



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

FOURTH QUARTER 2021 PORTFOLIO REVIEW

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

Fourth Quarter 2021

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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.*

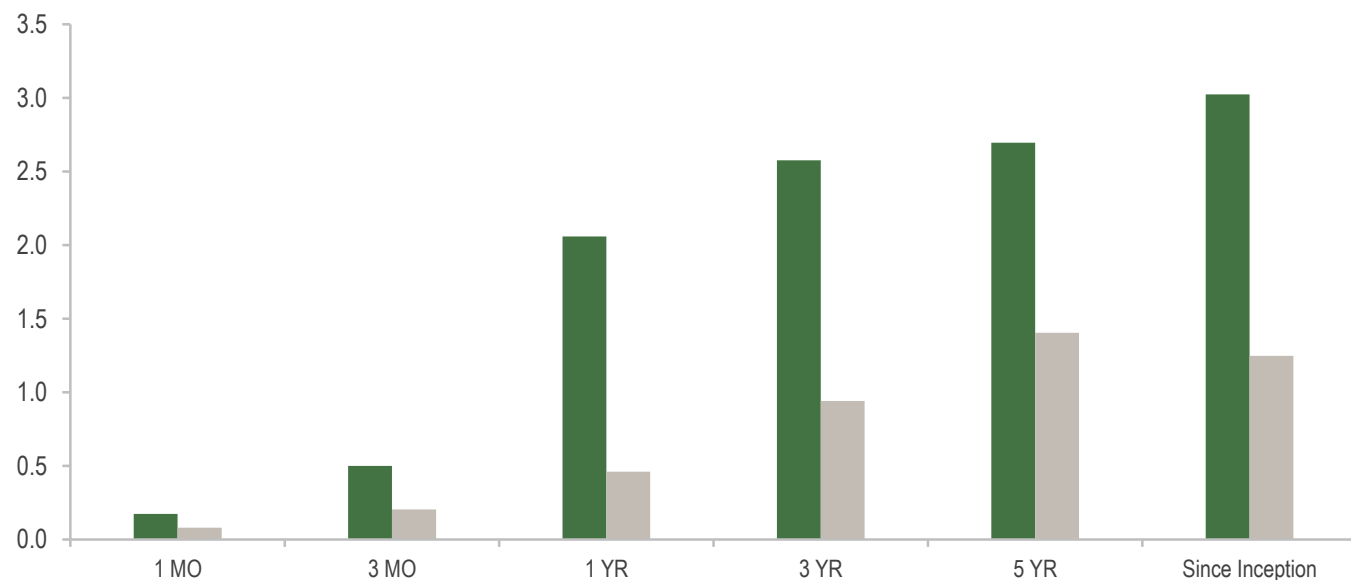
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## ANNUALIZED INVESTMENT PERFORMANCE AS OF 12/31/21<sup>1</sup>



	1 Mo.	3 Mo.	1 Yr.	3 Yr.	5 Yr.	Since Inception <sup>4</sup>
■ Portfolio (before inv. mgmt. fees) <sup>2</sup>	0.17	0.50	2.06	2.58	2.70	3.02
■ Portfolio (net of all fees - NAV level) <sup>3</sup>	0.16	0.45	1.88	2.39	2.50	2.82
■ 3 Year Constant Maturity Treasury Yield	0.08	0.20	0.46	0.94	1.40	1.25
<b>Value Added (before inv. mgmt. fees)<sup>5</sup></b>	<b>0.09</b>	<b>0.30</b>	<b>1.60</b>	<b>1.64</b>	<b>1.29</b>	<b>1.78</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.

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Fourth Quarter 2021

## CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

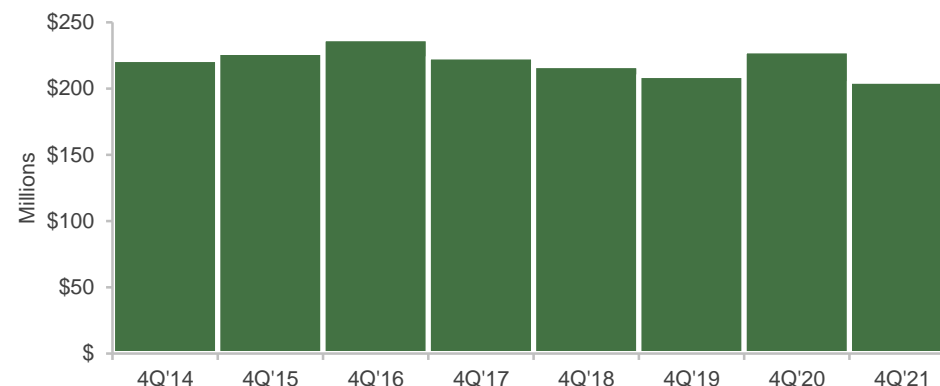
### ACCOUNT SUMMARY

<b>Benchmark</b>	3 Year Constant Maturity Treasury Yield
<b>Galliard Inception Date</b>	January 6, 2014
<b>Net Asset Value</b>	\$205,506,996

### PORTFOLIO CHARACTERISTICS

	Portfolio 9/30/21	Portfolio 12/31/21
<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>	1.79%	1.76%
<b>Yield to Maturity</b>	0.99%	1.32%
<b>Effective Duration</b>	3.04 years	3.01 years
<b>Market/Book Value Ratio</b>	103.11%	102.10%

### HISTORICAL FUND ASSETS



### PORTFOLIO DISTRIBUTION

	% Portfolio 9/30/21	% Portfolio 12/31/21
<b>Liquidity Buffer: Cash &amp; Equivalents<sup>4</sup></b>	2.1	2.2
<b>Short Portfolio</b>	40.4	40.3
<b>Intermediate Portfolio</b>	57.5	57.5
<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.

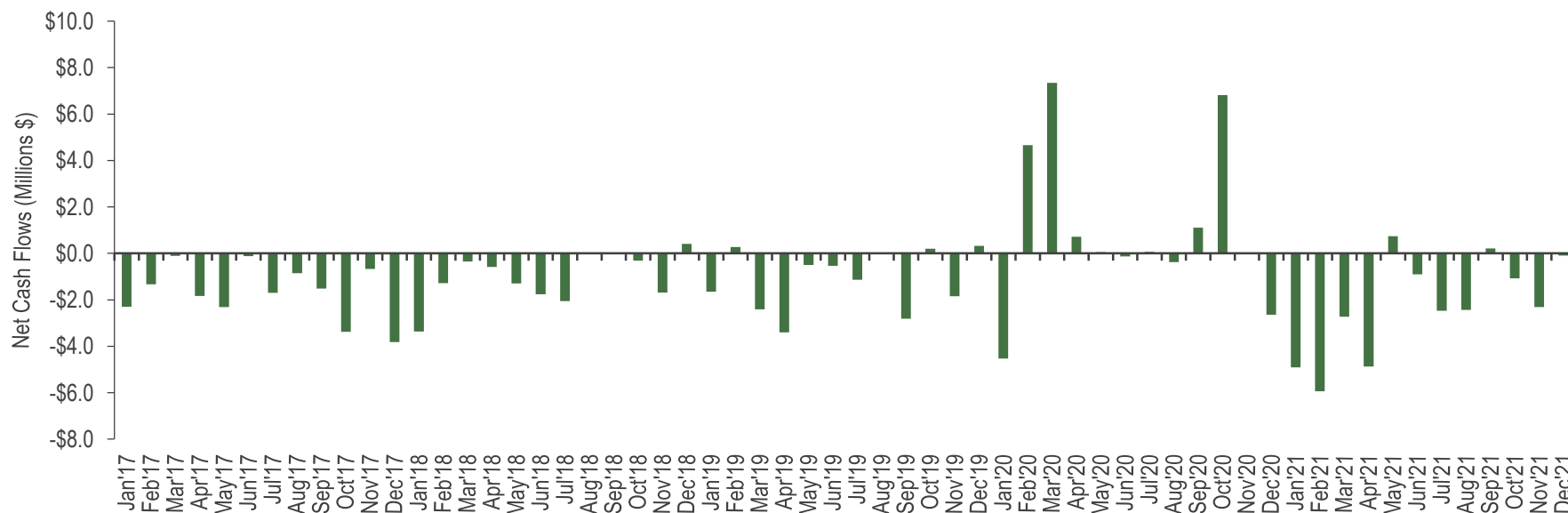
4: Includes Receivables and Payables.

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

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

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## HISTORICAL CASHFLOWS



	2017	2018	2019	2020	1Q'21	2Q'21	3Q'21	4Q'21	2021 YTD
Beginning Assets	\$237.6	\$223.7	\$217.3	\$209.8	\$228.3	\$215.8	\$211.8	\$208.0	\$228.3
Net Cash Flow (\$) <sup>1</sup>	-\$19.9	-\$12.2	-\$13.4	\$13.1	-\$13.6	-\$5.0	-\$4.7	-\$3.5	-\$26.7
Net Cash Flow (%)	-8.37%	-5.47%	-6.18%	6.25%	-5.94%	-2.33%	-2.21%	-1.66%	-11.71%
Estimated Investment Earnings	\$5.9	\$5.9	\$5.9	\$5.4	\$1.1	\$1.0	\$0.9	\$0.9	\$4.0
Ending Assets <sup>2</sup>	\$223.7	\$217.3	\$209.8	\$228.3	\$215.8	\$211.8	\$208.0	\$205.5	\$205.5

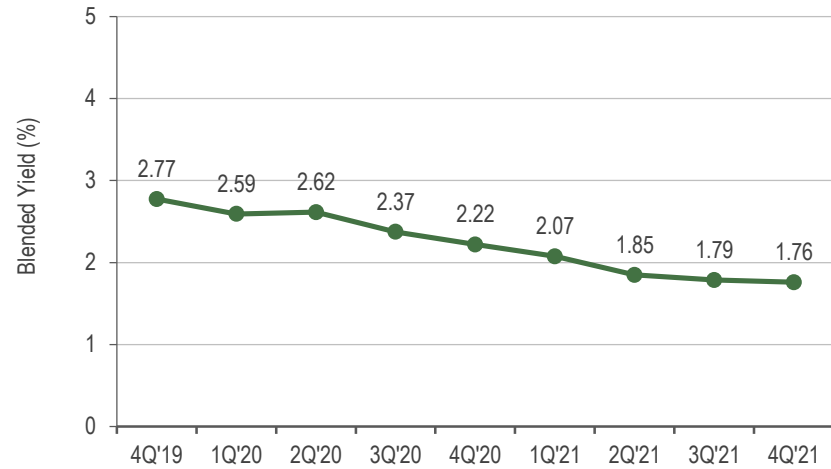
1: Contributions, Withdrawals and Investment Transfers

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

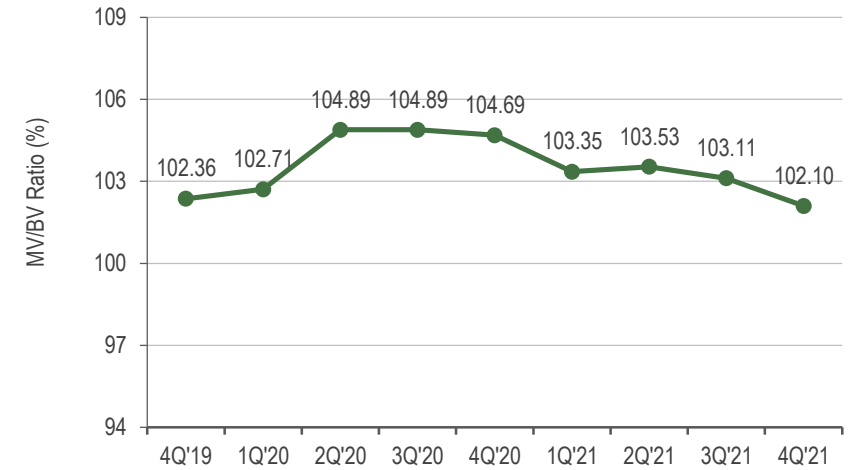
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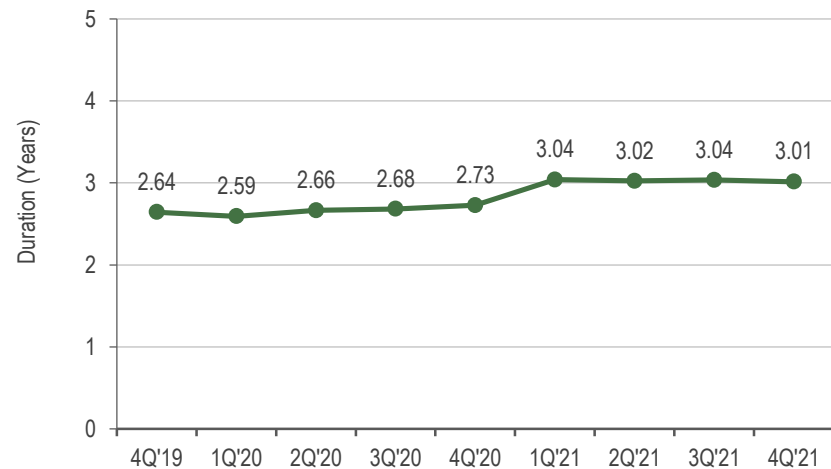
### HISTORICAL BLENDED YIELD<sup>1</sup>



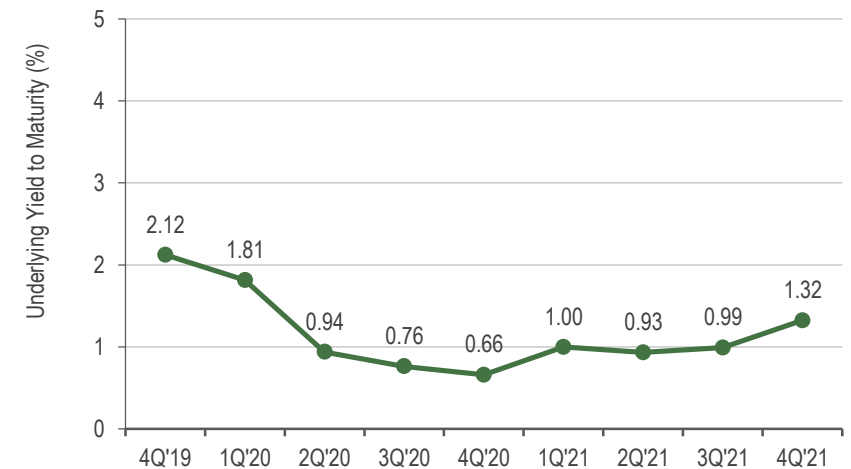
### HISTORICAL MARKET VALUE TO BOOK VALUE RATIO



### 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>

	<b>Contract Type<sup>2</sup></b>	<b>% Portfolio 9/30/21</b>	<b>% Portfolio 12/31/21</b>	<b>Rating 9/30/21</b>	<b>Rating 12/31/21</b>	<b>Wrap fees (bps) 12/31/21</b>
American General Life Ins. Co.	SBIC	23.2	23.2	A+	A+	15
Massachusetts Mutual Life Ins. Co.	SBIC	17.6	17.6	AA+	AA+	15
Nationwide Life Ins. Co.	SBIC	13.1	13.1	A+	A+	15
Prudential Ins. Co. of America	SBIC	21.4	21.4	AA-	AA-	15
Transamerica Life Ins. Co.	SBIC	22.5	22.5	A+	A+	15

1: 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.

2: SBIC = Security Backed Investment Contract. SAGIC = Separate Account GIC



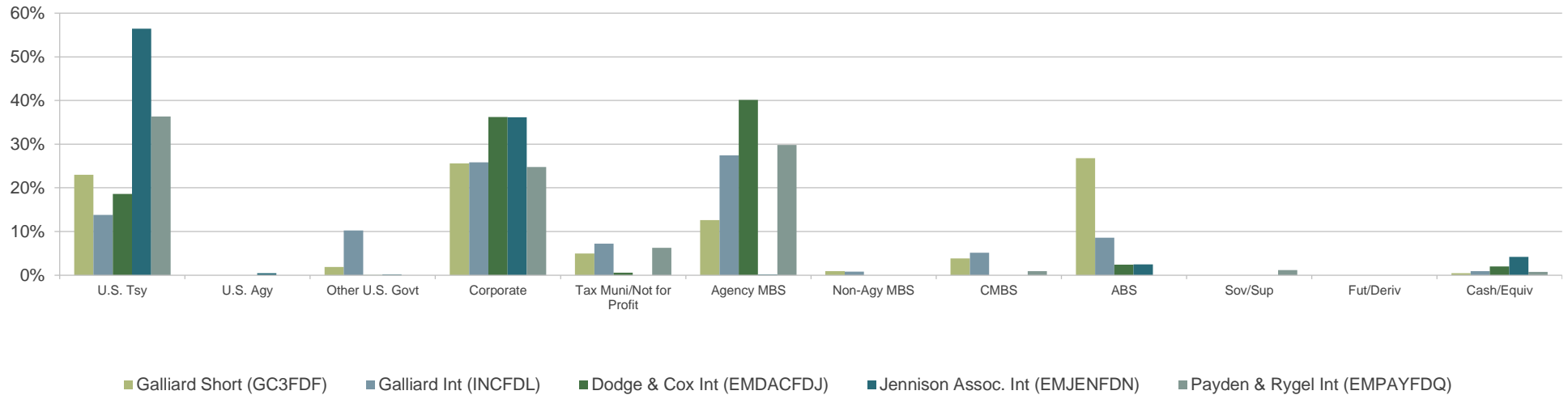
# STABLE VALUE PORTFOLIO REVIEW - CITY AND COUNTY OF DENVER DEFERRED COMPENSATION PLAN

Fourth Quarter 2021

## MANAGER DISTRIBUTION

	Strategy	Benchmark	% of Portfolio 9/30/21	% of Portfolio 12/31/21
Liquidity Buffer: Cash & Equivalents	STIF/Money Market		2.1	2.2
Galliard	Short	Bloomberg U.S. 1-3 Year Government/Credit Bond Index	40.4	40.3
Galliard	Intermediate	Bloomberg U.S. Intermediate Aggregate Bond Index	27.6	27.6
Dodge & Cox	Intermediate	Bloomberg U.S. Intermediate Aggregate Bond Index	10.0	10.0
Jennison Assoc.	Intermediate	Bloomberg U.S. Intermediate Government/Credit Bond Index	9.9	9.8
Payden & Rygel	Intermediate	Bloomberg U.S. Intermediate Aggregate Bond Index	10.1	10.1
Total			100% <sup>1</sup>	100% <sup>1</sup>

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



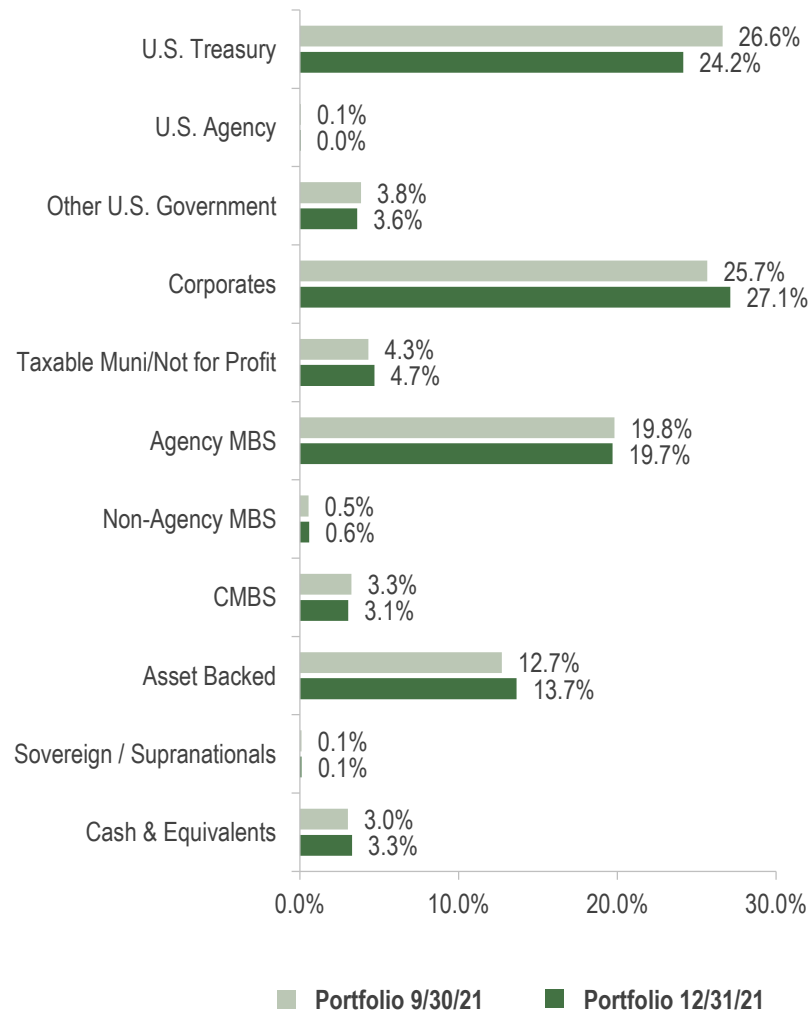
1: Total % of portfolio may not add to 100% due to rounding.

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

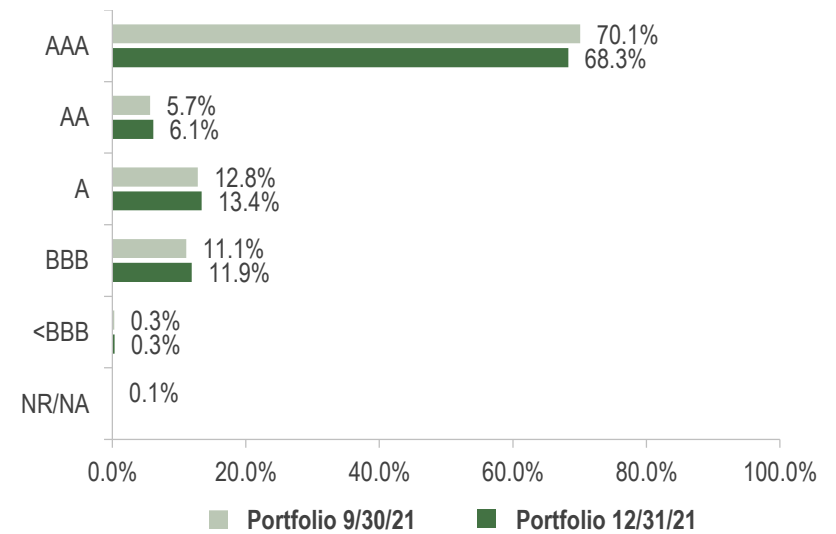
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Fourth Quarter 2021

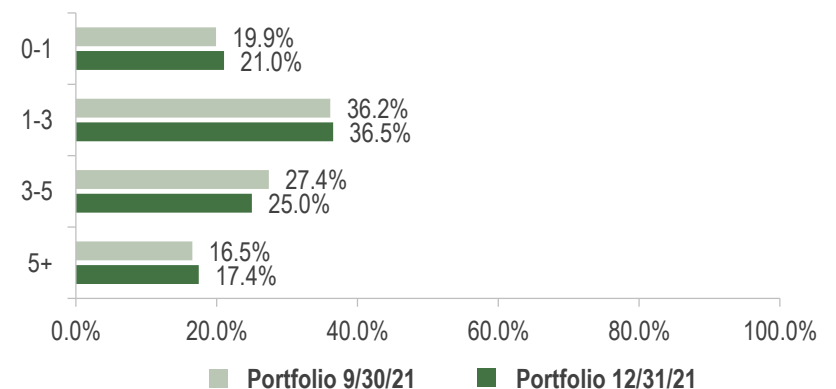
## UNDERLYING FIXED INCOME ASSET ALLOCATION<sup>1</sup>



## 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 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: 10/1/2021 - 12/31/2021

Asset ID	Security Description	Book Value	Settle Date	Galliard Composite Rating
<b>PURCHASES</b>				
9983008\$P	WF/BlackRock Short Term Investment Fund S	1,750,000	11/10/2021	AAA
9983008\$P	WF/BlackRock Short Term Investment Fund S	1,000,000	11/24/2021	AAA
9983008\$P	WF/BlackRock Short Term Investment Fund S	1,000,000	12/22/2021	AAA
<b>TOTAL PURCHASES</b>		<b>3,750,000</b>		
<b>SALES</b>				
946996HT5	American General Life Ins. Co.	415,000	11/10/2021	A+
575997KF7	Massachusetts Mutual Life Ins. Co.	314,000	11/10/2021	AA+
896994KB5	Nationwide Life Ins. Co.	232,000	11/10/2021	A+
744999SF1	Prudential Ins. Co. of America	387,000	11/10/2021	AA-
600996LC4	Transamerica Life Ins. Co.	402,000	11/10/2021	A+
946996HT5	American General Life Ins. Co.	238,000	11/24/2021	A+
575997KF7	Massachusetts Mutual Life Ins. Co.	179,000	11/24/2021	AA+
896994KB5	Nationwide Life Ins. Co.	132,000	11/24/2021	A+
744999SF1	Prudential Ins. Co. of America	221,000	11/24/2021	AA-
600996LC4	Transamerica Life Ins. Co.	230,000	11/24/2021	A+
946996HT5	American General Life Ins. Co.	238,000	12/22/2021	A+
575997KF7	Massachusetts Mutual Life Ins. Co.	179,000	12/22/2021	AA+
896994KB5	Nationwide Life Ins. Co.	132,000	12/22/2021	A+
744999SF1	Prudential Ins. Co. of America	221,000	12/22/2021	AA-
600996LC4	Transamerica Life Ins. Co.	230,000	12/22/2021	A+
<b>TOTAL SALES</b>		<b>3,750,000</b>		



# MARKET REVIEW

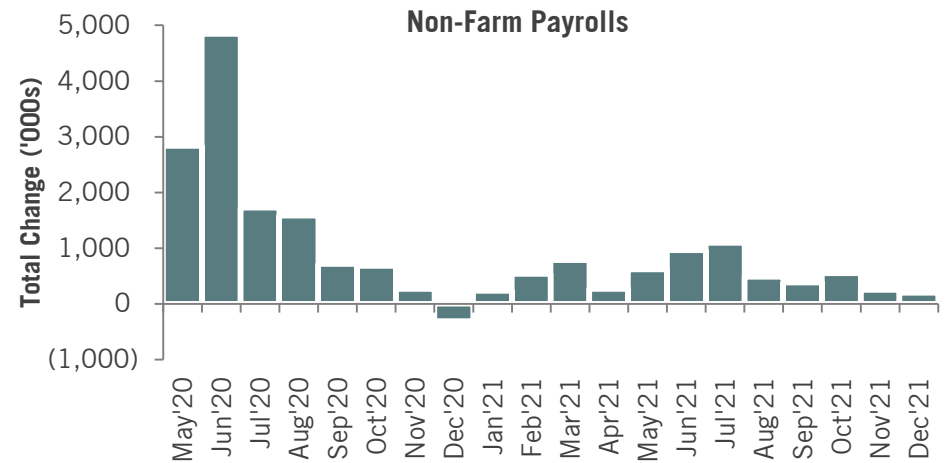
## FOURTH QUARTER 2021

### DELTA GIVES WAY TO OMICRON...

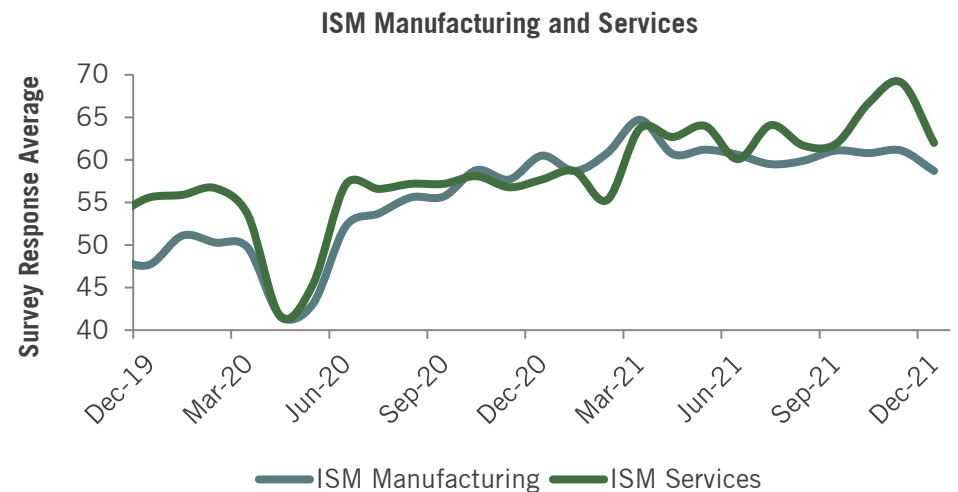
- At the time of our last quarterly write-up, the wave of COVID-19 delta variant infections was fading, and the biggest market concern revolved around ongoing supply chain bottlenecks. Fast forward to the end of the year, the highly contagious omicron variant has spread like wildfire around the globe. Like delta, omicron serves as another reminder of the uncertainty involved with a global pandemic.
- GDP grew at a 2.3% q/q annualized pace in 3Q21, underwhelming expectations that had been revised lower throughout the back half of the year. The delta variant was clearly a drag on consumption; however, supply chain bottlenecks, labor market constraints, inflation concerns, and the fading impact of Government stimulus were significant influences as well.
- Headwinds persist as inflation remains elevated and it will take some time for shortages to abate. Confidence intervals remain wide, but currently 4Q GDP is expected to be 6.0%-6.5% q/q annualized while full year 2021 GDP is expected to be 5.5%-6.0%.

### ...AND SHORTAGES TEMPER ECONOMIC RECOVERY

- Job growth has been lackluster, mostly missing expectations. Regardless, unemployment has ground down to 3.9%. Despite an unprecedented 10-11 million job openings over the past six months, labor force participation and total employment remain below pre-pandemic levels.
- Earlier in the fall, consumer spending held up well as evidenced by month-over-month changes in retail sales of 0.7% and 1.8% in September and October respectively, but then November sales rose only 0.3% versus expectations of 0.8% with supply chain issues to blame.
- Business activity continues to be strong; however, supply chain issues and labor shortages remain problematic. After hovering near the highest level in the past 20 years for most of 2021, the ISM Manufacturing PMI dipped to 58.7 in December from 61.1 in November. Meanwhile, the ISM Services PMI reading of 69.1 in November marked the highest point in the series' history before falling back to a still-elevated 62 in December.



Source: Bloomberg



Source: Bloomberg

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# MARKET REVIEW

## FOURTH QUARTER 2021

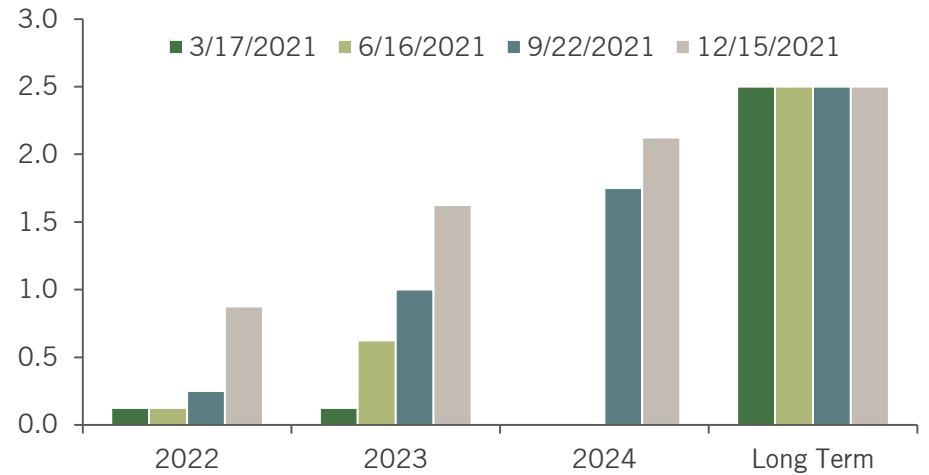
### FED TAKES ACTION...

- As expected, the Fed kept rates unchanged at its November and December meetings, and started QE tapering in November. However, at its December meeting, after the highest inflation prints in nearly 40 years, the Fed decided to speed up its taper. The accelerated schedule will conclude in March, three months earlier than originally expected.
- The market now expects three interest rate hikes in 2022, to begin soon after the taper is complete. Indeed, the most recent Summary of Economic Projections (SEP), released at the December meeting, now indicates that 17 of 18 FOMC members project at least two rate increases in 2022, with 12 of 18 members projecting at least three rate increases over the next year.
- The debt ceiling was successfully increased by \$2.5 trillion in mid-December, avoiding a Government default. Congress successfully passed the \$1.2 trillion Infrastructure Investment & Jobs Act in November, while the \$2.2 trillion Build Back Better Act stalled out in December and still needs Senate approval.

### ...AS INFLATION NO LONGER TRANSITORY

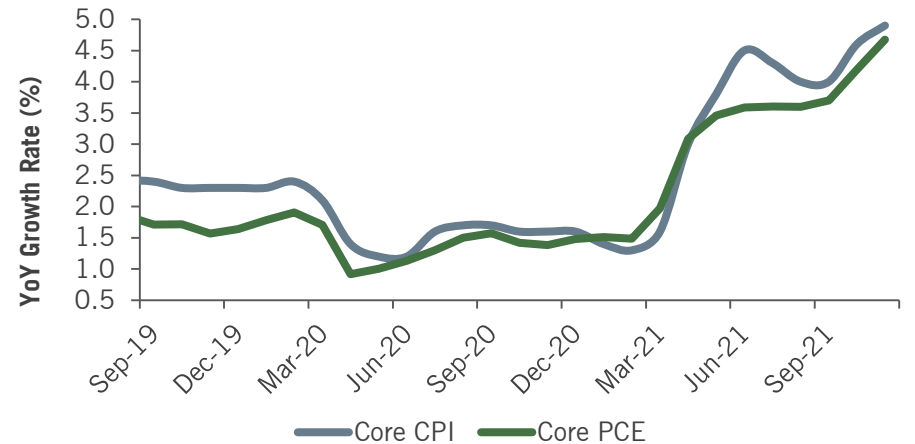
- Headline CPI increased by 6.8% y/y in November, the highest rate of inflation since 1982, while core CPI increased by 4.9% y/y, the highest since 1991. Similarly, headline PCE increased by 5.7% y/y in November and core PCE increased by 4.7% y/y, the highest readings since 1982 and 1983 respectively. On a month-over-month basis, all of these measures are near pandemic highs after briefly dipping lower during 3Q.
- This reversal of monthly measures and the highest year-over-year inflation readings in ~40 years suggest that core inflation may be stickier than previously expected by the Fed. Indeed, in his Congressional testimony at the end of November, Fed Chair Powell stated, “it’s probably a good time to retire the word transitory,” and the reference was subsequently removed from the December FOMC statement.
- Although the 5-year break-even inflation rate is elevated at almost 3%, the 5Y-5Y forward break-even inflation rate remains firmly anchored at 2.25%, suggesting that the market believes the Fed will act aggressively enough to keep inflation at bay.

FOMC Median Fed Funds Rate Projections (%)



Source: Federal Reserve

Core CPI vs Core PCE



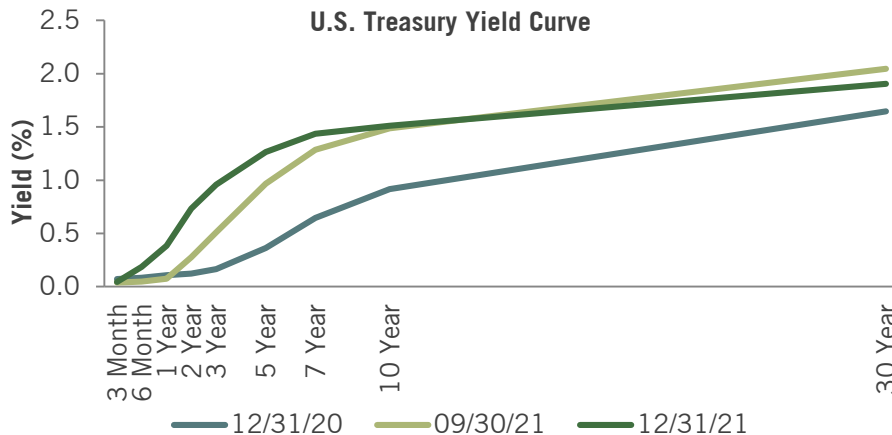
Source: Bloomberg

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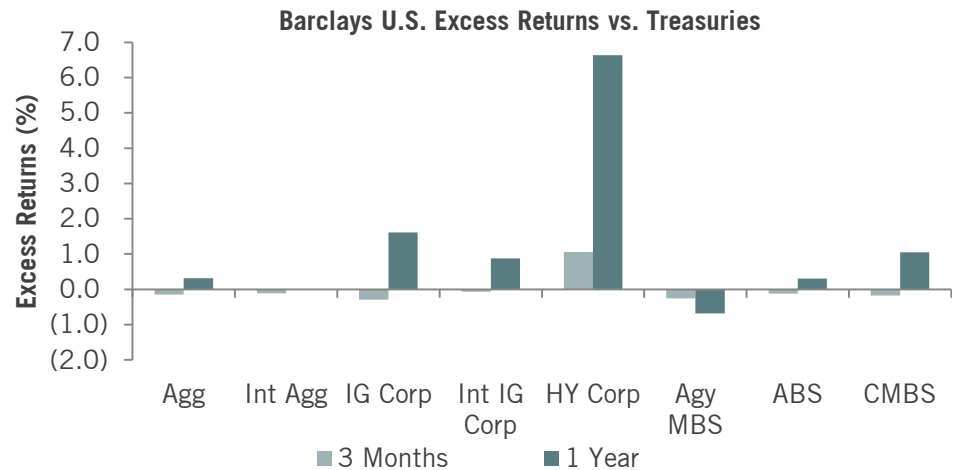
# MARKET REVIEW

## FOURTH QUARTER 2021

### YIELD CURVE FLATTENS ON RATE HIKE EXPECTATIONS, NON-TREASURY SECTOR PERFORMANCE MUTED



Source: Bloomberg



Source: Bloomberg

- As the market re-priced inflation fundamentals and a hawkish monetary policy response, the yield curve reshaped considerably during the quarter. The 2-year Treasury yield increased by 45 bps (0.45%), reflecting expected rate increases, while the 10-year Treasury yield increased by only a couple of bps, such that 2s vs. 10s flattened by 43 bps. Over the year, the shape of the yield curve was remarkably unchanged (2s vs. 10s flatter by only 6 bps). Nominal Treasury yields moved higher but real yields were virtually unchanged, leaving break-even inflation wider for the year.
- Most major fixed income spread sectors slightly underperformed like-duration Treasuries during the quarter, with the exception of high yield Corporates which outperformed. Within investment grade Corporates, longer bonds underperformed short/intermediate maturities, while A/BBB issuers modestly lagged the highest quality names.
- Corporate spreads widened modestly across maturities during the quarter, roughly moving back to beginning of year levels, but remain historically tight overall. 2021 new issue supply was very strong, ~\$1.5 trillion gross (\$420 billion net). Expectations for 2022 are similar with current estimates ranging from \$1.4-1.6 trillion gross/\$525-650 billion net (BMO, JPM).
- The Agency MBS sector gave way to rapidly developing Fed policy during the fourth quarter, generating negative excess returns versus like-duration Treasuries. Home prices charged higher by 18.4% y/y in October, marking 11 straight months of double digit year-over-year growth. Notably, however, the month-over-month growth rate slowed as the year progressed.
- ABS also underperformed Treasuries in 4Q, as the Fed pivot put pressure on short spreads. At ~\$270 billion, ABS new supply in 2021 was the highest on record; however, it was primarily the result of supply in 2020 getting pushed out (Citi). Averaging ABS new issue over the past two years gets ~\$230 billion per year, which is in alignment with ABS new issue in the three years leading up to the pandemic. Consumer credit performance continues to be strong, despite the expiration of pandemic related assistance programs.
- Consistent with other securitized sectors, CMBS underperformed during the quarter. The same cast of characters are to blame: shifting Fed policy and swap spread widening. CMBS conduit supply limped along at only \$30 billion for the year, while Single-Asset/Single Borrower (SASB) supply exploded to \$81 billion (BofA). While overall CMBS credit performance continues to improve, the omicron variant of COVID-19 is forcing yet another delay of an elusive “return to normal.”

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

Fourth Quarter 2021

### CALENDAR YEAR INVESTMENT PERFORMANCE

	2017	2018	2019	2020	2021
Portfolio (before inv. mgmt. fees) <sup>1</sup>	2.81	2.94	3.01	2.66	2.06
Portfolio (net of all fees - NAV level) <sup>2</sup>	2.60	2.73	2.82	2.48	1.88
3 Year Constant Maturity Treasury Yield	1.58	2.63	1.94	0.43	0.46
<b>Value Added (before inv. mgmt. fees)<sup>3</sup></b>	<b>1.24</b>	<b>0.31</b>	<b>1.07</b>	<b>2.24</b>	<b>1.60</b>

### MARKET INDICES

ICE BofA U.S. 3 Month Treasury Bill	0.86	1.87	2.28	0.67	0.05
Consumer Price Index	2.11	1.67	2.29	1.36	2.66

### 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 2021

### 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 12/31/21	Per \$1000
Investment Management Fees paid to Galliard	0.124%	\$1.24
Investment Management fees paid to Non-Affiliated Investment Advisors	None	None
Investment Contract Fees* <sup>1</sup>	0.147%	\$1.47
Acquired Fund Fees <sup>2</sup>	0.056%	\$0.56
-Investment Contract Fees	None	None
-Other Acquired Fund Fees and Non-Affiliated Investment Management Fees paid to Non-Affiliated Investment Advisors <sup>3</sup>	0.056%	\$0.56
12b-1 Distribution Fee	None	None
Other Expenses	None	None
<b>Total Annual Fund Operating Expenses<sup>4</sup></b>	<b>0.326%</b>	<b>\$3.26</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.