



**GALLIARD**  
Capital Management, Inc.

## **CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN**

FOURTH QUARTER 2019 PORTFOLIO REVIEW

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# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2019

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*The information contained in this report is for informational purposes only. It is intended to provide a summary of portfolio performance and characteristics, and an accounting based view of transactions and holdings. This is a standardized report and is not intended to be used for compliance purposes. Individual portfolio compliance requirements may not be captured in this report.*

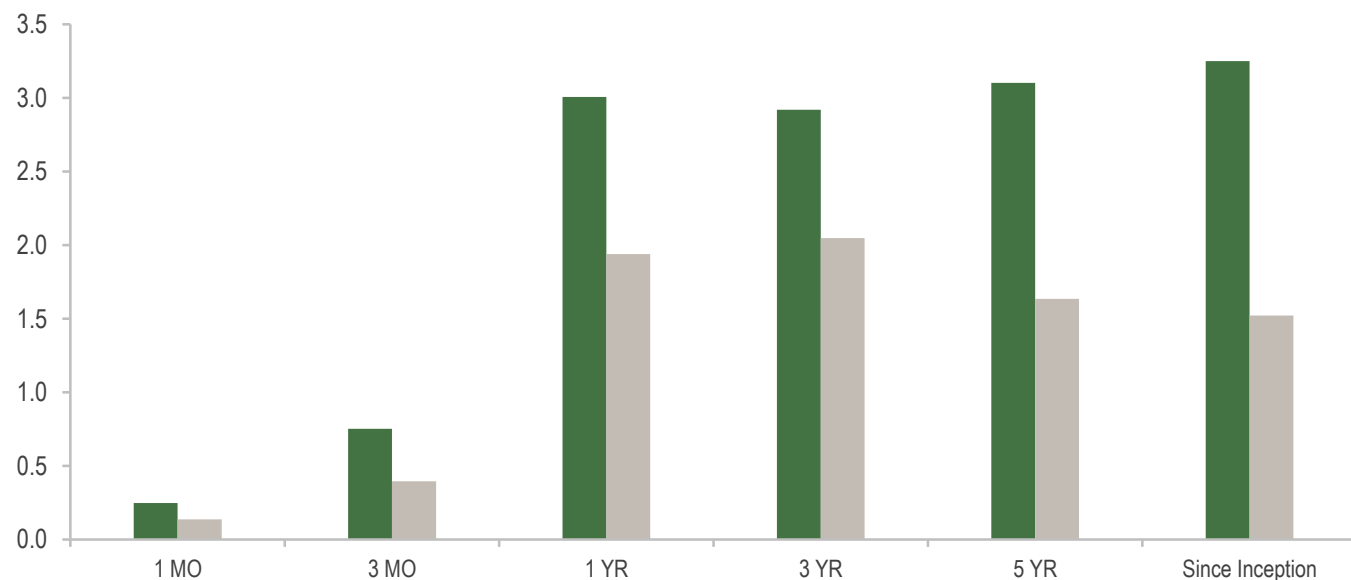
**STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN**

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# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2019

## ANNUALIZED INVESTMENT PERFORMANCE AS OF 12/31/19<sup>1</sup>



	1 Mo.	3 Mo.	1 Yr.	3 Yr.	5 Yr.	Since Inception <sup>4</sup>
■ Portfolio (before inv. mgmt. fees) <sup>2</sup>	0.25	0.75	3.01	2.92	3.10	3.25
Portfolio (net of all fees - NAV level) <sup>3</sup>	0.23	0.70	2.82	2.72	2.89	3.03
■ 3 Year Constant Maturity Treasury	0.14	0.40	1.94	2.05	1.63	1.52
<b>Value Added (before inv. mgmt. fees)<sup>5</sup></b>	<b>0.11</b>	<b>0.36</b>	<b>1.07</b>	<b>0.87</b>	<b>1.47</b>	<b>1.73</b>

1: Returns for periods of less than one year are not annualized.

2: Returns are net of book value contract fees only.

3: Returns are net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement.

4: Performance inception: February 1, 2014.

5: May not add due to rounding.

# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

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## CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

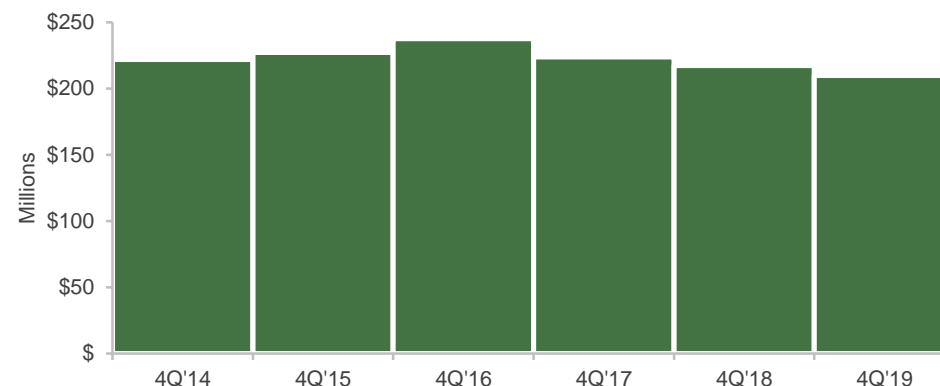
### ACCOUNT SUMMARY

<b>Benchmark</b>	3 Year Constant Maturity Treasury
<b>Galliard Inception Date</b>	January 6, 2014
<b>Net Asset Value</b>	\$209,803,846

### PORTFOLIO CHARACTERISTICS

	Portfolio 9/30/19	Portfolio 12/31/19
<b>Average Quality - Book Value<sup>1</sup></b>	AA-	AA-
<b>Average Quality - Market Value<sup>2</sup></b>	AA	AA
<b>Number of Contract Issuers</b>	5	5
<b>Blended Yield (after all fees)<sup>3</sup></b>	2.82%	2.77%
<b>Yield to Maturity</b>	2.12%	2.12%
<b>Effective Duration</b>	2.70 years	2.64 years
<b>Market/Book Value Ratio</b>	102.58%	102.36%

### HISTORICAL FUND ASSETS



### PORTFOLIO DISTRIBUTION

	% Portfolio 9/30/19	% Portfolio 12/31/19
<b>Liquidity Buffer: Cash &amp; Equivalents<sup>4</sup></b>	5.8	6.7
<b>Short Portfolio</b>	36.7	36.4
<b>Intermediate Portfolio</b>	57.5	56.9
<b>Total</b>	<b>100.0%<sup>5</sup></b>	<b>100.0%<sup>5</sup></b>

1: Average holdings quality of the contracts and other book value assets in the portfolio. The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.

2: Average holdings quality of the underlying assets of the portfolio. The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.

3: Blended Yield is net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement.

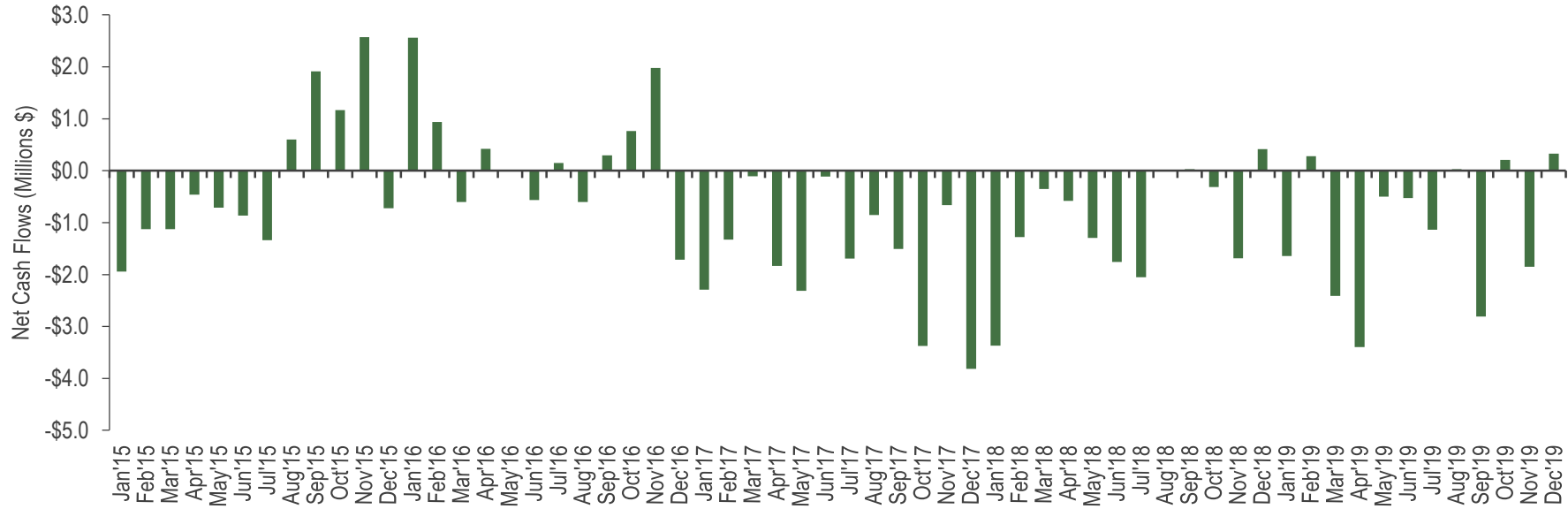
4: Includes Receivables and Payables.

5: Total % of portfolio may not add to 100% due to rounding.

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## HISTORICAL CASHFLOWS



	2015	2016	2017	2018	1Q'19	2Q'19	3Q'19	4Q'19	2019 YTD
Beginning Assets	\$222.0	\$227.3	\$237.6	\$223.7	\$217.3	\$215.0	\$212.1	\$209.6	\$217.3
Net Cash Flow (\$)¹	-\$2.1	\$3.6	-\$19.9	-\$12.2	-\$3.8	-\$4.4	-\$3.9	-\$1.3	-\$13.4
Net Cash Flow (%)	-0.92%	1.59%	-8.37%	-5.47%	-1.74%	-2.03%	-1.81%	-0.60%	-6.18%
Estimated Investment Earnings	\$7.4	\$6.8	\$5.9	\$5.9	\$1.5	\$1.5	\$1.5	\$1.5	\$5.9
Ending Assets²	\$227.3	\$237.6	\$223.7	\$217.3	\$215.0	\$212.1	\$209.6	\$209.8	\$209.8

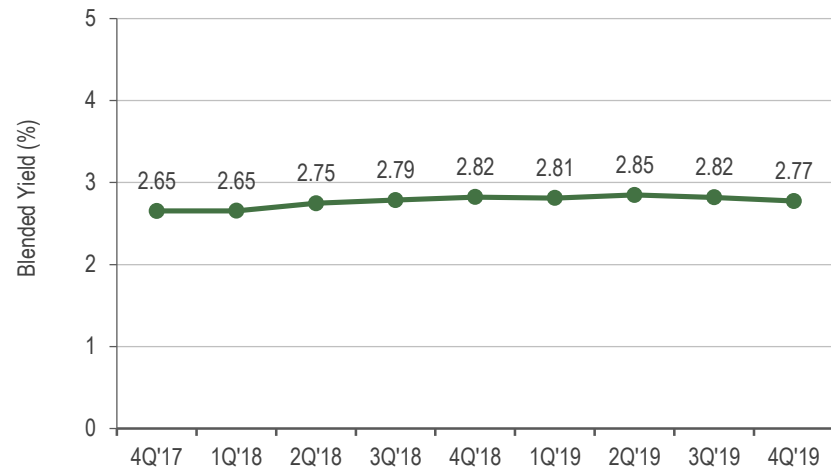
1: Contributions, Withdrawals and Investment Transfers

2: Cashflows may not net to final assets due to rounding.

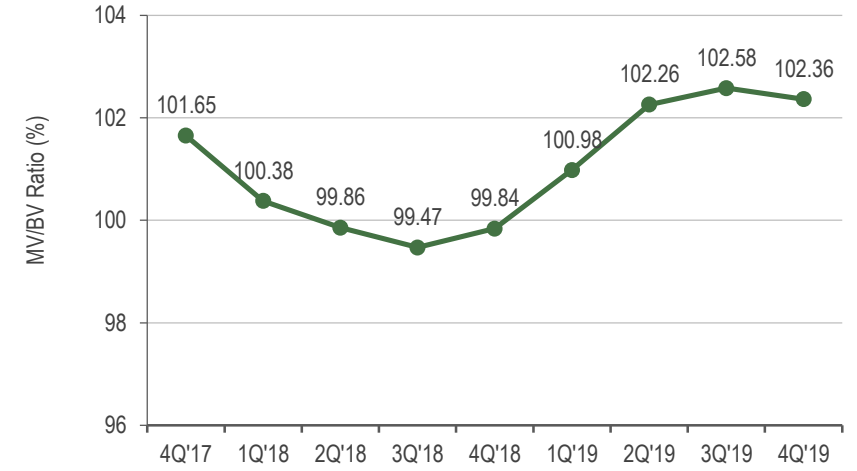
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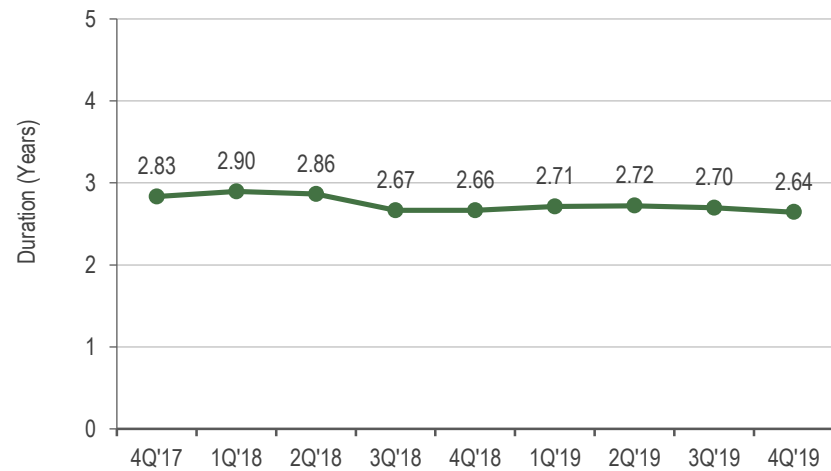
### HISTORICAL BLENDED YIELD<sup>1</sup>



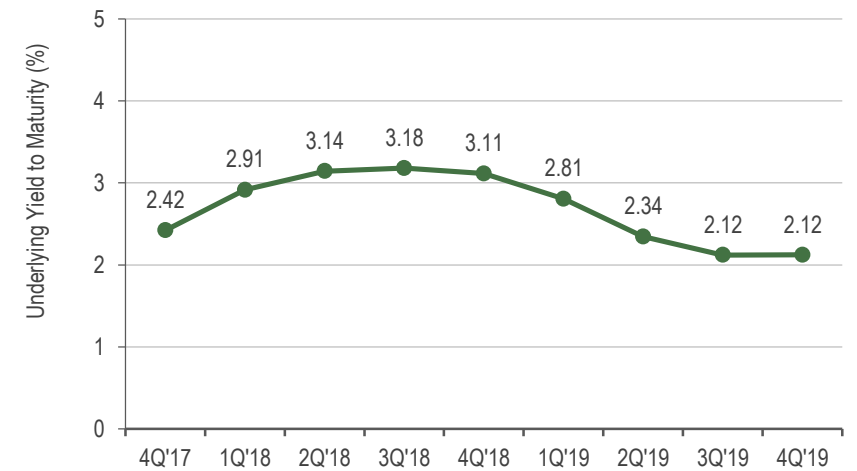
### HISTORICAL MARKET VALUE TO BOOK VALUE RATIO



### HISTORICAL DURATION



### HISTORICAL UNDERLYING YIELD TO MATURITY



<sup>1</sup>: Blended Yield is net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement.

# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

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## CONTRACT ISSUER DISTRIBUTION & RATING SUMMARY<sup>1</sup>

	% Portfolio 9/30/19	% Portfolio 12/31/19	Rating 9/30/19	Rating 12/31/19	Wrap fees (bps) 12/31/19
American General Life Ins. Co.	22.5	22.3	A+	A+	17
Massachusetts Mutual Life Ins. Co.	17.5	17.3	AA+	AA+	18
Nationwide Life Ins. Co.	9.7	9.6	A+	A+	17
Prudential Ins. Co. of America	21.7	21.4	AA-	AA-	18
Transamerica Premier Life Ins. Co.	22.8	22.6	A+	A+	16

<sup>1</sup>: The quality rating shown represents the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch. Ratings shown as NR/NA are not rated or not available security ratings.



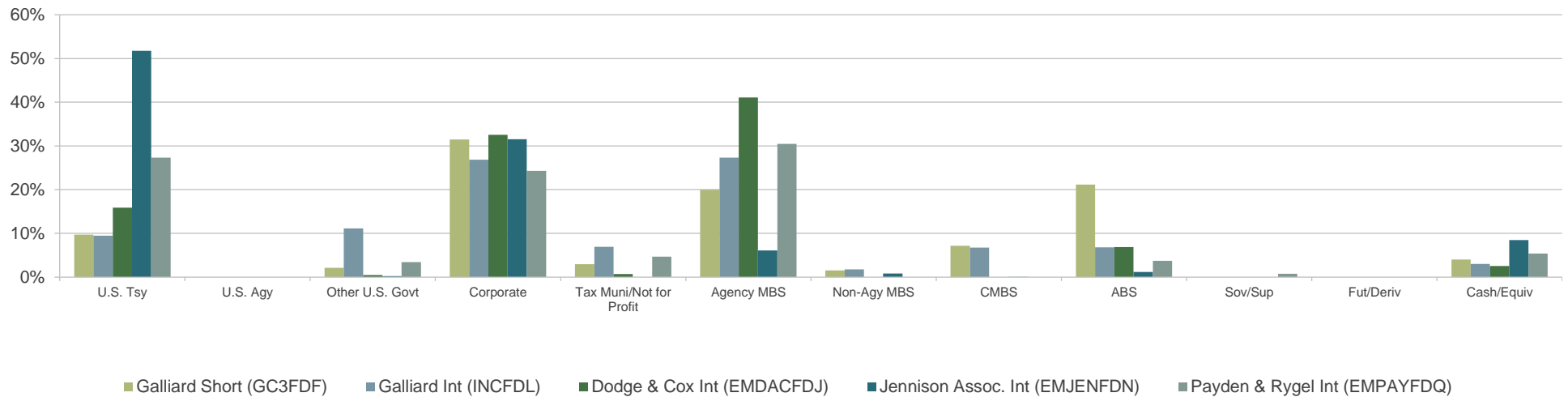
# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2019

## MANAGER DISTRIBUTION

	Strategy	Benchmark	% of Portfolio 9/30/19	% of Portfolio 12/31/19
Liquidity Buffer: Cash & Equivalents	STIF/Money Market		5.8	6.7
Galliard	Short	Bloomberg Barclays U.S. 1-3 Year Government/Credit Bond Index	36.7	36.4
Galliard	Intermediate	Bloomberg Barclays U.S. Intermediate Aggregate Bond Index	25.7	25.6
Dodge & Cox	Intermediate	Bloomberg Barclays U.S. Intermediate Aggregate Bond Index	10.6	10.5
Jennison Assoc.	Intermediate	Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index	10.6	10.4
Payden & Rygel	Intermediate	Bloomberg Barclays U.S. Intermediate Aggregate Bond Index	10.6	10.5
Total			100% <sup>1</sup>	100% <sup>1</sup>

## UNDERLYING FIXED INCOME PORTFOLIOS<sup>2</sup>



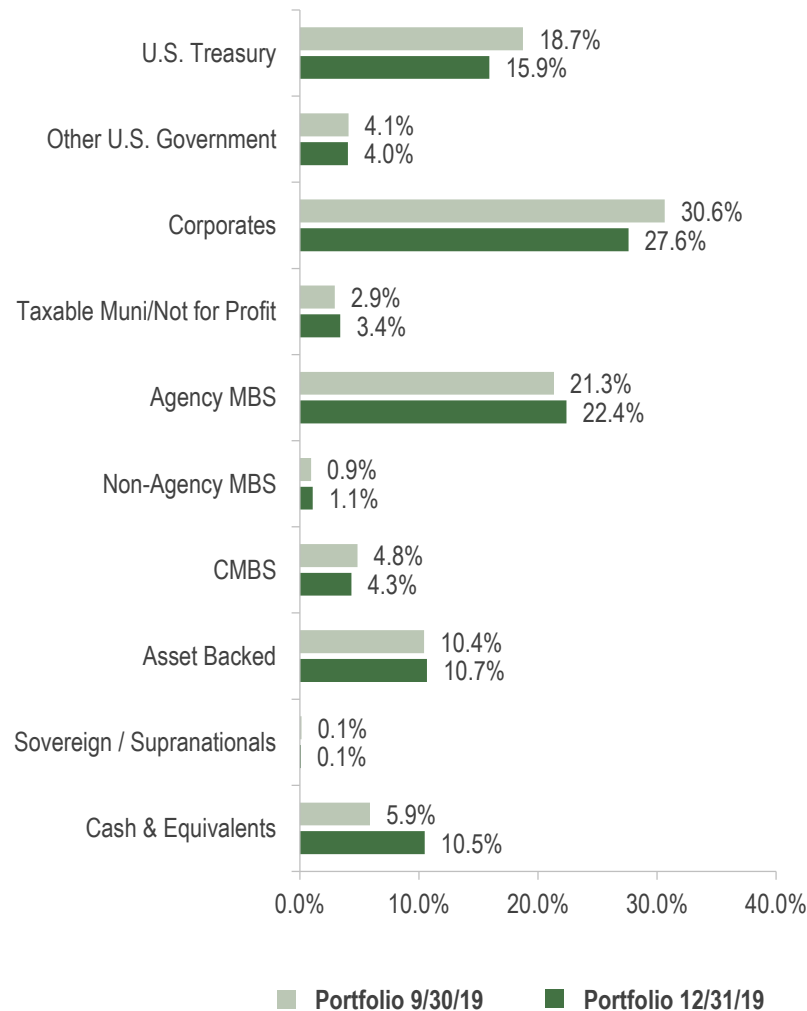
1: Total % of portfolio may not add to 100% due to rounding.

2: Market Value. The external managers provide portfolio holdings and the securities are classified using Galliard's analytics methodology for maximum comparability across managers.

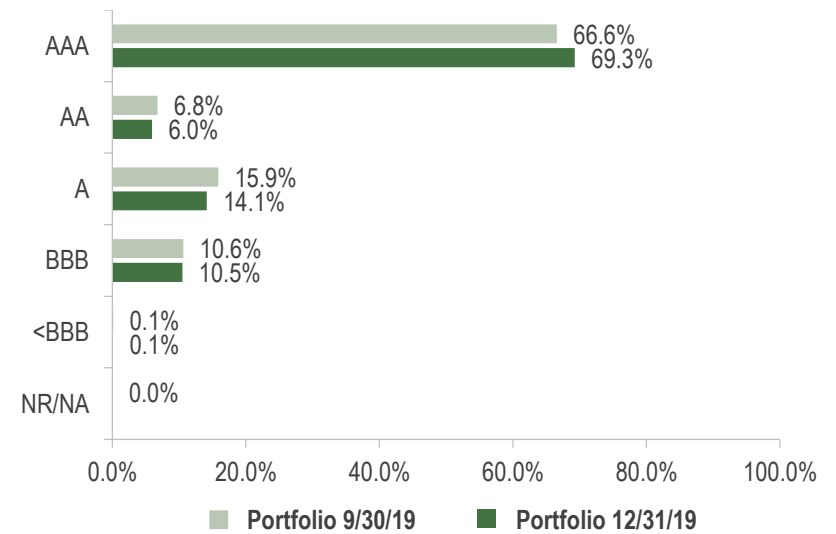
# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2019

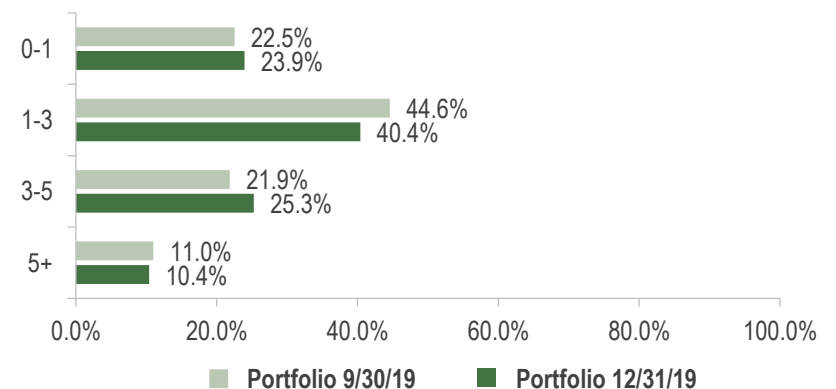
## UNDERLYING FIXED INCOME ASSET ALLOCATION<sup>1</sup>



## UNDERLYING QUALITY DISTRIBUTION<sup>1</sup>



## UNDERLYING DURATION DISTRIBUTION



<sup>1</sup>: Market Value. Total % of portfolio may not add to 100% due to rounding. The external managers provide holdings and the securities are classified using Galliard's analytics methodology for maximum comparability across managers. The quality distribution shown represents the distribution of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch. Ratings shown as NR/NA are not rated or not available security ratings. Distributions represent the portfolio positions for reporting purposes only. Investment guideline compliance is reported in the appendix or separately through your Galliard relationship manager.

# CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN PORTFOLIO TRANSACTIONS

Period: 10/1/2019 - 12/31/2019

Asset ID	Security Description	Book Value	Settle Date	Galliard Composite Rating
<b>PURCHASES</b>				
9983008\$P	WF/BlackRock Short Term Investment Fund S	3,350,000	11/13/2019	AAA
<b>TOTAL PURCHASES</b>		<b>3,350,000</b>		
<b>SALES</b>				
946996HT5	American General Life Ins. Co.	805,000	11/13/2019	A+
575997KF7	Massachusetts Mutual Life Ins. Co.	617,000	11/13/2019	AA+
896994KB5	Nationwide Life Ins. Co.	343,000	11/13/2019	A+
744999SF1	Prudential Ins. Co. of America	774,000	11/13/2019	AA-
600996LC4	Transamerica Premier Life Ins. Co.	811,000	11/13/2019	A+
<b>TOTAL SALES</b>		<b>3,350,000</b>		

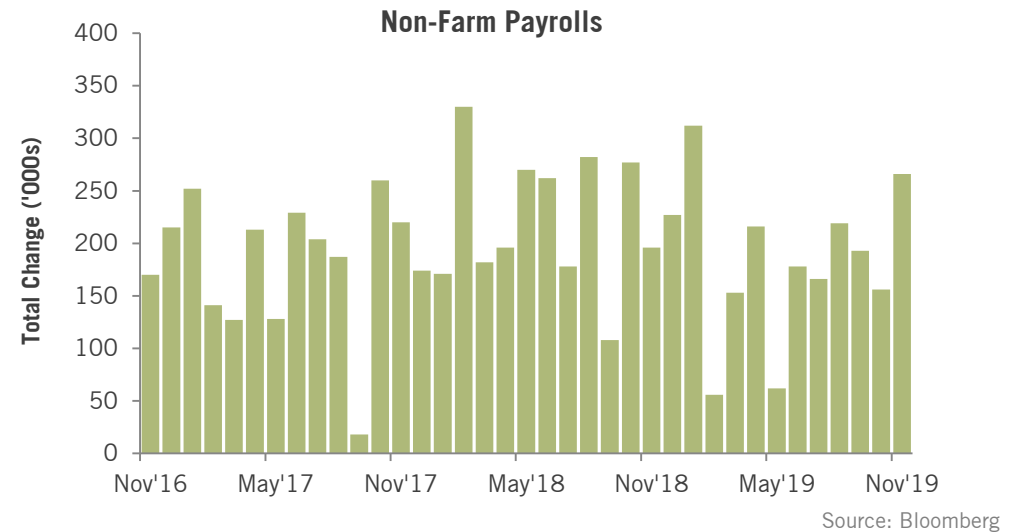


## MARKET REVIEW

### FOURTH QUARTER 2019

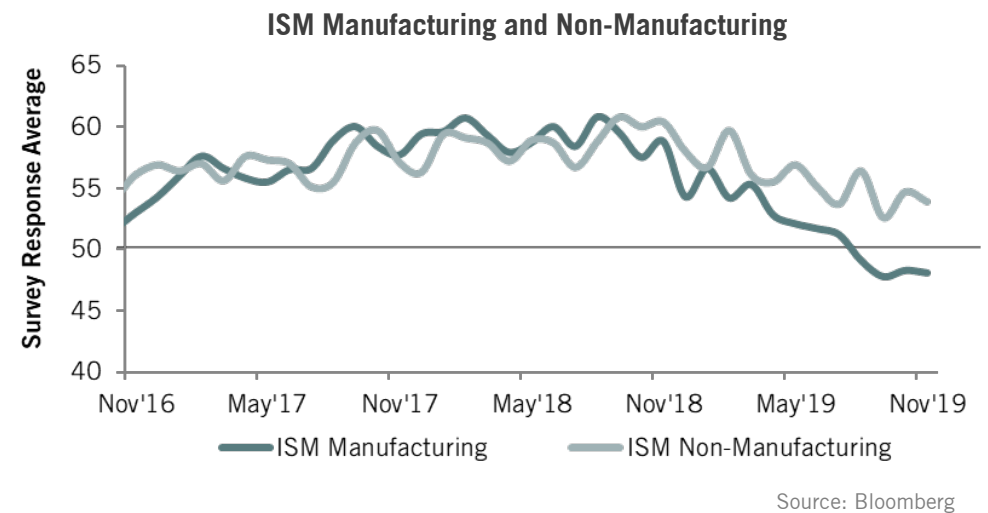
#### GROWTH HELD STEADY IN 3Q WITH A HEALTHY CONSUMER...

- U.S. GDP growth came in stronger than expected at 2.1% annualized in the third quarter. Buoyant consumer spending continued to offset flagging business activity; however, the margin of this offset was somewhat less than at mid-year.
- Personal consumption growth of 3.2% moderated slightly while retail sales have slowed considerably since peaking in mid-summer.
- The unemployment rate remained at a 50-year low of 3.5% in November, and job creation accelerated during the fourth quarter, easing concerns that slowness in business activity would eventually lead to weakness in the labor market.
- Lower mortgage rates have driven a flurry of robust housing activity since the middle of the third quarter. While some of this is base effect related, the economic impact of renewed housing activity is a positive.



#### ...WHILE BUSINESSES CONTINUED TO STRUGGLE

- On the business side, data releases continued to highlight a flagging sector, particularly in manufacturing.
- The December ISM Manufacturing Index reading slipped further into contractionary territory to 47.2, another post-financial crisis low point. The ISM Non-Manufacturing and Composite Indices have remained expansionary, further highlighting the weakness in manufacturing.
- Although growth is expected to slow further in 4Q – forecasts are now calling for GDP in the 1.5% - 2.0% range – the lagged effects of supportive monetary policy and the potential for a trade war cease-fire have set the stage for increasing business output in the quarters ahead.



The information contained herein reflects the views of Galliard Capital Management, Inc. & sources believed to be reliable by Galliard as of the date of publication. The views expressed here may change at any time subsequent to the date of publication. This publication is for informational purposes only. For institutional investor use only.

# MARKET REVIEW

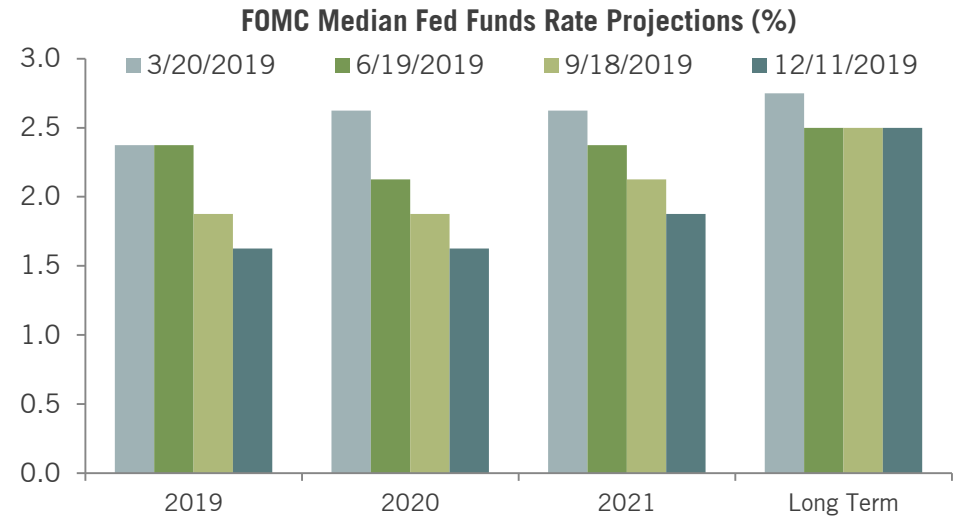
## FOURTH QUARTER 2019

### SUPPORTIVE MONETARY POLICY AND TRADE WAR DEAL...

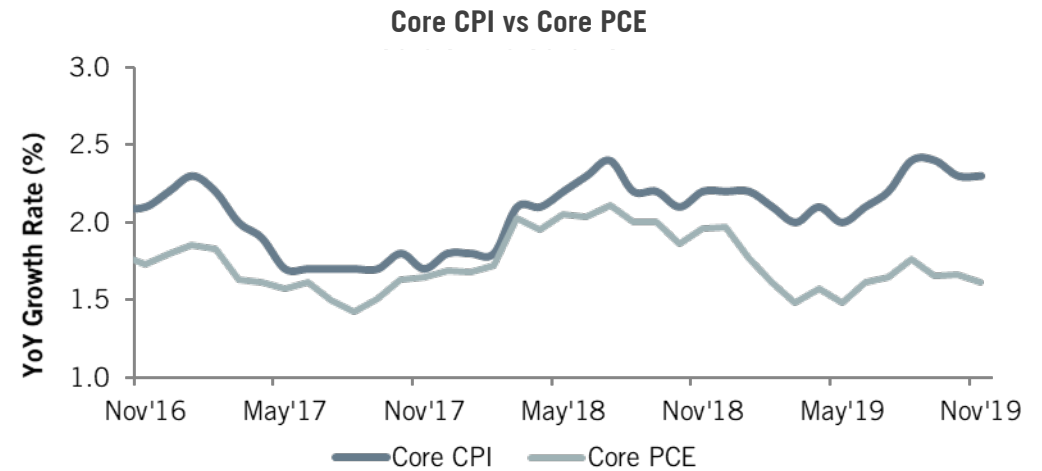
- As expected, the Fed delivered a third consecutive 25 bps interest rate cut in October. However, the post-meeting message strongly suggested that a pause in further policy accommodation was in order given resilience in broader economic data.
- At the December meeting, the Fed unanimously voted to keep policy rates unchanged, cementing the idea that the series of “mid-cycle adjustments” had come to an end.
- On the trade policy front, the U.S. and China have agreed to a Phase I trade deal, expected to be signed in mid-January. The deal reportedly includes a roll-back of some existing tariffs, a hold on new tariffs scheduled for December, and a promise of increased Chinese purchases of U.S. agricultural products.

### ...REDUCED DOWNSIDE RISKS TO THE ECONOMY

- With the economy on firmer footing than in August and September, the Fed has some breathing room to be patient. Benign inflation measures and subdued inflation expectations also give the Fed room to keep rates low: core PCE, the Fed’s preferred inflation measure, fell to 1.6% annualized in November from a high of 1.8% in August.
- The market perceives a very low probability of monetary policy action in the year ahead; however, an asymmetric easing bias exists with the hurdle for raising rates being considerably higher than for cutting rates.
- The economic significance of the recent trade deal is minimal; however, it signals a less volatile negotiation between the U.S. and China, at least for the time being, which could have a positive impact on business sentiment.



Source: Federal Reserve, Bloomberg



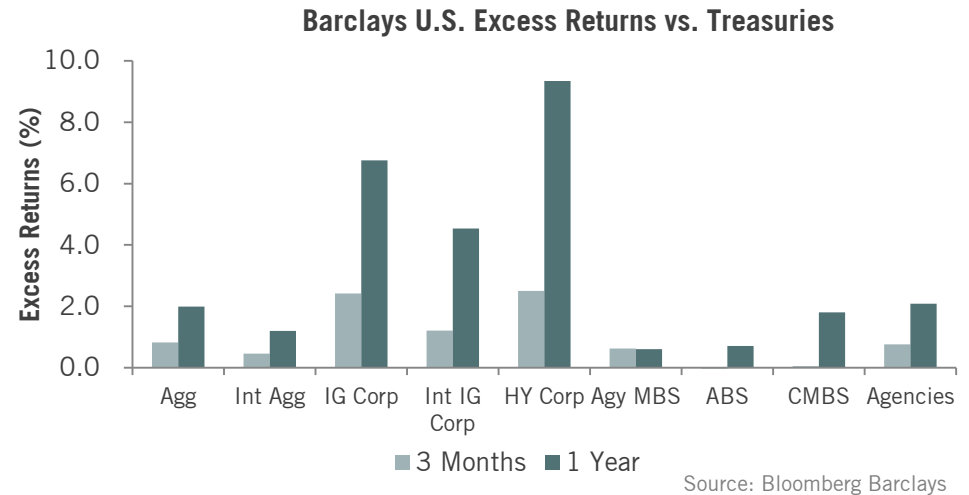
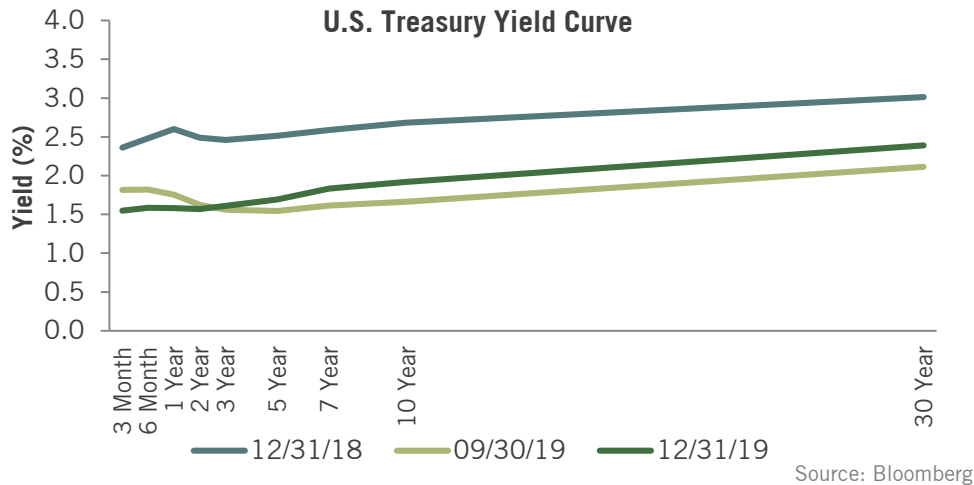
Source: Bloomberg

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# MARKET REVIEW

## FOURTH QUARTER 2019

### YIELD CURVE STEEPENS DURING THE QUARTER, MOST NON-TREASURY SECTORS OUTPERFORM



- Supportive monetary policy since last summer and recent progress on the trade war with China have reduced downside risks to the broader economy. As a result, interest rates have come off their lows and both the 2s-10s and 3mo-10yr inversions reversed early in the quarter.
- Overall, interest rates increased across intermediate and longer maturities during the quarter, with 10-year rates ending at roughly 1.90% and 30-year rates finishing close to 2.40%. Shorter rates moved lower with the Fed's October rate cut.
- Most spread sectors outperformed like-duration Treasuries during the fourth quarter, led by Corporate bonds. Long Corporates meaningfully outperformed intermediate and shorter maturities, while BBB and crossover/high yield names continued to outperform higher quality bonds.
- Corporate valuations reached 2019 tights in December as new issue supply underwhelmed expectations for the month (\$18.9 billion vs. \$25 billion). For the year, IG issuance was down modestly versus 2018.
- Agency MBS had a nice turnaround from an excess return standpoint, outperforming like-duration Treasuries every month since August. Accommodative monetary policy and the Phase I trade deal with China have lowered interest rate volatility expectations – as a result, Agency MBS valuations looked relatively attractive by the end of November.
- ABS generated slightly negative excess returns for the quarter as the rally in swap spreads witnessed since summer 2018 reversed. Notably, 2-3 year swap spreads are 10 bps wider since the end of the third quarter. ABS new issue supply was \$237 billion in 2019, basically flat versus 2018.
- Swap spread widening also impacted CMBS, but the sector modestly outperformed like-duration Treasuries for the quarter; CMBS was the best performing securitized sector for the year. Total private label CMBS supply hit \$97 billion in 2019, a 23% increase from the prior year; more than half came in the single-asset/single-borrower space (SASB).

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## APPENDIX - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2019

### CALENDAR YEAR INVESTMENT PERFORMANCE

	2015	2016	2017	2018	2019
Portfolio (before inv. mgmt. fees) <sup>1</sup>	3.60	3.15	2.81	2.94	3.01
Portfolio (net of all fees - NAV level) <sup>2</sup>	3.38	2.93	2.60	2.73	2.82
3 Year Constant Maturity Treasury	1.03	1.01	1.58	2.63	1.94
<b>Value Added (before inv. mgmt. fees)<sup>3</sup></b>	<b>2.57</b>	<b>2.15</b>	<b>1.24</b>	<b>0.31</b>	<b>1.07</b>

### MARKET INDICES

ICE BofAML U.S. 3 Month Treasury Bill	0.05	0.33	0.86	1.87	2.28
Consumer Price Index	0.73	2.07	2.11	1.67	2.41

### GUIDELINE COMPLIANCE

We have not become aware of any investment guideline compliance issues occurring in the portfolio during the quarter.

1: Returns are net of book value contract fees only.

2: Returns are net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, and plan administrative reimbursement.

3: May not add due to rounding.

## APPENDIX - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2019

### TOTAL ANNUAL FUND OPERATING EXPENSES

Total Annual Operating Expenses are deducted directly from the Fund's net asset value and reduce the investment option's rate of return.

Expense	Expense Ratio 12/31/19	Per \$1000
Investment Management Fees paid to Galliard	0.132%	\$1.32
Investment Management fees paid to Non-Affiliated Investment Advisors	None	None
Investment Contract Fees* <sup>1</sup>	0.160%	\$1.60
Acquired Fund Fees <sup>2</sup>	0.060%	\$0.60
-Investment Contract Fees	None	None
-Other Acquired Fund Fees and Non-Affiliated Investment Management Fees paid to Non-Affiliated Investment Advisors <sup>3</sup>	0.060%	\$0.60
12b-1 Distribution Fee	None	None
Other Expenses	None	None
<b>Total Annual Fund Operating Expenses<sup>4</sup></b>	<b>0.352%</b>	<b>\$3.52</b>

\*Changes have occurred to the fee schedule structure since the prior period. Please contact your Galliard representative if you have additional questions.

- 1: These are fees paid to create and maintain the investments used by a stable value fund.
- 2: These are fees borne indirectly by the Fund when it acquires an interest in another fund which pays its own separate fees.
- 3: Includes audit fees for the cost of producing a report by a qualified auditor.
- 4: Total Annual Fund Operating Expenses are reflected daily in the Fund's net asset value (NAV).

Excluding STIF or money market allocations, non-affiliated investment advisors include Dodge & Cox , Jennison Assoc., Payden & Rygel.