired on the basis of only the service that is credited in that system.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981.  
Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.302 and  
amended by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989.  
Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 8, eff. Sept. 1, 1991.

#### SUBCHAPTER E. ADMINISTRATION

Sec. 803.401. ADMINISTRATION OF PROGRAM. (a) The board of trustees of each retirement system to which this chapter applies may adopt rules it finds necessary to implement the proportionate retirement program provided by this chapter.

(b) Each retirement system to which this chapter applies, under this chapter and other laws governing the particular system, is responsible for determining:

(1) the eligibility of its members for benefits, including whether sufficient combined service credit exists to qualify members for proportionate retirement benefits from that system; and

(2) the amount and duration of proportionate retirement benefits payable by that system.

(c) Each retirement system to which this chapter applies shall cooperate with the other retirement systems to which this chapter applies in the implementation of the proportionate retirement program.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.401 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 131, Sec. 8, eff. Sept. 1, 1991.

Sec. 803.402. RECORDS. Except as provided by other law, records of members and beneficiaries of a retirement system to which this chapter applies that are in the custody of any retirement system to which this chapter applies are confidential and not subject to disclosure and are exempt from the public access provisions of Chapter 552. The records or information in the records may be transferred between retirement systems to which this chapter applies to the extent necessary to administer the proportionate retirement program provided by this chapter.

Acts 1981, 67th Leg., p. 1876, ch. 453, Sec. 1, eff. Sept. 1, 1981. Amended by Acts 1989, 71st Leg., ch. 835, Sec. 11, eff. Sept. 1, 1989. Renumbered from Vernon's Ann.Civ.St. Title 110B, Sec. 13.402 by Acts 1989, 71st Leg., ch. 179, Sec. 1, eff. Sept. 1, 1989. Amended by Acts 1991, 72nd Leg., ch. 16, Sec. 11.05(k), eff. Aug. 26, 1991; Acts 1991, 72nd Leg., ch. 131, Sec. 8, eff. Sept. 1, 1991; Acts 1995, 74th Leg., ch. 76, Sec. 5.95(96), eff. Sept. 1, 1995; Acts 1999, 76th Leg., ch. 1541, Sec. 1, eff. Sept. 1, 1999; Acts 2001, 77th Leg., ch. 1229, Sec. 1, eff. Sept. 1, 2001.

# Rudd and Wisdom, Inc.

## CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.  
Evan L. Dial, F.S.A.  
Philip S. Dial, F.S.A.  
Philip J. Ellis, A.S.A.  
Charles V. Faerber, F.S.A., A.C.A.S.  
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Elizabeth A. O'Brien, A.S.A.  
Raymond W. Tilotta  
Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

June 28, 2016

Via E-Mail: [amasel@hlb-cpa.com](mailto:amasel@hlb-cpa.com)

Board of Trustees  
The City of Galveston Employees'  
Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Special Studies

Dear Trustees:

At your request, we have studied several questions:

- What increase in the cap on monthly benefits, currently at the annual rate of \$50,000, could the plan afford without an increase in contributions by allowing an increase in the amortization period for the unfunded actuarial accrued liability (UAAL) to an appropriate period?
- What increase in contributions would be required to increase the cap on monthly benefits to \$60,000 and to maintain an appropriate amortization period for the UAAL? Same question but to \$65,000.
- What would it take to get to a 100% funded ratio?

We have been asked to study other questions, as well, and they will be studied, with the results reported to you in two subsequent reports. For all of these questions above, we believe that because of the significant size of the net deferred investment losses in the December 31, 2015 actuarial valuation, it is important to recognize those losses in answering the questions. In the report to you of the actuarial valuation, we brought you the good news that the amortization period for the UAAL was only 13.7 years. But we also disclosed that if we had fully recognized the net deferred investment losses by using the market value of assets (MVA) in place of the actuarial value of assets (AVA), the period would have been 18.1 years. The easiest way to recognize the net deferred investment losses of \$2,841,775 is to use the MVA in place of the AVA, and that is what we have done for these special studies. Except for using the MVA instead

of the AVA, these special studies are based on the actuarial assumptions and methods reflected in the December 31, 2015 actuarial valuation, as well as the census data.

### Summary of Answers

| Question                                                                                                                        | Answer                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| • What increase in the benefits cap could plan afford without an increase in contributions?                                     | from annual rate of \$50,000 to \$55,000                                                 |
| • What increase in the city contribution rate would be required for an increase in the benefit cap to \$60,000?<br>to \$65,000? | from 9% to 9.34%<br>from 9% to 9.63%                                                     |
| • What would it take to get a 100% funded ratio?                                                                                | \$16,347,000 on 12/31/2016,<br>or city rate of 12.76% for 10<br>years beginning 1/1/2017 |

### Selection of Appropriate Maximum Amortization Period for UAAL

An important element for these studies was to determine what the maximum UAAL amortization period should be for approving increases in benefits. Before the bear market of 2000-2002, we would use a 30-year period as the maximum period for our public employee pension plan clients. At that time, the Pension Review Board (PRB) guidelines for actuarial soundness said that the preferred range for the UAAL amortization period was 25-30 years. After 2002, we began using a 25-year period because we realized that the 30-year period had little cushion for adverse investment experience. Then after the great recession of 2008, public employee pension plans began to come under more scrutiny with their inadequate contribution arrangements because of the significant investment losses. After the market had rebounded for several years and some of our clients could afford some benefit improvements, usually because of contribution increases as well as the market rebound, we began thinking that a period less than 25 years should be used.

The PRB modified their guidelines in 2011, changing the preferred range for the UAAL amortization period to 15-25 years and adding that no benefit improvement should be adopted that would increase the amortization above 25 years. We have encouraged a number of public plan boards to consider a strategy of gradually reducing the maximum period for approving benefit increases from the formerly used 25-year period to an ultimate target such as 15 years, with reductions in two or three year increments. So the strategy incorporates periodic benefit improvements by allowing an increase in the UAAL amortization period up to a maximum period and then waits until there is a reduction in the amortization period below a new lower maximum. How long it would take for the strategy to eventually get to the 15-years target would depend primarily upon the plan's investment returns and the financial health of the employer.



For the studies you have requested, we believe an appropriate initial maximum period is 20 years, the midpoint of the preferred range of 15 to 25 years in the PRB guidelines. For part of an ongoing strategy, we would want to use the lesser of the MVA and AVA for approving benefit increases. In effect we want to recognize any deferred net investment losses but to not recognize deferred net investment gains. For these studies, the lesser of the two is the MVA. In addition, for the studies determining additional funding, we have assumed it would begin in January 2017, a year after the valuation date, and that it would be provided by the city.

#### **Increase in Cap Without an Increase in Contributions**

Increasing the cap on monthly benefits from \$4,166.67 (an annual total of \$50,000) to \$4,583.33 (an annual total of \$55,000) would increase the UAAL amortization period to 20 years (with the UAAL based on the MVA). We would approve this change in benefits.

#### **Increase in Cap with an Increase in Contributions**

Increasing the cap on monthly benefits from the approved level of \$4,583.33 (an annual total of \$55,000) to \$5,000.00 (an annual total of \$60,000) would require an increase in the city contribution rate of 0.34% beginning January 2017 in order to maintain the UAAL amortization period of 20 years. Similarly, the increase in the city contribution rate to further increase the monthly benefits cap to \$5,416.67 (an annual rate of \$65,000) would be 0.63% beginning January 2017 in order to maintain the UAAL amortization period of 20 years.

#### **Achieving a 100% Funded Ratio**

There are two features of achieving a 100% funded ratio that should be understood when looking at what it would take for a plan to get to the 100% funded ratio. First is that even after achieving a 100% funded ratio, the normal cost as a level percent of payroll would still be payable each year. What would no longer be necessary (or realistically, no longer be at such a high level) would be the part of the total contribution in excess of the normal cost percent that is dedicated to amortizing the UAAL. The second feature is that a plan is expected to have actuarial gains and losses each year that are revealed in the annual actuarial valuation. So the realistic expectation of achieving a 100% funded ratio is that the UAAL could be negative for a year or two or even longer (funded ratio slightly over 100%) and then be positive for a year or two or even longer (funded ratio slightly under 100%). The timing of the progression back and forth on either side of 100% would depend on the magnitude and direction of the net gains and losses.

We have determined additional city contributions under two different scenarios to achieve a 100% funded ratio for the plan. For both of these scenarios, we assumed an increase in the cap on monthly benefits from an annual rate of \$50,000 to \$55,000. One of the key underlying assumptions is that the plan's experience would exactly match the actuarial assumptions used in the December 31, 2015 actuarial valuation. If the city would contribute \$16,347,000 by December 31, 2016, then it is expected that the funded ratio in the actuarial valuation as of

Trustees  
Page 4  
June 28, 2016

December 31, 2016 based on the MVA would be 100%. The GASB 68 funded ratio is based on the MVA.

Alternatively, it takes time to achieve a funded ratio of 100%. With no changes in the current city contribution rate of 9% and increasing the cap on monthly benefits to \$4,583.33 (an annual rate of \$55,000), it would take 20 years to achieve the 100% funded ratio. If the city were to increase its contribution rate from 9% to 12.76% beginning in January 2017, then it would take 10 years of contributing at that 12.76% rate to achieve the 100% funded ratio.

We certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

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Enclosures  
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# Rudd and Wisdom, Inc.

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Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

May 19, 2016

Ms. Ann Masel, CPA  
Plan Administrator  
1011 Tremont Street  
Galveston, Texas 77550

Re: Plan Document Inconsistencies

Dear Ann:

We have noticed some inconsistencies in the plan document and have summarized them below for the attention of The City of Galveston Employees' Retirement Plan for City Employees Board of Trustees. We have also included suggestions for addressing these inconsistencies. However, the board's legal counsel should be the one to decide on the appropriate resolution of these inconsistencies.

### Timing of the Application of the Dollar Cap

In Section 6.2 describing an Early Retirement Pension, the order is appropriate in our opinion: (1) calculate the benefit according to the formula, (2) apply the maximum monthly benefit limitation, and (3) apply the Early Pension reduction factor. Section 6.4 describes a Deferred Vested Pension. The last paragraph in the section describes a situation where a member is initially not eligible to begin early retirement (or is but elects to defer retirement) and later meets the age requirement for early commencement. In this paragraph, our opinion is that the order of application of the maximum monthly benefit limitation and the early retirement reduction is inconsistent and inappropriate. We recommend that the last sentence in Section 6.4 be changed as follows to be consistent with the immediate early retirement benefit determination in Section 6.2.

"Application of such reduction shall be applied *after* ~~prior to~~ the application of the \$4,166.67 per month maximum."

### Dependent Child Beneficiary Following the Death of a Retired Member

There is authority for a dependent child beneficiary to receive a monthly benefit upon the death of an active employee if there is no surviving spouse in Section 7.3(a)(ii). However, there is no authority for a child beneficiary receiving a monthly benefit upon the death of a Retired Member

if there is no surviving spouse, only for a lump sum benefit to the Beneficiary as described in Section 7.4(b).

Our understanding is that the administrative practice of the plan is to provide benefits to dependent child beneficiaries of retired members who die without a spouse. Therefore, our suggestion is to add a new Section 7.4(b) that provides for a dependent child pension in the event there is no surviving spouse, similar to Section 7.3(a)(ii) with the amount of the benefit equal to 50% of the pension that the Member was receiving or was entitled to receive (ie, what the surviving spouse would have received).

The current Section 7.4(b) would then change to 7.4(c). In this section, we believe a clarification is necessary to describe the lump sum, if any, payable upon the death of a pensioner with no surviving spouse or child. The lump sum should equal the Member's accumulated contributions less any payments made. The current Section 7.4(b)(i)(A) should be changed as follows:

*"the Member's total Contribution Accumulation, less any payments previously made to such deceased Member, if any; or".*

#### **Disabled Child**

A dependent child is defined in Section 2.1(l). In this definition, a dependent child includes children that incurred a disability where the disability occurred prior to age 18 and is dependent upon the Member for support and meets the Social Security Act qualifications for a child's benefit. However, Section 7.3(a)(ii), describing the benefits payable to a child describes the payments only until age 18.

Our understanding is that the administrative practice of the plan is to provide benefits to disabled dependent child beneficiaries who are older than age 18. We recommend that the plan language be changed to reflect the administrative practice and the intent of the definition of a dependent child. The same language would also be applicable in the new Section 7.4(b) described above.

#### **Definition of Early Retirement Date**

In order to be consistent with the definition of Normal Retirement Date in Section 2.1(x) and with current administrative practice, the definition of Early Retirement Date in Section 2.1(n) should be changed as follows:

*"The last day of the month ~~following the month~~ in which the Member terminated employment with the Employer after satisfying the requirements for early retirement specified in Section 5.2."*



Ms. Ann Masel, CPA

Page 3

May 19, 2016

### **Employer Contributions**

As indicated in the cover letter to our December 31, 2015 actuarial valuation report, we recommend that the description of employer contributions in Section 4.1 be revised and updated. We will provide further considerations in subsequent correspondence.

### **Reference to Texas Revised Civil Statutes**

In the preamble of the First Amendment, there is a reference to Article 6243p of the Texas Revised Civil Statutes. However, that portion of state law is for the City of Galveston Retirement Plan for Police Officers. According to Mr. Stefan Smith, there is no portion of state law which is the legal authority for the City of Galveston Employees' Retirement Plan for City Employees.

Our suggestion for resolving this inconsistency is to change the preamble by deleting the words "which provisions were replaced by the provisions of Article 6243p of the Texas Revised Civil Statutes".

Please let us know if you have any questions.

Sincerely,

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF:lb

Enclosures

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Discussion ensued regarding bringing the Plan into compliance with the bylaws. Each member will look at the bylaws and present suggestions to Ann Masel, third party administrator, for the consideration of Stefan Smith, Plan Attorney. One consideration will be changing the month of the annual meeting to May and the date of the quarterly meetings to the first Tuesday of the 2<sup>nd</sup> month following the end of the quarter. This would put current operating procedure in compliance with the bylaws.

The next regular meeting was set for Tuesday, August 2, 2016.

**BYLAWS OF  
THE BOARD OF TRUSTEES OF THE  
CITY EMPLOYEES' RETIREMENT FUND  
OF GALVESTON, TEXAS  
(As revised May 13, 1994)**

**ARTICLE ONE: OFFICE**

1.01 The office of the board is located in the Finance Department of the City of Galveston, City Hall, 823 Broadway, Galveston, Texas, and the name of the agent of the Board at such address is the Director of Finance; nevertheless, the Board of Trustees may at their sole discretion appoint another agent and office location for the Board.

**ARTICLE TWO: TRUSTEES**

**Power**

2.01 The Trustees shall act only as a Board, and an individual Trustee shall have no power as such. All powers of the Board shall be exercised by the Board of Trustees or under its authority, and the business and affairs of the fund shall be controlled by the Board of Trustees, subject, however, to such limitations as are imposed by law or these Bylaws, as to actions to be authorized or approved by the employee members. The Board of Trustees may, by contract or otherwise, give general or limited or special power and authority to the officers of the Board to transact the general business, or any special business of the Board, and may give power of attorney to officers of the Board to transact any special business requiring such authorization.

**Number and Qualification of Trustees**

2.02 The authorized number of Trustees of this Board shall be seven (7). The Trustees shall be either employee members or residents of the City of Galveston, Texas. The number of Trustees may be increased or decreased from time to time by amendment to these Bylaws but no decrease shall have the effect of shortening the term of any incumbent Trustee. Provided, however, that the number of city employees on the Board shall never be less than three.

**Election and Term of Office**

2.03 The Trustees shall be elected or appointed as follows: One Trustee who shall be a resident of the City shall be appointed by the Mayor. One Trustee who shall be a member of the Finance Department and also a member of the Employees' Retirement Plan shall be appointed by the City Manager. Two Trustees who shall be residents of the City shall be appointed by the Board. Provided, however, the two members initially appointed by the Board shall serve one year terms, the two members initially appointed by the Mayor and City Manager shall serve two year terms and the three members initially elected by the employee members shall serve three year terms. Thereafter, all Board members shall serve three year terms.

#### Vacancies

2.06 Vacancies of the elected members of the Board of Trustees may be filled by the Board. (And other Trustees' positions shall be filled by the person or entity originally appointing them, i.e., the Mayor, the City Manager, or Retirement Board of Trustees). Regarding that Trustee that was originally elected by the Plan members, and which becomes vacant during his/her three year term, the Board shall appoint a Trustee to fill that unexpired term. Notice of the appointment shall be posted by the Secretary of the Board of Trustees within seventy-two (72) hours of the appointment. Provided, however, if ten (10%) percent of the Plan members file the petition within sixty (60) days of action of the Board appointment, an election must be held within thirty (30) days of the petition to fill the unexpired term. The petition, if filed, shall be presented to the Director of Finance, or other named agent of the Board of Trustees.

#### Place of Meetings

2.07 All meetings of the Board of Trustees shall be held at the conference room adjacent to the City Council Chambers on the second floor of City Hall or at any other place as may be designated from time to time by the Chairman or a majority of the Board or by written consent of all of the members of the Board.

#### Regular Meetings

2.08 Regular meetings of the Board of Trustees shall be held, with notice, and as may be required to comply with the provisions of the Texas Open Meetings Act, if applicable. The Board shall have at least one regular meeting each quarter of the fiscal year. Regular meetings shall commence at 2:00 p.m. on the third Tuesday following the end of the preceding quarter of the calendar year. All employee members of the City Employees' Retirement Fund of the City of Oak Grove, Texas, may attend these regular meetings except for those meetings which may be closed to the public under the Texas Open Meetings Act. No employee member, however, may participate in a regular meeting except when the regular meeting is also the annual meeting to elect Trustees. The Board may, by resolution, adopt rules of conduct and procedure for its meetings. Until these rules are adopted or where the rules do not address the matter, the conduct and procedure of the meetings shall continue to and be governed by Baker's Rules of Order, Revised.

#### Call and Notice of Meeting

2.09 Meetings of the Board of Trustees for any purpose shall be called at any time by the Chairman; if the Chairman is absent or unable or refuses to act, by the Vice Chairman or by a majority of the Board of Trustees. Written notice of the meetings, stating the time and in general terms the purposes or purposes thereof, shall be mailed or telephoned or personally delivered or communicated by telephone conversation to each Trustee not later than seventy-two (72) hours before the meeting. Emergency meetings can be called with two (2) hours' notice with the same type of notice. Notice of all meetings shall be posted on the bulletin board next to the Council Conference Room.

#### Quorum

2.10 A majority of the authorized number of Trustees, to include at least one non-employee Trustee, shall be necessary to constitute a quorum for the transaction of business, except to adjourn as hereinafter provided. Every act or decision by a majority of the Trustees present shall be regarded as the act of the Board of Trustees, unless a greater number is required here.



#### *Adjournment - Notice*

2.09 The Trustees may adjourn any Trustees' meeting to meet again at a stated hour on a stated place. Notice of the time and place where an adjourned meeting will be held should be given to absent Trustees, and to the public, if the time and place is fixed at the adjourned meeting.

#### *Conduct of Meetings*

2.10 The Chairman or, in the Chairman's absence, the Vice Chairman or in the Chairman and Vice Chairman's absence, any Trustee selected by the Trustees present, shall preside at meetings of the Board of Trustees. The Secretary of the Board or, in the Secretary's absence, any person appointed by the presiding officer, shall act as Secretary of the Board of Trustees.

#### *Compensation*

2.11 Trustees, Officers and members of committees shall serve without compensation.

#### *Limitation of Liability Indemnification of Trustees and Officers*

2.12 The Board of Trustees shall not be liable to the City or the employee members for monetary damages for acts or omissions that occur in the Trustees' capacity as Trustees or the Officers' capacity as officers. This article does not limit the liability of the Trustees and Officers for acts or omissions for: (1) a breach of duty of loyalty to the City of Galveston Employees' Retirement Fund, or its employee members; (2) a bad faith breach of a Trustee's or Officer's duty to the Retirement Fund, intentional misconduct, or a knowing violation of the law; (3) a transaction from which a Trustee or Officer received an improper benefit, whether or not the benefit resulted from an action taken within the scope of the Trustee's or Officer's office or duties; or (4) an act or omission for which the liability of a Trustee or Officer is expressly provided by applicable law. Any present or former Trustee, Officer, or employee of the Board shall be indemnified against judgments, penalties, fine settlements, and reasonable expenses actually incurred by the person in connection with a proceeding in which the person was, is, or is threatened to be made a named defendant or respondent because the person is or was a Trustee, Officer, or employee of the Board to the extent such indemnification is authorized by Section 2-36 of the Galveston City Code, as amended, and to the extent not excluded by other applicable laws.

#### *Annual Meeting*

2.13 The annual Board meeting will be held in August in order to present the annual financial report to Pension Plan members and to elect officers. The annual meeting is open to attendance and participation by all members of this Pension Plan.

### **ARTICLE THREE: OFFICERS AND COMMITTEES**

#### *Title and Appointment*

3.01 The officers of the Board shall be a Chairman, Vice Chairman and Secretary and such assistants and other officers as the Board of Trustees shall from time to time determine. Any two officers may be held by one person. All officers shall be appointed by and hold office at the pleasure of the Board of Trustees. Only Trustees can be officers. The Board shall jointly serve as Plan Administrator and shall appoint an Assistant Administrator to handle the day-to-day affairs of the Plan. The Board may also from

one or more committees to investigate, review or recommend recommendations to the Board on any matter within the power of the Board or relating to the Plan. Only Board, however, may make any final action on any recommendations by any such committee. Any committee created by the Board shall be composed of at least one Board member, and may be composed of as many plan members, who are not Trustees, whom the Board determines, in its sole discretion, are appropriate to serve on said committees.

#### **Powers and Duties of Officers**

3.81 The officers of the Fund shall have the powers and duties generally accorded to the respective officers, and such additional authority or duty as may, from time to time, be established by the Board of Trustees.

#### **ARTICLE FOUR: EXECUTION OF INSTRUMENTS**

4.01 The Board of Trustees may, at its discretion, authorize an officer or officers, or other persons, to execute any instrument or document.

#### **ARTICLE FIVE: RECORDS AND REPORTS AND FINANCIAL GUIDELINES**

##### **Inspection of Books and Records**

5.01 All books and records provided for by law shall be open to inspection for the Plan members during regular business hours. The Trustees may examine such books and records.

##### **Adoption of Investment Guidelines**

5.02 The Board of Trustees shall by Resolution establish investment guidelines and adopt policies, and objectives consistent with the City of Cheltenham Employees' Retirement Plan for City Employees, as mutated and amended, consistent with sound municipal investment goals and financial principles and regulations.

**ARTICLE SIX: AMENDMENT OF BYLAWS**

**Amendment of Bylaws**

6.1: The power to alter, amend, or repeal these Bylaws is vested in the Trustees.

REVISED by the Board of Trustees on \_\_\_\_\_, 1991

**ATTEST:**

Robert D. Richardson, Secretary

Revised on May 13, 1994

## Chapter 26 - PENSIONS

~~Repealed~~

-- (1) --

~~Editor's note--Ord. No. 82-84, § 1, enacted Sept. 22, 1982, amended Art. 1 of this Chapter to adopt a pension plan by reference and specifically repealed Arts. 1--101. Former Arts. 1--101, relating to pensions during term Code 1982, §§ 16-1--16-80, Ord. No. 81-24, §§ 1--5, enacted March 26, 1981 and Ord. No. 82-45, §§ 2--5, enacted June 23, 1982.~~

~~State Constitution reference--Municipal retirement systems authorized, Art. 8, § 37-d.~~

~~Director reference--Employee pensions and insurance, Art. 8, § 3-d.~~

~~State Law reference--City pending generally, Vernon's Ann. Ch. St. art. 622b as imp.; Texas Municipal Retirement System, Vernon's Ann. Ch. St. art. 6248b.~~

## ARTICLE I. - IN GENERAL

Sec. 26-1. - Pension plan--Adopted and incorporated by reference.

There is hereby adopted and incorporated into this Code by reference that certain pension plan, for noncivil service employees of the city, to be known as "The City of Galveston Employees' Retirement Plan for Noncivil Service Employees of the City (As Restated Effective October 1, 1983)", a true copy of said plan being available for inspection and copying in the office of the city secretary and office of the director of finance.

(Ord. No. 83-93, § 1, 9-22-83)

Sec. 26-2. - Same--Amendment No. One.

The pension plan as adopted by Chapter 26 above is hereby amended by those certain provisions to be known as the February 1984 pension plan amendments which amendments are hereby incorporated herein as Exhibit A, to the same extent as those set forth at length in this section, a true copy of which amendments are made available for inspection and copying in the office of the city secretary during normal business hours.

(Ord. No. 84-9, § 1, 2-23-84)

Sec. 26-3. - Same--Amendment No. Two.

The pension plan as adopted by Chapter 26 above is hereby amended by those certain provisions to be known as the August 1984 pension plan amendments which amendments are hereby incorporated herein as Exhibit A, to the same extent as those set forth at length in this section, a true copy of which amendments are made available for inspection and copying in the office of the city secretary during normal business hours.

(Ord. No. 84-59, § 1, 8-23-84)

Sec. 26-4. - Same--Amendment No. Three.

Effective with benefit payments on and after October 1, 1985, the monthly pension payable to a retired member who retired prior to October 1, 1984, shall be increased by ten (10) percent of the amount of his monthly pension, save and except the following retirees and beneficiaries:

- (a) Retirees who began receiving pension payments subsequent to October 1, 1984.
- (b) Beneficiaries of previous members who have received the appropriate allowable benefits

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subsequent to October 1, 1984.

- (g) Beneficiaries who as of October 1, 1985, are receiving one hundred dollars (\$100.00) per month minimum benefit under section 16-47(c) of the prior plan.

(Ord. No. 85-68, § 1, 9-26-85)

Sec. 28-5. - Same—Amendment No. Four.

The pension plan as adopted by Chapter 28 above is hereby amended by amending Section 3.5, Membership, to read and provide as follows:

3.5. *Membership:* Eligible Employees who were members of the Previous Plan on September 30, 1983, shall become Members of this restated Plan as of the Effective Date. Membership in this restated Plan for Eligible Employees who were members of the Previous Plan on September 30, 1983, shall be mandatory and shall be a requirement as a condition of employment as an Employee of the Employer.

Each other Eligible Employee hired on and after the Effective Date shall become a Member as of his date of hire and shall complete an enrollment form which is prescribed by the Plan Administrator in which he shall nominate a Beneficiary to receive his death benefits if no eligible dependents are living, and agree to be bound by the terms and conditions of this Plan.

Membership in this restated Plan for Eligible Employees hired on or after the Effective Date shall also be mandatory and shall be a requirement as a condition of employment as an Employee of the Employer.

Provided, however, that in the sound discretion of the Board of Trustees, the Board may allow those Employees appointed by the governing body of the Employer and those Employees actively enrolled in another acceptable retirement or pension plan on the initial hire date to waive membership hereunder.

(Ord. No. 87-42, § 1, 2-5-87)

Sec. 28-6. - Same—Amendment No. Five: Employee Contributions.

Pursuant to authority set forth in Article XI thereof, The City of Galveston Employee's Retirement Plan for City Employees (as restated effective October 1, 1983) is hereby amended in the following respects only and except as otherwise provided, shall be effective as of January 1, 1989:

- (a) First Section 2.1(f), Compensation, of the plan is hereby amended to read as follows:

(f) *Compensation:* The total cash remuneration paid to an employee for a calendar year by the employer for personal services, including longevity pay, overtime, deferred compensation, workmen's compensation, 414(h)(2) pick-up contributions and unused vacation and sick leave. Compensation taken into account under the plan shall not exceed two hundred thousand (\$200,000.00), adjusted for changes in the cost-of-living as provided in Section 415(d) of the Internal Revenue Code, for the purpose of calculating a member's accrued benefit for any plan year commencing after December 31, 1988. However, the accrued benefit determined in accordance with this provision shall not be less than the accrued benefit determined on the effective date of this amendment without regard to this provision.

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- (b) *Second: Section 4.2, Contributions by Members, is hereby amended by adding the following paragraphs to said section:*

Effective January 1, 1990, the employer shall pick up under the provisions of Section 414(h)(2) of the Internal Revenue Code of 1986 and pay the contribution which the member is required by law to make to the fund for all compensation earned after December 31, 1989. Although the contributions so picked up are designated as member contributions, such contributions shall be treated as contributions being paid by the employer in lieu of contributions by the member in determining tax treatment under the Internal Revenue Code of 1986 and such picked-up contributions shall not be includable in the gross income of the member until such amounts are distributed or made available to the member or the beneficiary of the member. The member, by the terms of this plan, shall not have any option to choose to receive the contribution so picked up directly and the picked-up contributions must be paid by the employer to the fund.

Member contributions which are picked up shall be treated in the same manner and to the same extent as member contributions made prior to the date of which member contributions were picked up by the employer. Member contributions so picked up shall be included in gross salary for purposes of determining benefits and contributions under the plan.

The employer shall pay the member contributions from the same source of funds used in paying salary to the member, by effecting an equal cash reduction in gross salary of the member.

- (c) *Third: Article VI, Amount of Retirement Benefits, is hereby amended to add the following Section 5.7 to read as follows:*

5.7. *Increase to retirees:* Effective with benefit payments on and after October 1, 1988, the monthly pension payable to a retired member who retired prior to October 1, 1987, shall be increased by five (5) percent of the amount of his monthly pension, save and except the following retirees and beneficiaries:

- (a) Retirees who began receiving pension payments subsequent to October 1, 1987.
- (b) Beneficiaries of previous members who have received the appropriate allowable benefits subsequent to October 1, 1987.
- (c) Beneficiaries who as of October 1, 1988, are receiving one hundred dollars (\$100.00) per month minimum benefit under section 16-47(c) of the prior plan.
- (d) *Fourth: The plan is amended by the addition of a new Article XII to read as follows:*  
Article XII. *Limitations Under Code Section 415*

12.1. *Maximum annual benefit under code section 415:* Notwithstanding any other provision contained herein to the contrary, the benefits payable to an employee from this plan, shall be subject to the limitations of Code section 415 in accordance with (a) and (b) below:

- (a) *Defined benefit plan(s) only:* Any annual pension payable to an employee hereunder (including any annual pension paid to such employee from another defined benefit plan of the employer) shall not exceed the lesser of (1) and (2) below, subject to (3) through (7) below:  
(1)

Ninety thousand dollars (\$90,000.00), adjusted for increases in the cost of living, as prescribed by the secretary of the treasury or his delegate, effective January 1 of each calendar year and applicable to the limitation year ending with or within such calendar year; or

- (2) One hundred (100) percent of the employee's average earnings for the three (3) consecutive calendar years, while a participant in the plan, in which his earnings were the highest. For purposes of this subsection (2), earnings for any limitation year shall be the employee's earned income, wages, salaries, and fees for professional services, and other amounts received for personal services actually rendered in the course of employment with the employer (including, but not limited to, commissions paid salesmen, compensation for services on the basis of a percentage of profits, commissions on insurance premiums, tips and bonuses), provided such amounts are actually paid or includable in gross income during such year. Earnings shall exclude the following:
- (i) Employer contributions to a plan of deferred compensation which are not included in the employee's gross income for the taxable year in which contributed, employer pick-up contributions under section 414(h)(2) of the Code, or employer contributions under a simplified employee pension plan to the extent such contributions are deductible by the employee, or any distributions from a funded plan of deferred compensation;
  - (ii) Amounts realized from the exercise of a nonqualified stock option, or when restricted stock (or property) held by the employee either becomes freely transferable or is no longer subject to a substantial risk of forfeiture;
  - (iii) Amounts realized from the sale, exchange or other disposition of stock acquired under a qualified stock option; and
  - (iv) Other amounts which received special tax benefits, or contributions made by the employer (whether or not under a salary reduction agreement) towards the purchase of an annuity described in section 403(b) of the Code (whether or not the amounts are actually excludable from the gross income of the employee).
- (3) Except as provided in (5) below, the foregoing limitations shall not be applicable with respect to any participant whose total annual pension under this plan and any other defined benefit plan maintained by the employer, is less than ten thousand dollars (\$10,000.00) and who has not at any time participated in any defined contribution plan (within the meaning of section 415(k) of the Code) maintained by the employer.
- (4) In the event that a participant has less than ten (10) years of participation in this plan and predecessor plans hereto, the dollar limitation otherwise applicable under (1) above shall be reduced by multiplying such limitation by a fraction, the numerator of which is the number of such participant's years of plan participation (or part thereof), but never less than one (1), and the denominator of which is ten (10). This paragraph shall, to the extent required by the secretary of the treasury, be applied separately to each change in benefit structure hereunder.
- (5) In the event that a participant has been credited with less than ten (10) years of vesting service, the percentage-of-average-earnings limitation otherwise applicable under (2) above and the dollar amount otherwise applicable under (3) above shall be reduced by

multiplying each by a fraction, the numerator of which is the number of such participant's years of vesting service (or part thereof), but never less than one (1), and the denominator of which is ten (10).

- (5) The limitations of this section apply to a straight life annuity with no ancillary benefits and to an annuity that constitutes a qualified joint and survivor annuity, provided payment begins between the participant's attainment of age sixty-two (62) and age sixty-five (65). If payment is in a different form, the amount thereof shall be adjusted to be the actuarial equivalent of a single life annuity and the limitation shall be applied to such adjusted amount. If payment begins before the participant's attainment of age sixty-two (62), the limitation in (1) above shall be reduced on an actuarially equivalent basis; provided however, if such payment begins after the participant's age fifty-five (55), the reduced limit shall not be less than seventy-five thousand dollars (\$75,000.00) limit for age fifty-five (55); (provided, further, however, as to police or firefighters who are participants in this plan, in no event shall such amount be reduced below fifty thousand dollars (\$50,000.00), adjusted for increases in the cost of living, as prescribed by the secretary of treasury, or his delegate). If payment begins after the participant's attainment of age sixty-five (65), the limitation in (1) above shall be the actuarial equivalent of such amount otherwise applicable at the participant's attainment of age sixty-five (65). The interest rate to be used in determining actuarial equivalence shall be the rate specified in section 2.1(b) hereof; however, the interest rate used in determining an actuarially equivalent single life amount or age sixty-two (62) amount shall not be less than five (5) percent and the interest rate used in determining an actuarially equivalent post age sixty-five (65) amount shall not be greater than five (5) percent.
- (7) In no event shall a participant's maximum annual pension allowable under this section be less than the annual amount of pension (including early pension and qualified joint and survivor annuity amounts) duly accrued by such participant (under Code section 415 limitations then in effect) as of the last day of the limitation year beginning in 1982, or as of the last day of the limitation year beginning in 1986, whichever is greater (disregarding any plan changes or cost-of-living adjustments occurring after July 1, 1982, as to the 1982 accrued amount, and May 5, 1986, as to the 1986 accrued amount).
- (b) *Defined benefit and defined contribution plans:* If a participant also participates, or has participated, in one or more defined contribution plans (within the meaning of section 415(b) of the Code) maintained by the employer (whether or not terminated), then the sum of the defined benefit plan fraction and defined contribution plan fraction (as defined in (1) and (2) below) shall not exceed one (1.0), as provided in (3) below.
- (1) The defined benefit fraction for any limitation year shall mean a fraction (a) the numerator of which is the projected annual benefit of the participant under the plan (determined as of the close of the limitation year), and (b) the denominator of which is the lesser of one hundred twenty-five (125) percent of the dollar limitation under Code section 425(b)(1)(A) or one hundred forty (140) percent of the percentage limitation under Code section 415(b)(1)(B) for the year of determination (taking into account the effect of Section 235(g)(4) of the Tax Equity and Fiscal Responsibility Act of 1982).

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The defined contribution fraction for any limitation year shall mean a fraction (a) the numerator of which is the sum of the annual additions (as defined in section 415(c)(2) of the Code) to the participant's accounts under all defined contribution plans maintained by the employer as of the close of the limitation year (subject to reduction to the extent permitted under the transition rule in Section 235(g)(3) of the Tax Equity and Fiscal Responsibility Act of 1982), and (b) the denominator of which is the sum of the lesser of one hundred twenty-five (125) percent of the dollar limitation under Code section 415(c)(1)(A) or one hundred forty (140) percent of the percentage limitation under Code section 415(c)(1)(B), for such limitation year and for all prior limitation years during which the employee was employed by the employer (provided, however, at the election of the committee, the denominator shall be increased by using for limitation years ending prior to January 1, 1983, an amount equal to the denominator in effect for the limitation year ending in 1982, multiplied by the transition fraction provided in Code section 415(e)(6)(B).

- (3) If, in any limitation year, the sum of the defined benefit plan fraction and defined contribution plan fraction for a participant would exceed one (1.0) without adjustment of the amount of the maximum annual pension that can be paid to such participant under paragraph (a) of this section, then the amount of the maximum annual pension that can be paid to such participant under paragraph (a) of this section, shall be reduced to the extent necessary to reduce the sum of the defined benefit plan fraction and defined contribution plan fraction for such participant to one (1.0), or the committee may take such other action as will cause the sum to equal one (1.0) or less.

(Ord. No. 89-138, § 2, 12-21-89)

**Sec. 28-7. - Amendment No. Sbr. Board of Trustees.**

Pursuant to authority set forth in Article XI of the City of Galveston Employee's Retirement Plan for City Employees (as restated effective October 1, 1983) it is further amended in the following respects only:

- (a) First: Sections 2.1(f) Board and 2.1(ee) Trustee of the plan are hereby amended as follows:

2.1(f) Board: The Board of Trustees of the Plan, elected and appointed pursuant to Article X hereof. Members of the Board are and shall be considered "public officials" as such term is defined in the City Code of the City of Galveston, as amended from time to time.

2.1(ee) Trustee: The Board.

- (b) Second: Section 8.2(p) and Section 8.2 Duties and Powers of the Plan Administrator are hereby amended to read as follows and by adding the following paragraphs to said sections:

8.2(p) to appoint or employ for the Plan any agents it deems advisable, including, but not limited to, legal council, accountants, consultants and actuaries;

8.2(R) to perform all duties and exercise all powers of a plan administrator as provided in the Internal Revenue Code of 1986, as amended, and the Employee Retirement Income Security Act of 1974, as amended;

- (c) Third: Article X Trustee is hereby amended to read as follows:

10.1 Trustee. The Board of Trustees shall be composed of seven members who shall be

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✓ Board

appointed and elected in the following manner:

- a. Three members of the Board shall be employees of the City duly elected by the employees of the City who are current participants in the Plan. The Board shall determine the requirements and procedures for the election of such members;
  - b. One member, who shall be an employee of the City in the City's Finance Department, shall be appointed by the City Manager of the City of Galveston;
  - c. One member, who shall not be an employee of the City, but who is a resident of the City, shall be appointed by the Mayor of the City of Galveston;
  - d. Two members, who shall not be employees of the City, but who are residents of the City, shall be appointed by the five members of the Board of Trustees described in a. through c. above.
- With the exception of members appointed by the Mayor or City Manager, the Board may fill any vacancy in any term of any Board member for the remaining unexpired portion of said term. The Mayor and City Manager may fill any vacancy in any Trustee appointed by them pursuant to b. and c. above. Terms of office and removal of Trustees shall be determined by the Bylaws of the Board of Trustees.

**10.2 Trustee's Duties.** The Board shall act as Trustee for all monies in the Fund which shall at all times be held apart from any and all other general or special funds of the City. The Trustee shall administer the Plan. The Trustee shall have full power and sole discretion in the investment and reinvestment of the Plan's assets, subject only to restrictions imposed by the State of Texas upon life insurance companies in the making and disposition of investments and other restrictions applicable by law. The Board, as trustee, may adopt bylaws or rules of operation, consistent with all applicable federal, state and local law, governing the operations of the Board, the election and terms of Board members, and matters of policy and procedure.

**10.3 Ratification.** The actions in electing and selecting the initial Board of Trustees and their acts in hiring attorneys and consultants from March 9, 1990, to the present date are hereby expressly ratified.

- (d) **Fourth:** Section 11.1 Right to Amend is hereby amended to read as follows:

**11.1 Right to Amend.** The Board reserves the right to make from time to time any amendment or amendments to this Plan. However, the City, by and through its City Council, expressly retains the right to reduce, increase, suspend, or discontinue contributions, so long as the plan remains financially sound.

(Ord. No. 90-82, § 2, 11-8-90)

**Sec. 28-8. - Amendment No. 7: Minimum City Contribution.**

The contribution from the City of Galveston is hereby established at an amount of not less than five (5) percent of the salary of each member of the City of Galveston Employees' Retirement Plan for noncivil service employees of the city.

(Ord. No. 93-84, § 2, 9-23-93)

**Sec. 28-9. - Amendment No. 8.**

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- The employer contribution rate for city to the plan is hereby established at an amount of not less than five (5) percent and not to exceed a maximum of eight and one-half (8.5) percent of each eligible actively participating employee's eligible compensation as defined in the plan;
2. As a condition of employment with the city, the contribution rate for all employees participating in the plan shall be established at an amount of not less than four and three-fourths (4.75) percent and not to exceed a rate of eight and one-half (8.5) percent of each such eligible actively participating employee's eligible compensation as defined in the plan.
  3. The board of trustees of the plan shall amend section 4.2 of the plan to reflect the employee contribution rate required hereunder.
  4. Notwithstanding any other ordinance previously enacted by the city council or any provision of the Plan to the contrary, it is a condition of employment and a condition of eligibility for benefits that all actively participating employees in the plan contribute to the plan at rates determined from time to time by the city council as it determines necessary for the funding of the plan and the city council has the right to alter or modify those rates from time to time as it determines necessary for the funding of the plan.
  5. Notwithstanding any other ordinance previously enacted by the city council or any provision of the plan to the contrary, the plan may not provide any benefit or right which will adversely impact the plan's tax exempt and tax qualified status and the board of trustees of the plan is hereby directed to amend the plan, as necessary to preserve the tax exempt and tax qualified status of the plan;
  6. Nothing herein shall modify or constitute a waiver of the "at will" employment status of any eligible non-civil service employee of the city participating in the plan.
- (Ord. No. 03-090, § 2, 9-11-03)

Secs. 28-10—28-23. - Reserved.

ARTICLES II—VII. - RESERVED

*Repealed*

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*Editor—See the editor's footnote to the chapter title.*

Secs. 28-24—28-220. - Reserved.

ARTICLE VIII. - RESTATED POLICE RETIREMENT PLAN

*Repealed*

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*Editor's note—Ord. No. 21-0, § 1, adopted Feb. 5, 1901, amended the 1900 Code by adding Art. VIII §§ 15-61 and 15-62 therein. The editor has designated these provisions as §§ 28-221 and 28-222 herein. The actual provisions of police retirement plan are not set out herein but may be found on file in the city secretary's office.*

Sec. 28-221. - Police pension plan adopted.

There is hereby adopted and incorporated herein by reference that certain pension plan for police employees only, to be known as the "Police Retirement Plan" (restated effective December 1, 1980), a true copy of said plan being attached hereto as exhibit A and made a part hereof for all purposes, said plan to be effective as of December 1, 1980.

(Ord. No. 81-5, § 1, 2-5-81)

Sec. 28-222. - Application.

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beneficiary of the member. The member, by the terms of this Ordinance, shall not have any option to choose to receive the contributions so picked up directly and the picked-up contributions must be paid by Galveston to the trustees of the trust.

- (b) Member contributions which are picked up shall be treated in the same manner and to the same extent as member contributions made prior to the date on which the member contributions were picked up by the municipality. Member contributions so picked up shall be included in the gross salary for purposes of determining benefits and contributions under the plan and trust.
- (c) The city shall pay the member contributions from the same source of funds used in paying salary to the member, by effecting an equal cash reduction in gross salary of the member

(Ord. No. 89-137, § 2, 12-21-89)

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# Rudd and Wisdom, Inc.

## CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.  
Evan L. Dial, F.S.A.  
Philip S. Dial, F.S.A.  
Philip J. Ellis, A.S.A.  
Charles V. Faerber, F.S.A., A.C.A.S.  
Mark R. Fenlaw, F.S.A.  
Carl L. Frammolino, F.S.A.

Brandon L. Fuller, A.S.A.  
Christopher S. Johnson, F.S.A.  
Sheryl Kadakia, A.S.A.  
Oliver B. Kiel, A.S.A.  
Robert M. May, F.S.A.  
J. Christopher McCaul, F.S.A.  
Edward A. Mire, F.S.A.

Rebecca B. Morris, A.S.A.  
Amanda L. Murphy, F.S.A.  
Michael J. Muth, F.S.A.  
Khiem Ngo, F.S.A., A.C.A.S.  
Raymond W. Tilotta  
Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

August 19, 2015

Board of Trustees  
The City of Galveston Employees' Retirement Plan  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont  
Galveston, Texas 77550

Re: Special Actuarial Analysis as of  
January 1, 2015

Dear Trustees:

At your request, we have prepared this report which presents the results of our actuarial analysis of the City of Galveston Employees' Retirement Plan for City Employees based on the assumption that the plan was frozen on January 1, 2015. We have determined the plan's actuarial accrued liability assuming that no service rendered or compensation earned after December 31, 2014 would be reflected in the active members' ultimate benefit from the plan. The purpose of this special actuarial analysis is to determine what level of financing would be required by the City of Galveston over an appropriate number of years to fully fund the plan if it were frozen.

### Recommended Financing Commitment

The current financing commitment to the plan is 6% of pay by the covered employees and 9% of the covered payroll of the active contributing members by the City of Galveston. Since there would be no more employees contributing to the plan if it were to be frozen, there would be no covered payroll. So the recommended financing by the city is not a percent of payroll but an annual dollar amount.

As shown below, we have determined the unfunded actuarial liability (UAL) which is the actuarial present value of future benefits and expenses of the frozen plan less the market value of assets of the plan as of January 1, 2015. We recommend that the city pay an amount each year that would be expected to amortize the UAL with level dollar contributions over a closed 15-year period that would begin on the effective date of the freeze. More details are shown on page II-1.

| The City of Galveston Employees' Retirement Plan<br>Assuming the Plan is Frozen as of January 1, 2015 |               |
|-------------------------------------------------------------------------------------------------------|---------------|
| Unfunded Actuarial Liability (UAL)                                                                    | \$ 15,400,376 |
| UAL Amortization Period (closed period)                                                               | 15 Years      |
| Recommended Annual City Contribution Paid Monthly                                                     | \$ 1,567,264  |



In subsequent annual actuarial valuations, if experience is found to be adverse compared to our assumptions then the amount would be increased to stay with the expected amortization by the end of the closed 15-year period. If experience is found to be better than expected, then we recommend that the dollar amount stay unchanged for one year (as a hedge against future adverse experience).

### **Key Assumption**

The actuarial investment return assumption for an ongoing public employee pension plan is the long-term average annual expected rate of return from the plan assets. Because it is an on-going plan, its investment time horizon is long (e.g., 40 or 50 years) and continues to stay long with the passage of time. As a result, such a plan can withstand the ups and downs of the investment markets. In addition, the asset allocation of such an ongoing plan can take on more investment risks than a frozen plan because the investment time horizon of the frozen plan is getting shorter every year.

Another consideration for the actuarial investment return assumption is the plan's cash flow, the net result of contributions made to the plan and benefits paid from the plan each month. In recent years, the plan's cash flow has been slightly negative, that is, more benefits paid than contributions received. This is a common characteristic for a mature plan like yours. Expressed as a percentage of assets, the net negative cash flow in a year has averaged around 2%. The board has easily managed this amount with a relatively small allocation to cash and short-term fixed income investments. If the plan were to be frozen, the absence of contributions from the employees and the reduction of the contributions from the city would increase the net negative cash flow in the first year to over 5% of assets and would steadily increase to a range of 8% to 11% by the end of the 15-year contribution period. In the first year after city contributions stop, it is estimated that the percent would jump to a range of 12% to 15% and then continue to steadily increase.

As a result of both the decreasing investment time horizon and the increasing net negative cash flow, the plan's asset allocation would have more dedicated to cash and fixed income securities and less to equity investments. Therefore, the expected average annual long-term rate of return of the frozen plan would be significantly less than what it currently is as an ongoing plan (8%). We have used an actuarial investment return assumption of 6.25%, net of investment-related expenses, which we believe would be appropriate for this plan over its gradually decreasing investment time horizon that would result if the plan were to be frozen. As with any actuarial assumption, the assumed rate of investment return would be monitored in the future and would be subject to review and change as needed.

In addition, we did a sensitivity analysis of a change in the investment return assumption on the results of this frozen plan analysis. Section II shows the detailed results of a change in the investment return assumption from 6.25% to 5.5%. The UAL would increase and, in turn, the annual contribution would increase by 28% from \$1,567,264 to \$1,998,417.

### **Actuarial Value of Assets Method**

For this special frozen plan actuarial analysis, we have used the market value of assets (MVA) of the plan as of December 31, 2014. This is a departure in two ways from the actuarial value of assets (AVA) used in the ongoing plan actuarial valuation as of January 1, 2015. In that valuation, the



AVA developed by the five-year smoothing method was slightly greater than the MVA (by \$137,587). However, both the AVA and the MVA in that actuarial valuation report reflected the inclusion of an estimated additional eight months of city contributions. We believe it is appropriate for this special frozen plan actuarial analysis not to recognize any contributions after the valuation date as assets as of the valuation date. In addition, we believe it would be appropriate to use the actual MVA in this valuation and not an AVA that is the MVA adjusted by a smoothing method. Then if the plan is actually frozen, we would recommend phasing into the five-year averaging methodology currently used for the ongoing plan actuarial valuations.

#### **Administrative Expenses**

Our investment return assumption of 6.25% is net of investment-related expenses. We believe the non-investment-related administrative expenses should be recognized separately for this special analysis for two reasons. First, assuming administrative expenses are a level percent of assets over future years is reasonable for an ongoing plan. However, if this plan were to be frozen, its assets would begin to decline, and the administrative expenses as a percent of assets would increase over time. Second, the new accounting standards known as GASB 67 and 68 specify that the investment return assumption be net of investment-related expenses and that administrative expenses be separately recognized for accounting purposes. To avoid the need for different assumptions for expenses for the funding valuation and for the accounting information, it is reasonable to use the same recognition of expenses for both purposes.

For this special analysis of the plan as if it were frozen, we have looked at recent history and assumed that the annual administrative expenses would be \$125,000 in 2015 and increase at the underlying inflation assumption of 3% per year for 20 years. Then we calculated the present value of those projected assumed expenses and added it to the present value of plan benefits.

#### **Variability in Future Actuarial Measurement**

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- Plan experience differing from that anticipated by the current economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Analysis of the potential range of such future measurements resulting from the possible sources of measurement variability is typically outside the scope of the annual actuarial valuation or of a special actuarial analysis. However, we provided the sensitivity of a change in the investment return assumption, and we could perform other sensitivity analysis in a subsequent report if desired by the Board of Trustees.

### Other Considerations

While the freezing of this plan would bring some reduction in the required contributions by the city, there are other considerations that should enter into the discussions of such a significant potential decision. Section III of this report outlines some of the major implications of changing how retirement benefits would be provided if the plan were to be frozen.

There is one other consideration not mentioned in Section III. There was an Attorney General's opinion in 2008 (AG-0615) that interpreted in a surprising way the protection of vested accrued benefits in article XVI, section 66(d) of the Texas Constitution. Some pension attorneys and interested parties believe this AG opinion restricts the ability to cease considering the effect of the current benefit formula and future service and pay for vested participants as of the date of a plan amendment that would freeze the plan. Other pension attorneys and interest parties do not believe it would restrict the ability to freeze the plan so that no service or compensation after the date of the plan amendment would be recognized in determining the vested accrued benefit.

We recommend that the city engage a Texas pension attorney to clarify the potential effect of this AG opinion if there is continued interest in pursuing the freezing of the plan. The City of Fort Worth is currently engaged in two law suits over the application of AG-0615 to the public employee retirement system for their employees. We have assumed for this special actuarial analysis that the AG opinion would not restrict the city from freezing the plan so that no service or compensation after the assumed freeze date would be recognized.

Respectfully submitted,

RUDD AND WISDOM, INC.

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.

MRF/RBM:lb

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## *Section I – Certification of Special Actuarial Analysis as of January 1, 2015*

At the request of the Board of Trustees, we have performed a special actuarial analysis of The City of Galveston Employees' Retirement Plan as of January 1, 2015. The purpose of this report is to present our actuarial analysis of the plan reflecting the scenario that the plan is frozen as of January 1, 2015. The frozen plan would only provide monthly benefits to those vested as of January 1, 2015, determined using only frozen service and compensation as of January 1, 2015. For those not vested, the liability reflects the value of their employee accumulated contributions. The purpose of this report is to also recommend an annual contribution which would be part of a funding policy expected to be an adequate contribution arrangement if the plan had been frozen on January 1, 2015.

We have based our analysis on participant data as of January 1, 2015 provided by Mr. John Crider, the board's retained actuary, and preliminary asset information for the plan as of December 31, 2014 provided by Ms. Ann S. Masel, the board's administrator for the plan. We have relied on the accuracy of the participant data and the unaudited assets provided. We have used the actuarial methods and assumptions described in Section IV of this report. The actuarial analysis has been performed on the basis of the plan benefits described in Section V.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. In our opinion the assumptions used, in the aggregate and individually, are reasonable expectations of future experience if the plan had been frozen on January 1, 2015. The assumptions represent a reasonable estimate of anticipated experience of the plan over the future if the plan were to be frozen, and their selection complies with the applicable actuarial standards of practice.

The actuarial analysis of the plan reported herein has been performed in accordance with appropriate actuarial methodology and standards of practice.

We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

*Mark R. Fenlaw*

Mark R. Fenlaw, F.S.A.  
Member of American Academy of Actuaries

*Rebecca B. Morris*

Rebecca B. Morris, A.S.A.  
Member of American Academy of Actuaries

**Section II – Summary of Actuarial Analysis  
of Plan Freeze as of January 1, 2015**

|                                                                                                | January 1, 2015           |
|------------------------------------------------------------------------------------------------|---------------------------|
| <b>1. Participant Census at Valuation Date</b>                                                 |                           |
| a. Covered employees                                                                           | 450                       |
| b. Vested terminated due deferred benefit                                                      | 56                        |
| c. Terminated due refund                                                                       | 146                       |
| d. Retirees and beneficiaries in pay status                                                    | 322                       |
| e. Total                                                                                       | 974                       |
| <b>2. Projected Active Participant Compensation for Plan Year Following the Valuation Date</b> | \$ 0                      |
| <b>3. Actuarial Present Value of Future Benefits and Expenses</b>                              |                           |
| a. Accrued benefits for employees                                                              | \$ 21,275,525             |
| b. Terminated (vested deferred benefit and refund)                                             | 3,041,797                 |
| c. Retirees and beneficiaries                                                                  | 33,937,186                |
| d. Administrative expenses                                                                     | 1,891,100                 |
| e. Total                                                                                       | \$ 60,145,608             |
| <b>4. Actuarial Present Value of Future Normal Cost</b>                                        | \$ 0                      |
| <b>5. Actuarial Liability (Item 3e – Item 4)</b>                                               | \$ 60,145,608             |
| <b>6. Actuarial Value of Assets (Market Value)</b>                                             | \$ 44,745,232             |
| <b>7. Unfunded Actuarial Liability (UAL) (Item 5 – Item 6)</b>                                 | \$ 15,400,376             |
| <b>8. Recommended Annual City Contributions Each January 1 for the Amortization Period</b>     | \$ 1,516,864 <sup>1</sup> |
| <b>9. Recommended Annual City Contributions Paid Monthly</b>                                   | \$ 1,567,264 <sup>1</sup> |
| <b>10. UAL Amortization Period (Closed Period)<sup>2</sup></b>                                 | 15 years                  |
| <b>11. Funded Ratio (Item 6 ÷ Item 5)<sup>3</sup></b>                                          | 74.4%                     |

<sup>1</sup> Level annual amount required to amortize Item 7 over the period of years in Item 10.

<sup>2</sup> Level dollar amortization over 15-year closed period that began January 1, 2015.

<sup>3</sup> The funded ratio is not appropriate for assessing either the need for or the amount of future contributions or the adequacy of the funding policy of an ongoing plan. However, for a frozen plan, a funded ratio of 100% or more would indicate that contributions could cease. Subsequent experience would determine whether or not any additional contributions might be required.



**Sensitivity of Results to a Change in the  
Investment Return Assumption**

How sensitive is the recommended annual contribution to the investment return assumption? The table below shows the liability components as of January 1, 2015 and the recommended annual contribution with 6.25% and 5.50% as the investment return assumption and all other assumptions unchanged.

|                                                        | Investment Return Assumption |                  |
|--------------------------------------------------------|------------------------------|------------------|
|                                                        | 6.25%                        | 5.50%            |
| <b>1. Actuarial present value of</b>                   |                              |                  |
| a. Accrued benefits for employees                      | \$ 21,275,525                | \$ 23,856,961    |
| b. Benefits for terminated participants                | 3,041,797                    | 3,352,791        |
| c. Benefits for pensioners                             | 33,937,186                   | 36,085,787       |
| d. Administrative expenses                             | <u>1,891,100</u>             | <u>2,009,740</u> |
| e. Total                                               | \$ 60,145,608                | \$ 65,305,279    |
| <b>2. Market value of assets</b>                       | \$ 44,745,232                | \$ 44,745,232    |
| <b>3. Unfunded actuarial liability (UAL)</b>           | \$ 15,400,376                | \$ 20,560,047    |
| <b>4. Recommended annual contribution paid monthly</b> | \$ 1,567,264                 | \$ 1,998,417     |
| a. Increase amount                                     |                              | \$ 431,153       |
| b. Relative increase                                   |                              | 28%              |

### Section III – Other Considerations

If this plan were frozen, it is true that the city's required contributions would be reduced because the accrual of any additional future benefits would be frozen. However, there are considerations other than the reduction in the city's required contributions. This section is not intended to be an exhaustive list or a full description of each item. Rather it is intended to objectively introduce these considerations so that the discussions of whether or not this plan should be frozen are amplified. City management has shared with us their thinking that a freeze of this defined benefit (DB) plan would be accompanied by the creation of a new defined contribution (DC) plan for all of the employees adversely affected by a freeze, as well as for all future hires that would otherwise have been covered by this plan. So the shift from a DB plan to a DC plan is part of the context for these considerations.

1. The investment responsibility, investment expense, and investment risk would be shifted completely to the employees, both during the period of their employment and during the years of retirement as long as they have assets in or from the DC plan. Studies have consistently shown that investment returns from DB plans exceed the investment returns from DC plans because DB plans have the benefit of investment experts, lower investment expenses from pooled assets, a longer and consistent investment time horizon, and more expertise in the management of investment risk.
2. The longevity risk would be shifted to the employees. One of the other strengths of a DB plan compared to a DC plan is the normal form of the retirement benefit. DB plans pay monthly benefits for the lifetime of the pensioner while DC plans generally pay a lump sum distribution. So a pensioner in a DB plan does not have to be concerned about outliving plan assets, a major concern for someone retiring with a DC plan lump sum distribution.
3. The table below gives a summary comparison of DB plans and DC plans. Some of the comparisons below are why the large majority of state and local government public employees are still covered by DB plans in spite of a trend toward DC plans for federal employees and employees in the private sector.

| DB Plans vs. DC Plans                                                           |                  |                  |
|---------------------------------------------------------------------------------|------------------|------------------|
|                                                                                 | DB Plan          | DC Plan          |
| Bears investment risk and benefits from investment gains                        | Employer         | Employee         |
| Bears inflationary risk during working career                                   | Employer         | Employee         |
| Usual form of benefit                                                           | Monthly for life | Single sum       |
| Bears longevity risk in retirement years                                        | Employer         | Retiree          |
| Selects investment managers and asset allocation during working years           | Board            | Employee         |
| Selects investment managers and asset allocation during retirement years        | Board            | Retiree          |
| Generally provides more benefits than the other type of plan to these employees | Long term        | Short term       |
| Generally understood by most employees                                          | No               | Yes              |
| Usually pays for administrative expenses                                        | Employer         | Employee/retiree |
| Usually pays for investment expenses                                            | Employer         | Employee/retiree |

4. In order to know what the city and the covered employees would be getting by freezing the DB plan and switching to a DC plan, a comparison of projected retirement benefits (ongoing DB plan vs. the sum of frozen DB plan and new DC plan) should be made for representative employees. Such a study would show the reduction in benefits, especially to those current younger employees and future hires who will work a long career for the city.
5. Pre-retirement death or disability usually results in a lower benefit with a DC plan compared to the benefit with a DB plan. In the event of freezing your DB plan, the day after the effective date of the freeze the DB plan death and disability benefits would drop dramatically for most employees because they would be effectively considered terminated employees after the freeze date and not active employees. Pre-retirement death and disability benefits usually become vested only upon dying or becoming disabled.
6. The large majority of public employees still contribute to and are covered by defined benefit plans. While the benefit formulas vary from plan to plan, the contribution rates are a rough indicator of the level of benefits. The table below compares the employer and employee contribution rates to the DB plans for a sample of cities and counties with neighboring employees to the City of Galveston. Consideration should be given to the effect of replacing the DB plan with a DC plan on hiring and retaining employees.

| Employer           | 2015 Contribution Rates |          |
|--------------------|-------------------------|----------|
|                    | Employer                | Employee |
| <b>A. Cities</b>   |                         |          |
| Alvin              | 16.74%                  | 7%       |
| Angleton           | 12.63                   | 6        |
| Dickinson          | 8.64                    | 7        |
| Friendswood        | 15.99                   | 7        |
| Hitchcock          | 4.40                    | 5        |
| LaMarque           | 9.52                    | 5        |
| Sana Fe            | 12.61                   | 7        |
| Texas City         | 17.59                   | 7        |
| <b>B. Counties</b> |                         |          |
| Brazoria           | 12.32                   | 7        |
| Chambers           | 14.22                   | 7        |
| Galveston          | 11.25                   | 7        |
| Harris             | 12.34                   | 7        |
| Jefferson          | 17.66                   | 7        |
| Matagorda          | 14.77                   | 7        |

7. If the current DB plan were to be frozen, plan administration would continue, but after a few years the board composition would probably have to change. It might be more challenging to find people willing to serve on a board of a frozen plan with no active employee plan members.
8. There would be an increase in administrative activity as close to 200 employees who are not vested as of the plan freeze date would receive a cash out of their employee accumulated contributions. Ultimately, when there is only a moderate number of individuals receiving a monthly benefit from the frozen plan, it would make sense to close the plan and purchase annuities for those remaining recipients. At that time, there would be a large amount of administrative time and cost in order to complete that process.

## *Section IV – Actuarial Methods and Assumptions*

### **A. Actuarial Methods**

#### **1. Actuarial Cost Method**

For a frozen plan, no actuarial cost method is required. The primary calculations are the actuarial present value of future benefits and expenses. The unfunded actuarial liability (UAL) is the amount by which the present value of future benefits and expenses exceeds the current plan assets. The UAL is recalculated each time a valuation is performed. Experience gains and losses, which represent deviations of the UAL from its expected value based on the prior valuation, are determined at each valuation and are amortized as part of the newly calculated UAL.

#### **2. Amortization Method**

For this analysis of the plan frozen as of January 1, 2015, the UAL would be amortized with level dollar payments over a 15-year closed period beginning January 1, 2015, in accordance with the funding policy recommended by Rudd and Wisdom, Inc. in this report.

#### **3. Actuarial Value of Assets Method**

All assets are valued at market value as of January 1, 2015. Subsequent actuarial valuations following the freeze date of the plan would use a smoothed market value. This smoothed value would begin with market value and make an adjustment made to uniformly spread actuarial gains or losses after January 1, 2015 (as measured by actual market value investment return vs. expected market value investment return) over a five-year period. The total adjustment amount shall be limited as necessary such that the actuarial value of assets shall not be less than 80% of market value nor greater than 120% of market value. This method is similar to that currently used for the ongoing valuations of the plan.

### **B. Actuarial Assumptions**

#### **1. Mortality**

- |                              |                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------|
| a. Pre-retirement Mortality  | RP-2000 Combined Healthy Mortality Table projected to 2024 for males and females (sex distinct) |
| b. Post-retirement Mortality | RP-2000 Combined Healthy Mortality Table projected to 2024 for males and females (sex distinct) |
| c. Post-disability Mortality | RP-2000 Combined Healthy Mortality Table projected to 2024 for males and females (sex distinct) |

2. **Termination** There would be no need for assumed termination rates with a plan assumed to be frozen. All employees are assumed to have terminated employment as of January 1, 2015.
3. **Investment Return** Current and future plan assets are assumed to reflect an annual investment return of 6.25% net of investment-related expenses. See item B.10 for general administrative expenses.
4. **Earnings Progression** There would be no need to recognize projected earnings after 2014 if the plan had been frozen January 1, 2015.



5. **Retirement Rates** All terminated participants and employees assumed to have terminated employment as of December 31, 2014 who are eligible for a deferred monthly benefit are assumed to commence the benefit at age 65 or as of January 1, 2015 if over age 65.
6. **Disability** There would be no need for assumed rates of disability with a plan assumed to be frozen in such a way to preclude any new disability benefits.
7. **Inflation Component in Investment Return Assumption** 3%
8. **Form of Payment**
  - a. Married participants: Joint and 50% to surviving spouse form of payment.
  - b. Single participants: Life only form of payment.
  - c. Monthly benefits are payable the first of each month.
9. **Percent Married** We used actual provided marital status and spouse date of birth for the retirees. For the vested terminated participants and the employees, we assumed that 100% will be married at commencement of the monthly benefit, with male retirees having a spouse three years younger and female retirees having a spouse three years older.
10. **General Administrative Expenses** The expenses paid from plan assets for other than investment-related expenses are assumed to be \$125,000 in 2015 and are assumed to increase 3% per year. For determining the present value of future general administrative expenses, we assumed the plan, if frozen, would continue its current form of operation for 20 years and then be terminated.



***Section V – Outline of Principal Plan Eligibility and Benefit  
Provisions as of January 1, 2015***

- 1. Identifying Data**
  - a. Plan name: The City of Galveston Employees' Retirement Plan for City Employees
  - b. Type of plan: Defined benefit pension benefits
  - c. Plan sponsor: City of Galveston
  - d. Plan Year: January 1 - December 31
- 2. Participation**
  - a. Minimum Age: none
  - b. Maximum Age at Hire: none
  - c. Eligible Employee: All full-time employees except for those (i) covered by the separate retirement plans for police and for firefighters, (ii) performing emergency services as temporary employees, (iii) compensated on a fee basis; or (iv) leased.
- 3. Contributions**
  - a. Active Member: 6% of pay
  - b. City: all amounts necessary to adequately finance plan benefits, currently 9% of pay
- 4. Eligibility for Retirement**
  - a. Normal Retirement: age 65 plus five or more years of service
  - b. Early Retirement: age 55 or above plus ten or more years of service or age 62 plus five or more years of service
  - c. Disability: eligible for Social Security disability benefits
- 5. Retirement Benefit Monthly Amounts**
  - a. Normal Retirement: 2.25% of average monthly compensation per year of service assumed frozen as of January 1, 2015, payable the first of each month, not to exceed \$4,166.67 per month
  - b. Late Retirement: same as Normal Retirement
  - c. Early Retirement: amount equal to monthly normal retirement benefit accrued at early retirement date reduced by  $1/180^{\text{th}}$  for each of the first 60 months and  $1/360^{\text{th}}$  for each additional month by which early retirement precedes his normal retirement.
- 6. Payment Options**
  - a. The normal form of monthly payment for life is joint and 50% to surviving spouse for the member leaving a surviving spouse at date of death.
  - b. The member eligible to commence a monthly benefit may elect a lump sum distribution of his accumulated contributions and a reduced monthly benefit.

7. **Vested Termination Benefits**

- a. **Benefit:** vested percentage of accrued benefit at normal retirement age.
- b. **Vesting Schedule:**

| Years of Service | Vested Percent |
|------------------|----------------|
| less than 5      | 0%             |
| 5                | 50             |
| 6                | 60             |
| 7                | 70             |
| 8                | 80             |
| 9                | 90             |
| 10 or more       | 100            |

A member is always 100% vested in the portion of the accrued benefit attributable to his employee contributions.

- c. **Accrued Benefit:** a monthly benefit payable in the normal form of payment beginning at normal retirement age; the amount of the accrued benefit would be determined as if the member had terminated employment December 31, 2014 and calculated using the normal retirement benefit formula but using only years of benefit service and compensation credited at date of termination. For employees not vested on January 1, 2015, the accrued benefit would equal the return of the employee accumulated contributions.
8. **Average Monthly Compensation** Plan compensation averaged over the five calendar years of service covered by the plan through 2014 which produce the highest average monthly compensation.

*Section VI – Participant Census Summary*

|                                                | January 1, 2015 |
|------------------------------------------------|-----------------|
| <b>1. Covered Employee Count</b>               |                 |
| a. Vested                                      | 234             |
| b. Nonvested                                   | 216             |
| c. Total                                       | 450             |
| <b>2. Age and Service of Covered Employees</b> |                 |
| a. Average attained age                        | 47.4 years      |
| b. Average benefit service earned              | 8.2 years       |
| <b>3. Immediate Retirement Benefits</b>        |                 |
| a. Retirees and beneficiaries in pay status    | 322             |
| b. Aggregate monthly benefit                   | \$ 273,631      |
| c. Average monthly benefit                     | \$ 850          |
| <b>4. Deferred Retirement Benefits</b>         |                 |
| a. Vested terminated participants              | 56              |
| b. Aggregate monthly benefit                   | \$ 31,646       |
| c. Average monthly benefit                     | \$ 565          |
| <b>5. Refund of Contributions Payable</b>      |                 |
| a. Terminated participants                     | 146             |
| b. Aggregate amount payable                    | \$ 556,027      |

January 26, 2021

To the Board of Trustees

City of Galveston Employees' Retirement Plan for City Employees  
c/o Ms. Ann S. Masel, CPA  
1011 Tremont Street  
Galveston, TX 77550

The following represents our understanding of the services we will provide City of Galveston Employees' Retirement Plan for City Employees (the "Plan").

You have requested that we audit the statement of net position as of December 31, 2020, the statement of changes in net position for the year then ended and the related notes to the financial statements, which collectively comprise the basic financial statements of the Plan.

Accounting principles generally accepted in the United States of America, (U.S. GAAP,) as promulgated by the Governmental Accounting Standards Board (GASB) require that supplementary information such as management's discussion and analysis (MD&A) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the GASB, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the required supplementary information (RSI) in accordance with auditing standards generally accepted in the United States of America, (U.S. GAAS). These limited procedures will consist primarily of inquiries of management regarding their methods of measurement and presentation and comparing the information for consistency with management's responses to our inquiries. We will not express an opinion or provide any form of assurance on the RSI. The following RSI is required by U.S. GAAP. This RSI will be subjected to certain limited procedures but will not be audited:

- Management's Discussion and Analysis
- Schedules of Changes in Net Pension Liabilities and Related Ratios
- Schedule of Employer Contributions
- Schedule of Investment Returns

### **Auditor Responsibilities**

We will conduct our audit in accordance with U.S. GAAS. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements, whether due to fraud or error, misappropriation of assets, or violations of laws, governmental regulations, grant agreements, or contractual agreements.



An audit also includes evaluating the appropriateness of accounting policies used, and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the basic financial statements. If appropriate, our procedures will therefore include tests of documentary evidence that support the transactions recorded in the accounts, tests of the physical existence of inventories, and direct confirmation of cash, investments, and certain other assets and liabilities by correspondence with creditors and financial institutions. As part of our audit process, we will request written representations from your attorneys, and they may bill you for responding. At the conclusion of our audit, we will also request certain written representations from you about the basic financial statements and related matters.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements (whether caused by errors, fraudulent financial reporting, misappropriation of assets, or violations of laws or governmental regulations) may not be detected exists, even though the audit is properly planned and performed in accordance with U.S. GAAS.

In making our risk assessments, we consider internal control relevant to the Plan's preparation and fair presentation of the basic financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the basic financial statements that we have identified during the audit. Our responsibility as auditors is limited to the period covered by our audit and does not extend to any other periods.

We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or other-matter paragraphs. If our opinions on the basic financial statements are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue a report as a result of this engagement.

### **Compliance with Laws and Regulations**

As previously discussed, as part of obtaining reasonable assurance about whether the basic financial statements are free of material misstatement, we will perform tests of the Plan's compliance with the provisions of applicable laws, regulations, contracts, and agreements. However, the objective of our audit will not be to provide an opinion on overall compliance and we will not express such an opinion.

### **Management Responsibilities**

Our audit will be conducted on the basis that management and, when appropriate, those charged with governance acknowledge and understand that they have responsibility:

- a. For the preparation and fair presentation of the basic financial statements in accordance with accounting principles generally accepted in the United States of America;
- b. For the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of basic financial statements that are free from material misstatement, whether due to error, fraudulent financial reporting, misappropriation of assets, or violations of laws, governmental regulations, grant agreements, or contractual agreements; and
- c. To provide us with:
  - i. Access to all information of which management is aware that is relevant to the preparation and fair presentation of the basic financial statements such as records, documentation, and other matters;
  - ii. Additional information that we may request from management for the purpose of the audit; and
  - iii. Unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence.

- d. For including the auditor's report in any document containing financial statements that indicates that such basic financial statements have been audited by the entity's auditor;
- e. For identifying and ensuring that the entity complies with the laws and regulations applicable to its activities;
- f. For adjusting the basic financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the current year period(s) under audit are immaterial, both individually and in the aggregate, to the basic financial statements as a whole; and
- g. For acceptance of nonattest services, including identifying the proper party to oversee nonattest work;
- h. For maintaining adequate records, selecting and applying accounting principles, and safeguarding assets;
- i. For informing us of any known or suspected fraud affecting the Plan involving management, employees with significant role in internal control and others where fraud could have a material effect on the financials; and
- j. For the accuracy and completeness of all information provided.

With regard to the supplementary information referred to above, you acknowledge and understand your responsibility: (a) for the preparation of the supplementary information in accordance with the applicable criteria; (b) to provide us with the appropriate written representations regarding supplementary information; (c) to include our report on the supplementary information in any document that contains the supplementary information and that indicates that we have reported on such supplementary information; and (d) to present the supplementary information with the audited basic financial statements, or if the supplementary information will not be presented with the audited basic financial statements, to make the audited basic financial statements readily available to the intended users of the supplementary information no later than the date of issuance by you of the supplementary information and our report thereon.

With respect to any nonattest services we perform, Plan management is responsible for (a) making all management decisions and performing all management functions; (b) assigning a competent individual to oversee the services; (c) evaluating the adequacy of the services performed; (d) evaluating and accepting responsibility for the results of the services performed; and (e) establishing and maintaining internal controls, including monitoring ongoing activities. Nonattest services could include assistance with the preparation of financial statements including the government-wide journal entries and note disclosures.

As part of our audit process, we will request from management and, when appropriate, those charged with governance, written confirmation concerning representations made to us in connection with the audit.

## **Reporting**

We will issue a written report upon completion of our audit of the Plan's basic financial statements. Our report will be addressed to the governing body of the Plan. We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions, add an emphasis-of-matter or other-matter paragraph(s), or withdraw from the engagement.

## **Other**

We understand that your employees will prepare all confirmations we request and will locate any documents or support for any other transactions we select for testing.

If you intend to publish or otherwise reproduce the basic financial statements and make reference to our firm, you agree to provide us with printers' proofs or masters for our review and approval before printing. You also agree to provide us with a copy of the final reproduced material for our approval before it is distributed.

### **Provisions of Engagement Administration, Timing and Fees**

During the course of the engagement, we may communicate with you or your personnel via fax or e-mail, and you should be aware that communication in those mediums contains a risk of misdirected or intercepted communications.

The timing of our audit will be scheduled for performance and completion as follows:

- Perform inquiry and substantive procedures – May 2021
- Issue audit report – July 2021

Christopher L. Breaux, CPA is the engagement partner for the audit services specified in this letter. His responsibilities include supervising Whitley Penn, LLP's services performed as part of this engagement and signing or authorizing another qualified firm representative to sign the audit report.

Our fees are based on the amount of time required at various levels of responsibility, plus actual out-of-pocket expenses. Invoices will be rendered every month and are payable upon presentation. We estimate that our fee for the audit will not exceed \$15,100. We will notify you immediately of any circumstances we encounter that could significantly affect this initial fee estimate. Whenever possible, we will attempt to use the Plan's personnel to assist in the preparation of schedules and analyses of accounts. This effort could substantially reduce our time requirements and facilitate the timely conclusion of the audit. Further, we will be available during the year to consult with you on financial management and accounting matters of a routine nature.

During the course of the audit we may observe opportunities for economy in, or improved controls over, your operations. We will bring such matters to the attention of the appropriate level of management, either orally or in writing.

You agree to inform us of facts that may affect the basic financial statements of which you may become aware during the period from the date of the auditor's report to the date the financial statements are issued.

We agree to retain our audit documentation or work papers for a period of at least five years from the date of our report.

At the conclusion of our audit engagement, we will communicate to the Board of Trustees the following significant findings from the audit:

- Our view about the qualitative aspects of the Plan's significant accounting practices;
- Significant difficulties, if any, encountered during the audit;
- Uncorrected misstatements, other than those we believe are trivial, if any;
- Disagreements with management, if any;
- Other findings or issues, if any, arising from the audit that are, in our professional judgment, significant and relevant to those charged with governance regarding their oversight of the financial reporting process;
- Material, corrected misstatements that were brought to the attention of management as a result of our audit procedures;
- Representations we requested from management;
- Management's consultations with other accountants, if any; and
- Significant issues, if any, arising from the audit that were discussed, or the subject of correspondence, with management.



In the course of our services, our firm may transmit confidential information that you provided us to third parties in order to facilitate our services. As applicable, we require confidentiality agreements with all our service providers to maintain the confidentiality of your information and additionally the firm will take reasonable precautions to determine that our service providers have the appropriate procedures in place to prevent the unauthorized release of confidential information to others. We will remain ultimately responsible for the work provided by any third-party service providers used under this agreement. By your signature below, you consent to having confidential information transmitted to entities outside the firm. Please feel free to inquire if you would like additional information regarding the transmission of confidential information to entities outside the firm.

The audit documentation for this engagement is the property of Whitley Penn, LLP and constitutes confidential information. However, we may be requested to make certain audit documentation available to various regulators pursuant to authority given to it by law or regulation, or to peer reviewers. If requested, access to such audit documentation will be provided under the supervision of Whitley Penn, LLP's personnel. Furthermore, upon request, we may provide copies of selected audit documentation to the applicable regulator. The regulator may intend, or decide, to distribute the copies of information contained therein to others, including other governmental agencies.

Please sign and return the attached copy of this letter to indicate your acknowledgment of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

We appreciate the opportunity to be your financial statement auditors and look forward to working with you and your staff.

Respectfully,

*Whitley Penn LLP*

\*\*\*\*\*

RESPONSE:

This letter correctly sets forth our understanding.

Acknowledged and agreed on behalf of City of Galveston Employees' Retirement Plan for City Employees by:

\_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

# **City of Galveston Employees' Retirement Plan**

COMPILED FINANCIAL STATEMENTS  
For the Three Months and Twelve Months Ended  
December 31, 2020



## ACCOUNTANTS' COMPILATION REPORT

To the Board of Directors  
City of Galveston Employees' Ret Plan  
Galveston, TX 77550

Management is responsible for the accompanying financial statements of City of Galveston Employees' Ret Plan (a Texas, non-profit organization), which comprise the Statement of Net Assets Available for Benefits- tax basis as of December 31, 2020, and the related Statement of Changes in Net Assets Available for Benefits- tax basis for the three months and twelve months then ended in accordance with the tax basis of accounting, and for determining that the tax basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the financial statements nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on these financial statements.

The financial statements are prepared in accordance with the tax basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America.

Management has elected to omit substantially all of the disclosures ordinarily included in the financial statements prepared in accordance with the tax basis of accounting. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the company's assets, liabilities, equity, revenues and expenses. Accordingly, these financial statements are not designed for those who are not informed about such matters.

We are not independent with respect to City of Galveston Employees' Ret Plan as we perform monthly administrative duties for the plan.

Ham, Langston, & Brezina  
Galveston, TX

January 23, 2021

**City of Galveston Employees' Retirement Plan**  
**Net Assets Available for Benefits**  
**As of December 31, 2020**

**ASSETS**

|                                                     |               |    |                             |
|-----------------------------------------------------|---------------|----|-----------------------------|
| MNB - Trust 300                                     |               | \$ | 0.00                        |
| MNB - MM - Act 300                                  |               |    | 1,465,092.76 ✓              |
| Accrued dividends & interest                        |               |    | 10,301.77                   |
| Investments at FMV                                  |               |    |                             |
| Int'l Fixed Income Mutual Funds                     | 2,235,008.08  |    |                             |
| Market values adj - Int'l Fixed Income Mutual Funds | 106,382.83    |    |                             |
| Investments - Equity Funds                          | 26,831,007.56 |    |                             |
| Market value adj - Equity Funds                     | 16,431,832.95 |    |                             |
| Fixed Income Funds                                  | 13,060,342.82 |    |                             |
| Market value adj - Fixed Income Funds               | 510,053.88    |    |                             |
| Private Equity Funds                                | 2,394,629.93  |    |                             |
| Market value adj - Private Equity Funds             | 9,874.15      |    |                             |
| Total Investments                                   |               |    | <u>61,579,132.20</u>        |
| <b>TOTAL ASSETS</b>                                 |               | \$ | <u><u>63,054,526.73</u></u> |

**LIABILITIES**

|                                                            |  |    |                             |
|------------------------------------------------------------|--|----|-----------------------------|
| Withholding payable                                        |  | \$ | <u>17,326.97</u>            |
| <b>TOTAL LIABILITIES</b>                                   |  |    | <u>17,326.97</u>            |
| <b>NET ASSETS HELD IN TRUST FOR<br/>BENEFIT OBLIGATION</b> |  | \$ | <u><u>63,037,199.76</u></u> |

12/31/19

57,497,904

**City of Galveston Employees' Retirement Plan**  
**Statement of Changes in Net Assets**  
**Available for Benefits**  
**For the Three Months and Twelve Months Ending December 31, 2020**

|                                      | 3 Months Ended<br>December 31, 2020 | 12 Months Ended<br>December 31, 2020 |            |
|--------------------------------------|-------------------------------------|--------------------------------------|------------|
| <b>ADDITIONS:</b>                    |                                     |                                      |            |
| Contributions                        |                                     |                                      |            |
| Contributions - City                 | \$ 672,846.90                       | \$ 2,486,762.75                      |            |
| Contributions - Employees            | 448,565.34                          | 1,658,767.09                         |            |
| Total contributions                  | <u>1,121,412.24</u>                 | <u>4,145,529.84</u>                  | 404,152    |
| Investment income                    |                                     |                                      |            |
| Realized Gain on Sale of Investment  | 7,490.54                            | 7,490.54                             |            |
| Net gain/(loss) in Fair Market Value | 5,663,102.60                        | 4,869,999.77                         |            |
| Capital Gain Distributions           | 433,909.01                          | 492,586.01                           |            |
|                                      | <u>6,104,502.15</u>                 | <u>5,370,076.32</u>                  |            |
| Other income                         | 0.00                                | 373.39                               |            |
| Dividends                            | 266,462.62                          | 1,005,237.55                         |            |
| Total Other Income                   | <u>266,462.62</u>                   | <u>1,005,610.94</u>                  |            |
| Total Investment Income/(loss)       | 6,370,964.77                        | 6,375,687.26                         | 9,901,311  |
| Less: Investment expense             |                                     |                                      |            |
| Manager expense                      | (25,802.91)                         | (81,615.86)                          |            |
| Total investment expense             | <u>(25,802.91)</u>                  | <u>(81,615.86)</u>                   | <73,820>   |
| TOTAL ADDITIONS                      | 7,466,574.10                        | 10,439,601.24                        | 13,868,643 |
| <b>DEDUCTIONS:</b>                   |                                     |                                      |            |
| Retirement benefits                  | 870,485.70                          | 3,412,164.45                         |            |
| Benefits - non-taxable               | 2,250.93                            | 9,214.00                             |            |
| Survivor benefits                    | 78,927.42                           | 315,709.68                           |            |
| Survivor benefits - non-taxable      | 488.34                              | 1,953.36                             |            |
| Disability benefits                  | 8,161.26                            | 32,665.04                            |            |
| Disability benefits - non-taxable    | 18.27                               | 73.08                                |            |
| Rollover benefits                    | 104,249.43                          | 215,904.52                           |            |
| Lumpsum benefits                     | 154,846.70                          | 724,485.85                           |            |
| Actuarial fees                       | 9,213.00                            | 42,442.00                            |            |
| Custodial services                   | 9,000.00                            | 36,000.00                            |            |
| Dues and fees                        | 284.23                              | 284.23                               |            |
| Insurance                            | 0.00                                | 4,750.00                             |            |
| Investment Mgmt Evaluation           | 0.00                                | 14,700.00                            |            |
| Legal fees                           | 3,045.00                            | 10,146.25                            |            |
| Miscellaneous                        | 0.00                                | 3,347.95                             |            |
| Audit fees                           | 0.00                                | 15,100.00                            |            |
| Accounting fees                      | 15,710.00                           | 61,365.50                            |            |
| TOTAL DEDUCTIONS                     | <u>1,256,680.28</u>                 | <u>4,900,305.91</u>                  | 4885,066   |
| Net increase/(decrease)              | <u>\$ 6,209,893.82</u>              | <u>\$ 5,539,295.33</u>               | 8983,576   |