

THE STATE OF DELAWARE  
1<sup>ST</sup> QUARTER, 2022

**529 PROGRAM**  
**QUARTERLY REVIEW**

**CAPTRUST**  
40 Wall Street, 56th Floor  
New York, NY 10005

**The State of Delaware**

1<sup>st</sup> Quarter, 2022 Quarterly Review

prepared by:

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### Plan Information

Total plan assets as of March 31, 2022, were \$710.1 million. Approximately \$501.9 million (71% of total plan assets) are allocated to an Age-Based option, with approximately \$208.1 million (29% of total assets) allocated to static portfolios, individual funds, or a bank deposit portfolio.

- **Active Age-Based** – \$371.5 million (52% of total assets)
- **Blend Age-Based** – \$11.6 million (2% of total assets)
- **Index Age-Based** – \$118.8 million (17% of total assets)

### Peer Group Review

The annual peer group rankings were revised as of 09.30.2021. Peer group comparisons are now compared to all glidepaths within Silver and Gold rated Morningstar plans. Compared to the new peer groups, Fidelity has slightly higher equity exposures within both the beginning and end of its glidepath, with lower-than-average values during the core saving years.

### Underlying Holding Review

A benchmark composite is created for each of the three Age-Based options. This composite benchmark mimics the asset allocation for the given quarter and weighs the aggregate performance for each underlying fund accordingly.

- **Active Age-Based** option – 19 out of 32 funds (59%) outperformed their benchmark for the quarter.
- **Blend Age-Based** option – 19 out of 32 funds (59%) outperformed their benchmark for the quarter.
- **Index Age-Based** option – 4 out of 9 funds (44%) outperformed their benchmark for the quarter.



### Portfolio Positioning Review

- 2022's first quarter was dominated by the impact of the Ukraine-Russian conflict, as global equity markets sold off amidst rising energy prices, geopolitical instability, and the continued impact of COVID 19 on supply chain logistics. **The Fidelity Age-Based series was adversely impacted by its overweight towards non-US markets, which resulted in underperformance for the quarter versus peers and its benchmark.**
- The escalation of Russia's invasion into Ukraine took the world economy by surprise and has significantly reduced growth expectations both domestically and abroad for 2022. Coupling this event with continued supply chain disruptions, inflation remains at the forefront of most investors concerns. **Fidelity remains overweight towards inflation sensitive assets, which was a positive contributor to performance during the quarter. Both TIPs and Commodities exposure remain above benchmark weights.**
- Fidelity continues to see non-US market valuations as attractive, even as they sold off more heavily the US equities during the quarter. The time horizon for these allocation decisions remains in the 3–5-year timeframe. **Currently their investment team sees too much pessimism for EM markets, and too much optimism for US markets after the previous decade of persistent US market outperformance.**
- While Fidelity remains focused on non-US valuations, **their allocations have shifted slightly over the past year; with part of their allocation towards EM being redirected towards non-US developed.** This change did not impact overall portfolio beta, and they remain doubtful of the US market's ability to outperform in the short-to-mid term time frame, given the FED's expected interest rate hikes during 2022 and into 2023.
- **Fidelity also remains underweight nominal bonds**, as the expected yield on US issued bonds continues to lag in real returns against inflation.



### Program Design Update

- Fidelity is offering a new ESG option for 529 account owners, the Fidelity® Sustainable Multi Asset Fund Discussion. Our recommendation is to accept this new fund offering, as we continue to see an increase in adoption for ESG investments.
- The majority of 529 Silver and Gold rated plans currently offer at least one ESG option. Fidelity will be one of the only plans, however, to offer a multi-asset ESG portfolio (currently California offers an ESG age-based option). We believe this will be an additive factor during Morningstar's annual program review.
- The portfolio is a 70% Equity and 30% Fixed income offering, with 38% of the portfolio being allocated towards active management, and 62% directed towards passive investing.
- The rise in ESG investing should be expected to extend itself even further into 529 programs during 2022 and beyond. A report from Reuters at the end of 2021 showed the extensive growth this type of investing continues to see.
  - *"A record \$649 billion poured into ESG-focused funds worldwide through Nov. 30, up from the \$542 billion and \$285 billion that flowed into these funds in 2020 and 2019, respectively, the latest Refinitiv Lipper data shows. ESG funds now account for 10% of worldwide fund assets."*

Source: <https://www.reuters.com/markets/us/how-2021-became-year-esg-investing-2021-12-23/>



# AGE-BASED ANALYSIS

Period Ending 03.31.22 | Q1 22

Fund Series	2039	2036	2033	2030	2027	2024	2021	College
Delaware College Investment Plan	94%	81%	68%	54%	41%	28%	15%	15%

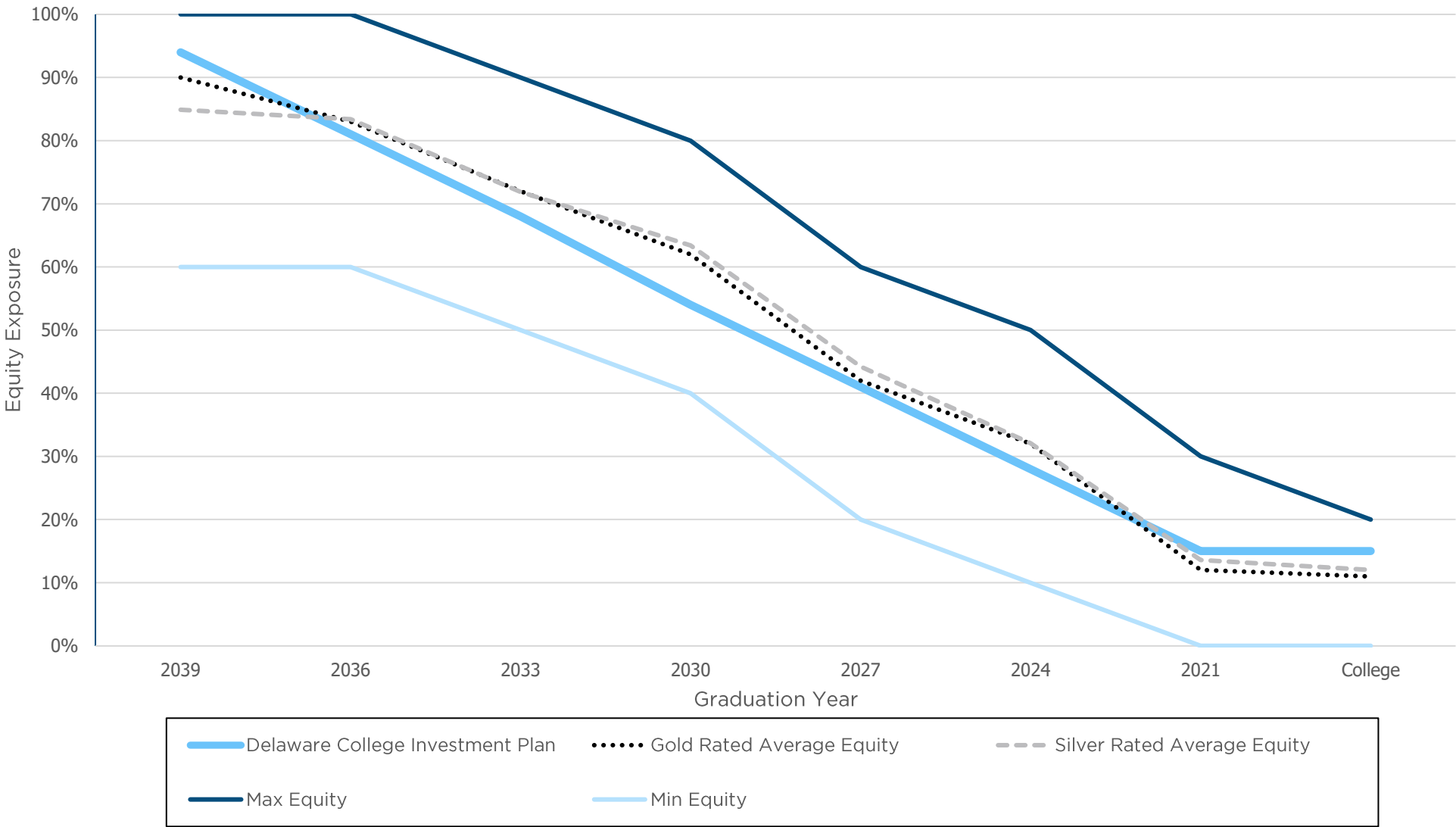
<b>Gold Rated Average Equity</b>	<b>90%</b>	<b>83%</b>	<b>72%</b>	<b>62%</b>	<b>42%</b>	<b>32%</b>	<b>12%</b>	<b>11%</b>
Illinois Index Con.	80%	70%	60%	50%	30%	20%	0%	0%
Illinois Active Con.	80%	70%	60%	50%	30%	20%	0%	0%
Illinois Index Mod.	90%	80%	70%	60%	40%	30%	10%	10%
Illinois Active Mod.	90%	80%	70%	60%	40%	30%	10%	10%
Illinois Index Agg.	100%	90%	80%	70%	50%	40%	20%	20%
Illinois Active Agg.	100%	90%	80%	70%	50%	40%	20%	20%
Michigan	80%	80%	72%	68%	48%	36%	15%	15%
Utah - my529	100%	100%	80%	70%	50%	40%	20%	10%

<b>Silver Rated Average Equity</b>	<b>85%</b>	<b>83%</b>	<b>72%</b>	<b>63%</b>	<b>44%</b>	<b>32%</b>	<b>14%</b>	<b>12%</b>
Alaska	100%	100%	85%	70%	54%	37%	20%	20%
California (A)	80%	80%	72%	67%	47%	35%	15%	15%
California (P)	80%	80%	72%	67%	47%	35%	15%	15%
Georgia	80%	80%	72%	67%	47%	35%	15%	15%
Maryland	100%	100%	85%	70%	54%	37%	20%	20%
Minnesota	80%	80%	72%	67%	47%	35%	15%	15%
Vanguard - Progressive	95%	87%	65%	55%	30%	21%	14%	12%
Ohio	77%	69%	53%	45%	28%	19%	4%	4%
Oregon	87%	84%	76%	70%	55%	42%	5%	5%
Pennsylvania	95%	89%	68%	57%	34%	23%	14%	11%

This information is gathered from 529-program websites and other written representations as of 09.30.2021. Peer groups are rebalanced on an annual basis, underlying allocations are updated quarterly for performance data. If any of the above information differs from these updated sources, the source document supersedes the above listing. Not all series update equity exposure and other metrics on a quarterly basis.



Asset Allocations – Gold & Silver Rated Plan Averages



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### Active Age-Based Option Review

- The **Active Age-Based** option outperformed in none of its age-bands YTD versus Gold and Silver rated peers.
- A continued underweighting to US markets further detracted from relative portfolio performance during 2022. While US markets did sell off during the first quarter, they found price support during the last few weeks of March, which helped stabilize their quarterly returns. Non-US markets found no such luck, however, as Europe continues to be negatively impacted by their reliance on Russian supplied energy (roughly 50% of Europe's energy needs are supplied through Russia).
- Many peer programs, such as plans managed by Vanguard and TIAA, have restructured their age-based series towards progressive glidepaths during 2021. Along with this shift, many other programs increased their allocation to TIPs and principal preservation options more heavily in later vintages (with generally reduced equity levels as well). This has resulted in peer programs having more downside protection during market selloffs, furthering the differences in portfolio approaches between Fidelity and peers.
  - While this is a difference, our expectation is that these programs that are outperforming now will lag in the eventual market recovery. Peers such as TIAA have 50% in cash during the enrollment year portfolios, which will negatively impact their performance as equity markets bounce back.

### Blend Age-Based Option Review

- The **Blend Age-Based** option outperformed in none of its age-bands YTD versus Gold and Silver rated peers
- The blend series performs as expected between Active and Index series, performing roughly on average against both peer groups, while having fees that fall roughly in-line with other primarily actively managed strategies within the Silver peer group.

### Index Age-Based Option Review

- The **Index Age-Based** option outperformed in none of its age-bands YTD versus Gold and Silver rated peers.
- Passive outperformed both Blend and Active for the first quarter of 2022, as the simplified asset allocation approach relatively benefited performance. It also benefited from not having exposure to the active managers of the non-US equity allocations that detracted from performance for both the Active and Blend series.





## AGE-BASED ANALYSIS

Period Ending 03.31.22 | Q1 22

2039	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.84%	94%	-6.71	-	-	-
Blend Age-Based Option	0.60%	94%	-6.71	-	-	-
Index Age-Based Option	0.15%	94%	-5.84	-	-	-
Gold - Peer Group Average	0.25%	90%	-5.63	6.09	12.88	-
Silver - Peer Group Average	0.30%	89%	-5.64	2.88	12.71	-

2036	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.81%	81%	-6.26	2.47	-	-
Blend Age-Based Option	0.57%	81%	-6.48	2.59	-	-
Index Age-Based Option	0.15%	81%	-5.84	4.02	13.36	-
Gold - Peer Group Average	0.25%	83%	-5.61	5.35	11.91	-
Silver - Peer Group Average	0.30%	86%	-5.59	4.42	12.42	11.97

2033	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.77%	68%	-6.03	1.61	11.22	10.18
Blend Age-Based Option	0.55%	68%	-6.29	-	-	-
Index Age-Based Option	0.15%	68%	-5.75	2.95	10.57	9.64
Gold - Peer Group Average	0.25%	72%	-5.40	4.39	10.83	-
Silver - Peer Group Average	0.29%	73%	-5.43	3.53	11.06	11.31

2030	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.74%	54%	-5.65	0.84	9.61	8.91
Blend Age-Based Option	0.52%	54%	-5.88	-	-	-
Index Age-Based Option	0.14%	54%	-5.50	1.88	9.06	8.43
Gold - Peer Group Average	0.25%	62%	-5.27	3.54	9.77	-
Silver - Peer Group Average	0.29%	64%	-5.28	2.92	9.83	10.13

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## AGE-BASED ANALYSIS

Period Ending 03.31.22 | Q1 22

2027	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.70%	41%	-5.07	0.23	7.94	7.54
Blend Age-Based Option	0.48%	41%	-5.22	-	-	-
Index Age-Based Option	0.14%	41%	-4.98	1.07	7.49	7.15
Gold - Peer Group Average	0.24%	42%	-4.93	1.81	7.48	-
Silver - Peer Group Average	0.29%	45%	-4.87	1.52	8.17	8.76

2024	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.70%	28%	-5.07	0.23	7.94	7.54
Blend Age-Based Option	0.44%	28%	-4.39	-	-	-
Index Age-Based Option	0.14%	28%	-4.28	0.46	5.98	5.89
Gold - Peer Group Average	0.23%	32%	-4.37	1.24	6.40	-
Silver - Peer Group Average	0.26%	32%	-4.04	1.28	6.91	7.47

2021	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.61%	15%	-3.42	-0.74	4.42	4.68
Blend Age-Based Option	0.41%	15%	-3.44	-	-	-
Index Age-Based Option	0.14%	15%	-3.41	-0.20	4.29	4.51
Gold - Peer Group Average	0.20%	12%	-3.13	-0.07	3.44	-
Silver - Peer Group Average	0.21%	11%	-2.56	0.76	4.52	4.61

In-College	Net Expense	Equity (%)	YTD	1 - Year	3 - Year	5 - Year
Active Age-Based Option	0.60%	15%	-3.45	-0.80	3.88	3.79
Blend Age-Based Option	0.40%	15%	-3.48	-0.73	-	-
Index Age-Based Option	0.14%	15%	-3.42	-0.29	3.77	3.68
Gold - Peer Group Average	0.20%	11%	-3.06	-0.07	3.44	-
Silver - Peer Group Average	0.21%	13%	-2.50	0.75	4.52	4.61

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### Active Age-Based Option Review

- The **Active Age-Based** underlying mutual fund composite underperformed the composite benchmark in all 8 age-bands for Q1, with each age-band averaging underperformance of -0.26% versus the composite benchmark.
- 59% of underlying funds (19 of 32) outperformed their respective benchmarks for Q1 2022, with all funds averaging underperformance of 0.19% versus their respective benchmarks.
- The largest weighted outperformance was from Fidelity® Series Canada Fund, which has an average weighting of 1.81% in each age-band and outperformed its benchmark by 12.25%.
- The most substantial weighted underperformance came from Fidelity® Series Emerging Markets Opportunities Fund, which has an average weighting of 8.65% in each age-band and underperformed its benchmark by -5.49%.

### Blend Age-Based Option Review

- The **Blend Age-Based** underlying mutual fund composite underperformed the composite benchmark in all 8 age-bands for Q1, with each age-band averaging underperformance of -0.47% versus the composite benchmark.
- 59% of underlying funds (19 of 32) outperformed their respective benchmarks for Q1 2022, with all funds averaging outperformance of 0.04% versus their respective benchmarks.
- The largest weighted outperformance was from Fidelity® Series Canada Fund, which has an average weighting of 1.68% in each age-band and outperformed its benchmark by 12.25%.
- The most substantial weighted underperformance came from Fidelity® Series Emerging Markets Opportunities Fund, which has an average weighting of 8.65% in each age-band and underperformed its benchmark by -5.49%.

### Index Age-Based Option Review

- The **Index Age-Based** underlying mutual fund composite outperformed the composite benchmark in 3 out of 8 age-bands for Q1, with each age-band averaging underperformance of -0.07% versus the composite benchmark.
- 44% of underlying funds (4 of 9) outperformed their respective benchmarks for Q1 2022, with all funds averaging essentially the same performance as their respective benchmarks.



## BENCHMARK ANALYSIS

Period Ending 03.31.22 | Q1 22

2039	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-6.15	4.53	14.14	11.78	9.95
Active Benchmark	-5.67	4.27	12.34	10.76	9.46
Blend Age-Based Option	-6.38	4.53	13.81	11.67	9.85
Blend Benchmark	-5.47	4.42	12.40	10.86	9.47
Index Age-Based Option	-5.81	5.54	13.05	11.27	10.22
Index Benchmark	-5.60	5.82	13.14	11.32	10.25

2036	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-6.09	3.42	12.52	10.52	8.93
Active Benchmark	-5.69	3.08	10.82	9.54	8.41
Blend Age-Based Option	-6.20	3.60	12.24	10.41	8.63
Blend Benchmark	-5.43	3.52	10.99	9.70	8.45
Index Age-Based Option	-5.83	4.21	11.50	10.02	9.14
Index Benchmark	-5.67	4.45	11.58	10.07	9.17

2033	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-5.92	2.71	11.09	9.35	7.87
Active Benchmark	-5.59	2.35	9.53	8.43	7.36
Blend Age-Based Option	-6.02	2.73	10.74	9.17	7.37
Blend Benchmark	-5.39	2.68	9.66	8.55	7.39
Index Age-Based Option	-5.72	3.24	10.11	8.86	8.05
Index Benchmark	-5.61	3.44	10.18	8.89	8.07

2030	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-5.59	1.86	9.44	8.02	6.72
Active Benchmark	-5.33	1.51	8.06	7.19	6.22
Blend Age-Based Option	-5.62	1.84	9.07	7.78	6.01
Blend Benchmark	-5.12	1.82	8.17	7.28	6.22
Index Age-Based Option	-5.43	2.22	8.55	7.56	6.85
Index Benchmark	-5.35	2.38	8.61	7.59	6.87

Data Source: DE CIP-Fidelity as of 03.31.2022; Morningstar source material as of 03.31.2022. If any of the above information differs from these updated sources, the source document supersedes the above listing.



## BENCHMARK ANALYSIS

Period Ending 03.31.22 | Q1 22

2027	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-5.00	1.06	7.72	6.64	5.51
Active Benchmark	-4.80	0.71	6.53	5.90	5.04
Blend Age-Based Option	-5.06	1.07	7.44	6.41	4.69
Blend Benchmark	-4.67	1.05	6.71	6.04	5.08
Index Age-Based Option	-4.97	1.29	6.99	6.27	5.65
Index Benchmark	-4.93	1.41	7.04	6.29	5.68

2024	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-4.18	0.35	5.81	5.09	4.14
Active Benchmark	-4.03	0.02	4.89	4.51	3.72
Blend Age-Based Option	-4.28	0.31	5.61	4.85	3.23
Blend Benchmark	-4.03	0.32	5.08	4.65	3.79
Index Age-Based Option	-4.32	0.43	5.32	4.87	4.34
Index Benchmark	-4.32	0.50	5.36	4.89	4.36

2021	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-3.37	0.00	4.30	3.85	3.00
Active Benchmark	-3.25	-0.26	3.66	3.43	2.66
Blend Age-Based Option	-3.32	0.05	4.12	3.51	2.01
Blend Benchmark	-3.18	0.06	3.77	3.49	2.67
Index Age-Based Option	-3.42	-0.01	3.85	3.62	3.10
Index Benchmark	-3.44	0.03	3.88	3.63	3.11

College	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-3.37	0.00	4.30	3.85	3.00
Active Benchmark	-3.25	-0.26	3.66	3.43	2.66
Blend Age-Based Option	-3.32	0.04	4.10	3.49	2.00
Blend Benchmark	-3.17	0.04	3.76	3.48	2.66
Index Age-Based Option	-3.42	-0.01	3.85	3.62	3.10
Index Benchmark	-3.44	0.03	3.88	3.63	3.11

Data Source: DE CIP-Fidelity as of 03.31.2022; Morningstar source material as of 03.31.2022. If any of the above information differs from these updated sources, the source document supersedes the above listing.



## BENCHMARK ANALYSIS

Period Ending 03.31.22 | Q1 22

Static Portfolio	Net Expense	1 - Year	3 - Year	5 - Year	10 - Year
<b>DE Agrsv Gro (Fid Funds)</b>	<b>0.99%</b>	<b>3.58</b>	<b>14.66</b>	<b>12.42</b>	<b>11.29</b>
Composite Benchmark	-	6.37	14.39	12.46	11.38
<b>DE Agrsv Gro (Fid Index)</b>	<b>0.13%</b>	<b>5.86</b>	<b>14.04</b>	<b>12.02</b>	<b>11.12</b>
Composite Benchmark	-	6.37	14.33	12.25	11.35
<b>DE Consvr (Fid Funds)</b>	<b>0.50%</b>	<b>-1.00</b>	<b>1.87</b>	<b>1.92</b>	<b>1.63</b>
Composite Benchmark	-	-0.82	1.75	1.92	1.52
<b>DE Consvr (Fid Index)</b>	<b>0.13%</b>	<b>-0.96</b>	<b>1.55</b>	<b>1.72</b>	<b>1.35</b>
Composite Benchmark	-	-0.82	1.75	1.92	1.53
<b>DE Mod Growth (Fid Funds)</b>	<b>0.87%</b>	<b>1.77</b>	<b>11.24</b>	<b>9.67</b>	<b>8.92</b>
Composite Benchmark	-	3.50	10.90	9.62	8.94
<b>DE Mod Growth (Fid Index)</b>	<b>0.13%</b>	<b>3.12</b>	<b>10.61</b>	<b>9.24</b>	<b>8.54</b>
Composite Benchmark	-	3.50	10.86	9.45	8.77

Individual Portfolio	Net Expense	1 - Year	3 - Year	5 - Year	10 - Year
<b>DE 500 Index</b>	<b>0.11%</b>	<b>15.52</b>	<b>18.80</b>	<b>15.87</b>	<b>14.48</b>
DE Fidelity 500 Index BM	-	15.65	18.92	15.99	14.64
<b>DE Bank Deposit</b>	<b>0.50%</b>	<b>0.10</b>	<b>0.55</b>	<b>0.76</b>	<b>0.47</b>
N/A	-	-	-	-	-
<b>DE International Index</b>	<b>0.15%</b>	<b>-2.45</b>	<b>7.15</b>	<b>6.16</b>	<b>5.93</b>
DE International Index BM	-	-1.33	7.68	6.60	6.29
<b>DE Intmdt Treasury Index</b>	<b>0.12%</b>	<b>-4.70</b>	<b>1.31</b>	<b>1.72</b>	<b>1.73</b>
DE Intmdt Treasury Index BM	-	-4.53	1.45	1.86	1.94
<b>DE Money Market</b>	<b>0.58%</b>	<b>0.00</b>	<b>0.48</b>	<b>0.71</b>	<b>0.36</b>
DE Money Market BM	-	0.06	0.81	1.14	0.65
<b>DE Total Market Index</b>	<b>0.11%</b>	<b>11.59</b>	<b>18.02</b>	<b>15.22</b>	<b>14.08</b>
DE Total Market index BM	-	11.67	18.12	15.31	14.21

Data Source: Fidelity as of 03.31.2022



# APPENDIX



# APPENDIX

Period Ending 03.31.22 | Q1 22

## Active Age-Based Option

Ticker	2039	2036	2033	2030	2027	2024	2021	College	Benchmark
FJACX	0.89%	0.76%	0.62%	0.47%	0.33%	0.18%	0.07%	0.07%	Russell 2000 TR USD
FVWSX	4.27%	3.61%	2.94%	2.24%	1.59%	0.88%	0.32%	0.32%	Russell 1000 Growth TR USD
FBLEX	6.20%	5.23%	4.27%	3.26%	2.30%	1.28%	0.46%	0.46%	Russell 1000 Value TR USD
FNKLX	4.72%	3.98%	3.25%	2.48%	1.75%	0.97%	0.35%	0.35%	Russell 1000 Value TR USD
FSAEX	2.05%	1.73%	1.41%	1.07%	0.76%	0.42%	0.15%	0.15%	Russell 1000 Growth TR USD
FGLGX	7.36%	6.21%	5.06%	3.86%	2.74%	1.52%	0.55%	0.55%	Russell 1000 TR USD
FCGSX	8.49%	7.17%	5.85%	4.46%	3.16%	1.75%	0.63%	0.63%	Russell 1000 Growth TR USD
FDMLX	7.76%	6.54%	5.34%	4.10%	2.89%	1.59%	0.57%	0.57%	Russell Mid Cap Value TR USD
FIOOX	2.76%	2.33%	1.90%	1.44%	1.02%	0.57%	0.21%	0.21%	Russell 1000 Value TR USD
FSBDX	3.40%	2.86%	2.33%	1.77%	1.25%	0.70%	0.25%	0.25%	Russell 1000 Growth TR USD
FSOPX	2.97%	2.50%	2.04%	1.56%	1.10%	0.61%	0.22%	0.22%	Russell 2000 TR USD
FIGSX	7.43%	6.53%	5.57%	4.54%	3.58%	2.55%	1.72%	1.72%	MSCI ACWI Ex USA Growth NR USD
FSTSX	2.02%	1.79%	1.52%	1.23%	0.97%	0.69%	0.46%	0.46%	MSCI World Ex USA SMID Growth NR USD
FINVX	7.54%	6.67%	5.66%	4.62%	3.63%	2.57%	1.73%	1.73%	MSCI ACWI Ex USA Value NR USD
FCNSX	3.19%	2.82%	2.40%	1.96%	1.56%	1.10%	0.74%	0.74%	MSCI ACWI Ex USA NR USD
FSOSX	7.50%	6.61%	5.64%	4.61%	3.63%	2.58%	1.75%	1.75%	MSCI ACWI Ex USA Growth NR USD
FEMSX	13.02%	11.72%	10.44%	9.09%	7.82%	6.43%	5.32%	5.32%	MSCI EM NR USD
FHKFX	1.41%	1.27%	1.12%	0.97%	0.83%	0.68%	0.58%	0.58%	MSCI EM NR USD
FSIGX	0.09%	10.66%	18.15%	25.78%	30.64%	32.27%	28.74%	28.74%	Bloomberg US Agg Bond TR USD
FTLTX	4.39%	4.38%	4.34%	4.12%	3.91%	3.54%	3.55%	3.55%	Bloomberg US Government Long TR USD
FYBTX	0.00%	0.00%	0.05%	0.39%	1.30%	2.95%	4.88%	4.88%	Bloomberg US Govt/Credit 1-3 Yr TR USD
FGNXX	0.00%	0.00%	0.20%	1.58%	5.24%	11.92%	19.79%	19.79%	ICE BofA USD 3M Dep OR CM TR USD
FCSSX	1.65%	1.55%	1.65%	1.64%	1.61%	1.61%	1.60%	1.60%	Bloomberg Commodity TR USD
FSHNX	0.11%	0.59%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	ICE BofA US High Yield TR USD
FFHCX	0.02%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	S&P/LSTA Leveraged Loan TR
FEDCX	0.09%	0.51%	0.51%	0.51%	0.51%	0.52%	0.52%	0.51%	JPM EMBI Global Diversified TR USD
FSEDX	0.03%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	JPM GBI-EM Global Diversified TR USD
FSREX	0.06%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	S&P United States REIT TR USD
FSIPX	0.00%	0.00%	0.54%	1.11%	1.70%	2.29%	2.58%	2.58%	Bloomberg US Treasury US TIPS TR USD
FSTZX	0.16%	0.15%	0.54%	3.04%	8.12%	13.35%	17.74%	17.74%	BBg US TIPS 0-5 Years
FSTDx	0.47%	0.48%	4.22%	4.99%	2.45%	0.46%	0.46%	0.46%	BBg US TIPS 5+ Years
FSTQX	0.00%	0.75%	1.24%	1.87%	2.35%	2.76%	2.76%	2.77%	BBG ATI, xUSxEM RICC,USH

Data Source: Fidelity as of 03.31.2022





# APPENDIX

Period Ending 03.31.22 | Q1 22

Blend Age-Based Option	Ticker	2039	2036	2033	2030	2027	2024	2021	College	Benchmark
	FNKLX	5.70%	4.90%	3.90%	3.00%	2.10%	1.20%	0.50%	0.50%	Russell 1000 Value TR USD
	FGLGX	8.00%	6.80%	5.50%	4.20%	3.00%	1.70%	0.70%	0.60%	Russell 1000 TR USD
	FIOOX	15.30%	12.90%	10.50%	8.00%	5.70%	3.30%	1.20%	1.20%	Russell 1000 Value TR USD
	FSBDX	11.20%	9.40%	7.70%	5.90%	4.20%	2.40%	0.90%	0.90%	Russell 1000 Growth TR USD
	FSOPX	3.80%	3.20%	2.60%	2.00%	1.50%	0.80%	0.30%	0.30%	Russell 2000 TR USD
	FHOFX	7.10%	6.00%	4.90%	3.80%	2.70%	1.50%	0.60%	0.60%	Russell 1000 Growth TR USD
	FIGSX	6.70%	5.90%	5.00%	4.10%	3.30%	2.30%	1.50%	1.50%	MSCI ACWI Ex USA Growth NR USD
	FSTSX	2.30%	2.00%	1.70%	1.40%	1.10%	0.80%	0.50%	0.50%	MSCI World Ex USA SMID Growth NR USD
	FINVX	6.80%	6.00%	5.10%	4.10%	3.30%	2.30%	1.50%	1.50%	MSCI ACWI Ex USA Value NR USD
	FCNSX	3.00%	2.60%	2.20%	1.80%	1.40%	1.00%	0.70%	0.70%	MSCI ACWI Ex USA NR USD
	FHLFX	2.80%	2.50%	2.10%	1.70%	1.40%	1.00%	0.60%	0.60%	MSCI ACWI Ex USA NR USD
	FSOSX	6.70%	6.00%	5.10%	4.10%	3.30%	2.30%	1.50%	1.50%	MSCI ACWI Ex USA Growth NR USD
	FEMSX	13.20%	11.90%	10.50%	9.20%	7.80%	6.40%	5.10%	5.10%	MSCI EM NR USD
	FHKFX	1.50%	1.30%	1.20%	1.00%	0.90%	0.70%	0.50%	0.50%	MSCI EM NR USD
	FSIGX	0.00%	2.90%	5.50%	7.60%	9.20%	10.10%	8.80%	8.80%	Bloomberg US Agg Bond TR USD
	FHMFx	0.00%	2.10%	3.90%	5.30%	6.50%	7.10%	6.20%	6.20%	Bloomberg US Corp Bond TR USD
	FHPFX	0.00%	2.00%	3.80%	5.20%	6.40%	7.00%	6.10%	6.10%	Bloomberg US Agg Bond TR USD
	FHNFX	0.00%	2.70%	5.10%	7.10%	8.60%	9.50%	8.20%	8.20%	Bloomberg Government 1-5 Yr TR USD
	FTLTX	3.30%	3.40%	3.30%	3.20%	3.10%	2.90%	2.90%	2.90%	Bloomberg US Government Long TR USD
	FYBTX	0.00%	0.00%	0.10%	0.70%	1.60%	3.20%	5.80%	5.80%	Bloomberg US Govt/Credit 1-3 Yr TR USD
	FGNXX	0.00%	0.00%	0.10%	0.70%	1.60%	3.20%	5.50%	5.50%	ICE BofA USD 3M Dep OR CM TR USD
	FHQFX	0.00%	0.00%	0.20%	2.10%	4.80%	9.50%	16.50%	16.50%	Bloomberg Corp 1 Yr Duration TR USD
	FCSSX	1.80%	2.00%	2.00%	2.00%	2.10%	2.10%	2.10%	2.10%	Bloomberg Commodity TR USD
	FSHNX	0.10%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	ICE BofA US High Yield TR USD
	FFHCX	0.00%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	S&P/LSTA Leveraged Loan TR
	FEDCX	0.00%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	JPM EMBI Global Diversified TR USD
	FSEDX	0.00%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	JPM GBI-EM Global Diversified TR USD
	FSREX	0.00%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	S&P United States REIT TR USD
	FSIPX	0.00%	0.10%	1.60%	2.50%	3.50%	4.50%	5.00%	5.00%	Bloomberg US Treasury US TIPS TR USD
	FSTZX	0.10%	0.20%	0.40%	1.90%	5.50%	9.00%	12.40%	12.40%	Bloomberg US TIPS 0-5 Year TR USD
	FSTDx	0.50%	0.80%	3.50%	4.30%	2.40%	1.00%	1.00%	1.00%	Bloomberg Treasury 5+ Yr TR USD
	FSTQX	0.00%	0.30%	0.60%	1.00%	1.30%	1.50%	1.50%	1.50%	Bloomberg Global Aggregate TR USD

Data Source: Fidelity as of 03.31.2022



Index Age- Based Option	Ticker	2039	2036	2033	2030	2027	2024	2021	College	Benchmark
	FCFMX	56.10%	48.40%	40.60%	32.50%	24.80%	16.60%	9.30%	9.30%	DJ US Total Stock Market TR USD
	FSGEX	37.40%	32.30%	27.10%	21.70%	16.50%	11.00%	6.20%	6.20%	MSCI ACWI Ex USA NR USD
	FIFZX	2.70%	15.10%	23.50%	30.50%	35.90%	38.90%	34.70%	34.70%	Bloomberg US Agg Bond TR USD
	FTLTx	3.60%	3.50%	3.40%	3.30%	3.20%	3.00%	3.00%	3.00%	Bloomberg US Government Long TR USD
	FHQFX	0.00%	0.00%	0.30%	3.60%	8.30%	16.00%	28.90%	28.90%	Bloomberg 3-6 Mo Tsy
	FSIPX	0.00%	0.00%	1.90%	3.00%	4.20%	5.30%	6.00%	6.00%	Bloomberg 1-10 TIPS
	FSTZX	0.00%	0.00%	0.10%	1.30%	4.20%	7.10%	9.90%	9.90%	Bloomberg US TIPS 0-5 Year TR USD
	FSTDx	0.00%	0.00%	2.10%	2.70%	1.20%	0.00%	0.00%	0.00%	Bloomberg Treasury 5+ Yr TR USD
	FSTQX	0.10%	0.80%	1.00%	1.40%	1.70%	1.90%	1.90%	1.90%	Bloomberg Global Aggregate TR USD

Data Source: Fidelity as of 03.31.2022



## CREATING CAPTRUST'S PROPRIETARY 529 AGE-BASED ALLOCATION UNIVERSE ANALYSIS

STEP 1:	Research the largest (30) direct 529 plans and aggregate each Age-Based option's glide-path and underlying fund publicly available data.		
STEP 2:	Average the equity exposure for each Age-Based option category & calculate the deviation from that average for each Age-Based option.		
STEP 3:	Weight the deviations based on the position within the glide path (e.g., weighting the age 11-12 period more heavily than deviations at younger ages).		
STEP 4:	Calculate a score (higher score meaning more total equity risk exposure) for each Age-Based option allocation based on the individual asset weighting scores (standard deviation x weighting) for each fund within the Age-Based Allocation Option.		
STEP 5:	Assign each Age-Based allocation to one of the nine risk-based categories, based on their relative scores from highest to lowest:		
	Aggressive – High Equity (9)	Aggressive – Mid Equity (8)	Aggressive – Low Equity (7)
	Moderate – High Equity (6)	Moderate – Mid Equity (5)	Moderate – Low Equity (6)
	Conservative – High Equity (3)	Conservative – Mid Equity (2)	Conservative – Low Equity (1)

The 529 program information compiled to create this report and the CAPTRUST 529 Age-Based Allocation Universe is gathered from publicly available program sources as of the date of this report, unless otherwise stated. The 529 programs that make up the CAPTRUST 529 Age-Based Allocation Universe each release equity exposure and other data at varying intervals. If any of the information within this report differs from updated sources, the updated source document supersedes the data in this report.



## DEFINITIONS

Terms	Definition & Application
<b>Composite Benchmark</b>	The composite benchmark is a weighted metric used to compare the relative performance of the underlying funds within an Age-Based option against those funds' respective benchmarks. The performance of each is weighted against the actual weighting of each Age-Based option. These values are not reflective of the portfolio's actual performance; rather, the performance solely of the underlying funds in isolation.
<b>Composite Data Points</b>	All data points (performance metrics/risk metrics/manager tenure/expense ratios) are provided via Morningstar and are shown as weighted composites relative to the stated allocations.
<b>Peer Group</b>	Peer group is determined by comparing equity exposures for similar Age-Based options within the Cammack Age-Based Allocation Universe. The performance of each Age-Based option is first weighted relative to the exposure of each underlying fund. This value is then equally weighted against each other fund within the respective proprietary ranked subgroup.
<b>Standard Deviation</b>	Statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over a certain period of time. This metric is used to try and predict the range of returns for a given fund. A high value signifies greater volatility, as the predicted range of performance is wide. A low value signifies lower volatility, as the predicted range of performance is more focused.

