

THE STATE OF DELAWARE  
3<sup>RD</sup> QUARTER, 2022

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

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



**The State of Delaware**

3<sup>rd</sup> Quarter, 2022 Quarterly Review

prepared by:

**Earle Allen, MBA, CEBS®**  
Principal | Financial Advisor

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### Plan Information

Total plan assets as of September 30, 2022, were \$595.1 million. Approximately \$420.7 million (71% of total plan assets) are allocated to an Age-Based option, with approximately \$77.3 million (29% of total assets) allocated to static portfolios, individual funds, or a bank deposit portfolio.

- Active Age-Based – \$307.7 million (52% of total assets)
- Blend Age-Based – \$11.3 million (2% of total assets)
- Index Age-Based – \$101.7 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 – 23 out of 31 funds (74%) outperformed their benchmark for the quarter.
- **Blend Age-Based** option – 22 out of 31 funds (71%) outperformed their benchmark for the quarter.
- **Index Age-Based** option – 1 out of 9 funds (11%) outperformed their benchmark for the quarter.



### Portfolio Positioning Review

- During the third quarter of 2022 market volatility continued to surge as inflation expectations remained elevated and the FED continued raising interest rates at the quickest pace in over forty years. Geopolitical tensions remain high, with the conflict between Russia and Ukraine remaining a focal point of discussion for 2022. China also continued to make headlines as Xi Jinping consolidated power for another five years, raising many economists to question the long-term investability of Chinese markets.
  - **Overall, the Fidelity portfolio series lagged peers in both its Active and Blend age-based series relative to peers. While underlying active manager attribution was strong during the third quarter, asset allocation decisions (specifically their emerging market overweight) negatively contributed to relative results.**
- Fidelity continues to view non-US equity options more favorably than US, though they maintain their same asset allocation limitations when investing in volatile markets such as within Emerging Asian economies. Fidelity follows global market cap weightings when determining allocations towards non-US markets, following a global market cap portfolio approach with approximately 60% US companies and 40% non-US companies for the equity portions of the glidepath. Potential concerns for China include a lack of transparency into company holdings, and a potential decrease in capital mobility as Xi Jinping's policies grow in influence.
  - **Fidelity's investment team maintains a careful view towards EM markets. While they recognize the volatility associated with the space, their underlying EM funds are benchmark neutral in terms of Chinese exposure and are underweight exposure within Taiwan. While downside risks exist in China, emerging markets (as a whole) represent a wide range of strong potential growth opportunities that should not be missed.**
- Fidelity has reduced their underweight towards duration risk during the quarter, as their investment team now views yields as have having reached fair value. As yields have continued to rise, the market has now priced in continued rate hikes into 2023, with a terminal rate of roughly 4-4.5%. Fidelity has also reduced their overweight towards commodities and inflation protected securities, as price targets have been met for these assets as both have surged YTD.



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

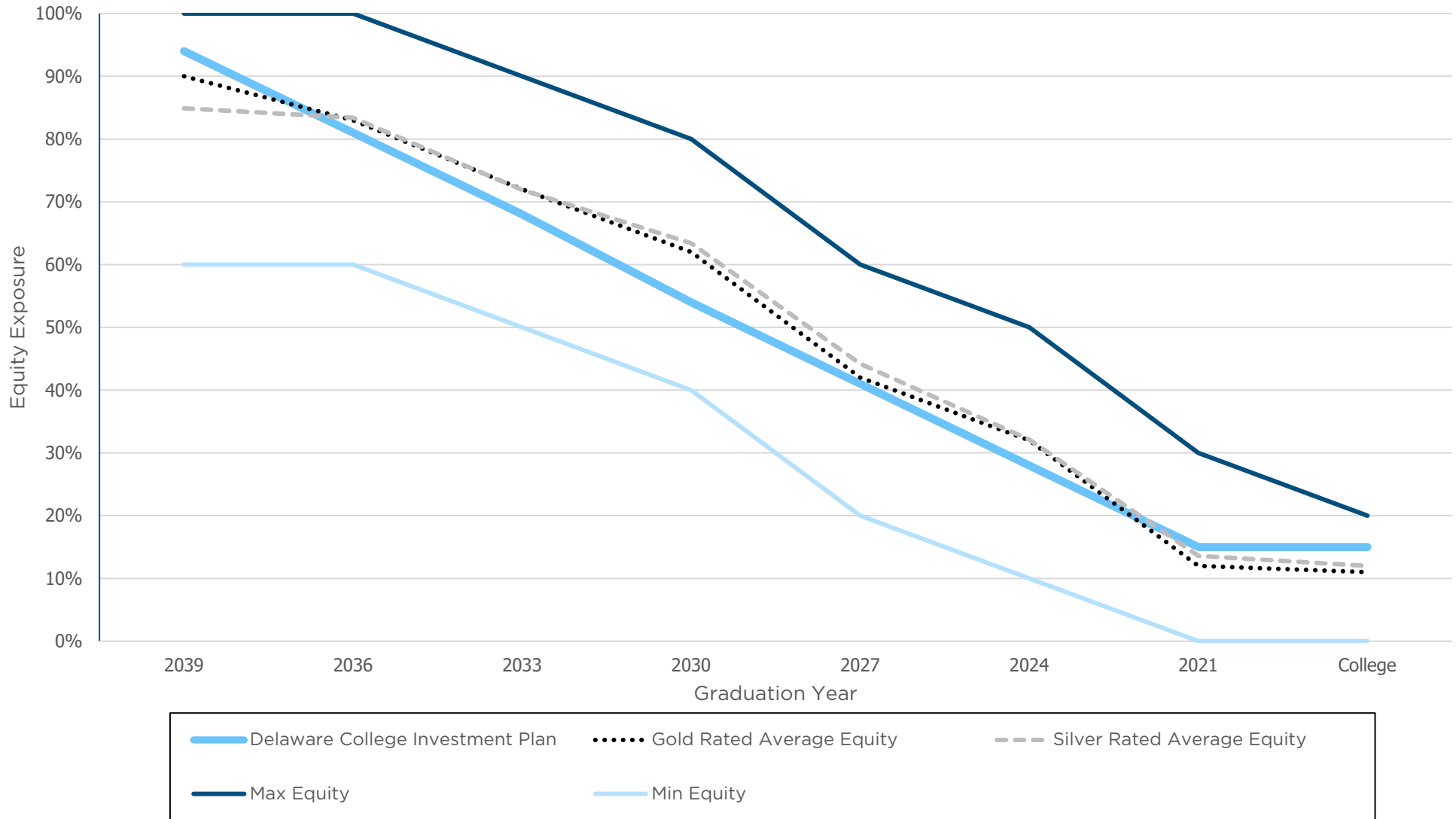
| Gold Rated Average Equity | 90%  | 83%  | 72% | 62% | 42% | 32% | 12% | 11% |
|---------------------------|------|------|-----|-----|-----|-----|-----|-----|
| Illinois Index Con.       | 80%  | 70%  | 60% | 50% | 30% | 20% | 0%  | 0%  |
| Illinois Active Con.      | 80%  | 70%  | 60% | 50% | 30% | 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% |

| Silver Rated Average Equity | 85%  | 83%  | 72% | 63% | 44% | 32% | 14% | 12% |
|-----------------------------|------|------|-----|-----|-----|-----|-----|-----|
| 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 underperformed in all of its age-band versus its Morningstar Target Enrollment peer group, all of its age-bands versus Gold rated peers, and all of its age-bands versus Silver rated peers.
- Active managers in general protected on the downside this quarter, along with glidepaths that had lower total equity exposure. Non-US markets sold off less heavily during the third quarter, however, on a YTD basis their return contributions still lag domestic markets. Peer programs that have reduced exposure towards longer duration fixed income investments also fared better this past quarter, as bond yields continued to rise. The increase in correlation between equities and fixed income has been difficult for traditionally structured portfolios to protect amidst increasingly volatile market conditions.
- The largest difference for this series versus other glidepaths closer to graduation has continued to be the omission of a fixed return product. As interest rates continue to rise, putting downward pressure on existing fixed income securities, guaranteed products have outperformed traditional fixed income options. These products would be expected to underperform, however, when the Fed does decide to reverse course and lower interest rates.

### Blend Age-Based Option Review

- The **Blend Age-Based** option underperformed in all of its age-band versus its Morningstar Target Enrollment peer group, all of its age-bands versus Gold rated peers, and all of its age-bands versus Silver rated peers. The blend series performs worse than both the Active and Index series on average, as the active funds that were overweighed within the Blend series were relative detractors compared to the passive options used.

### Index Age-Based Option Review

- The **Index Age-Based** option underperformed in all of its age-band versus its Morningstar Target Enrollment peer group, all of its age-bands versus Gold rated peers, and all of its age-bands versus Silver rated peers. Passive performance was mixed against both Blend and Active for the third quarter of 2022, as the simplified asset allocation approach relatively benefited performance.



| INVESTMENT NAME                        | Net Expense | Equity (%) | QTR Cat(%)      | YTD Cat(%)       | 1-Year Cat(%)    | 3-Year Cat(%)  | 5-Year Cat(%)  |
|----------------------------------------|-------------|------------|-----------------|------------------|------------------|----------------|----------------|
| <b>DE Coll Inv PI Active 2039 Port</b> | <b>0.24</b> | <b>87%</b> | <b>-6.87 64</b> | <b>-25.85 72</b> | <b>-22.38 80</b> |                |                |
| <b>DE Coll Inv PI Blend 2039 Port</b>  | <b>0.16</b> | <b>88%</b> | <b>-6.93 82</b> | <b>-26.39 93</b> | <b>-22.65 95</b> |                |                |
| <b>DE Coll Inv PI Index 2039 Port</b>  | <b>0.16</b> | <b>88%</b> | <b>-6.99 89</b> | <b>-25.31 55</b> | <b>-20.87 57</b> |                |                |
| US 529 Target-Enrollment 2039+         | 0.11        | 87%        | -6.57           | -24.66           | -20.46           |                |                |
| Gold Rated Peers (2039+)               | 0.08        | 83%        | -6.27           | -24.00           | -19.35           |                |                |
| Silver Rated Peers (2039+)             | 0.10        | 88%        | -6.64           | -24.63           | -20.57           |                |                |
| <b>DE Coll Inv PI Active 2036 Port</b> | <b>0.24</b> | <b>72%</b> | <b>-6.59 70</b> | <b>-24.32 72</b> | <b>-21.33 83</b> | <b>3.67 18</b> | <b>4.46 26</b> |
| <b>DE Coll Inv PI Blend 2036 Port</b>  | <b>0.16</b> | <b>73%</b> | <b>-6.62 78</b> | <b>-24.76 81</b> | <b>-21.53 93</b> |                |                |
| <b>DE Coll Inv PI Index 2036 Port</b>  | <b>0.16</b> | <b>73%</b> | <b>-6.62 82</b> | <b>-23.77 57</b> | <b>-19.86 61</b> | <b>3.03 36</b> | <b>4.42 49</b> |
| US 529 Target-Enrollment 2036          | 0.12        | 75%        | -6.34           | -23.29           | -19.27           | 3.06           | 4.75           |
| Gold Rated Peers (2036)                | 0.07        | 75%        | -6.14           | -23.00           | -18.62           |                |                |
| Silver Rated Peers (2036)              | 0.14        | 76%        | -6.44           | -23.24           | -19.31           | 2.96           | 5.06           |
| <b>DE Coll Inv PI Active 2033 Port</b> | <b>0.24</b> | <b>59%</b> | <b>-6.49 78</b> | <b>-23.06 72</b> | <b>-20.52 82</b> | <b>2.67 27</b> | <b>3.83 28</b> |
| <b>DE Coll Inv PI Blend 2033 Port</b>  | <b>0.16</b> | <b>60%</b> | <b>-6.56 87</b> | <b>-23.48 90</b> | <b>-20.67 91</b> |                |                |
| <b>DE Coll Inv PI Index 2033 Port</b>  | <b>0.16</b> | <b>60%</b> | <b>-6.47 72</b> | <b>-22.55 63</b> | <b>-19.15 61</b> | <b>2.10 53</b> | <b>3.82 36</b> |
| US 529 Target-Enrollment 2033          | 0.12        | 64%        | -6.14           | -22.11           | -18.67           | 2.38           | 4.32           |
| Gold Rated Peers (2033)                | 0.07        | 66%        | -5.96           | -21.89           | -17.88           |                |                |
| Silver Rated Peers (2033)              | 0.13        | 65%        | -6.13           | -21.94           | -18.56           | 2.38           | 4.82           |
| <b>DE Coll Inv PI Active 2030 Port</b> | <b>0.24</b> | <b>46%</b> | <b>-6.06 77</b> | <b>-21.06 65</b> | <b>-18.97 80</b> | <b>1.87 39</b> | <b>3.28 42</b> |
| <b>DE Coll Inv PI Blend 2030 Port</b>  | <b>0.16</b> | <b>46%</b> | <b>-6.13 85</b> | <b>-21.37 79</b> | <b>-19.14 89</b> |                |                |
| <b>DE Coll Inv PI Index 2030 Port</b>  | <b>0.16</b> | <b>46%</b> | <b>-5.98 71</b> | <b>-20.58 55</b> | <b>-17.77 61</b> | <b>1.43 64</b> | <b>3.31 33</b> |
| US 529 Target-Enrollment 2030          | 0.12        | 52%        | -5.67           | -20.53           | -17.40           | 1.95           | 3.78           |
| Gold Rated Peers (2030)                | 0.07        | 54%        | -5.48           | -20.34           | -16.79           |                |                |
| Silver Rated Peers (2030)              | 0.14        | 53%        | -5.75           | -20.53           | -17.51           | 2.04           | 4.27           |

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| INVESTMENT NAME                        | Net Expense | Equity (%) | QTR Cat(%) | YTD Cat(%) | 1-Year Cat(%) | 3-Year Cat(%) | 5-Year Cat(%) |
|----------------------------------------|-------------|------------|------------|------------|---------------|---------------|---------------|
| <b>DE Coll Inv PI Active 2027 Port</b> | 0.24        | 34%        | -5.30 70   | -18.16 59  | -16.60 66     | 1.36 34       | 2.81 40       |
| <b>DE Coll Inv PI Blend 2027 Port</b>  | 0.16        | 34%        | -5.42 80   | -18.47 76  | -16.72 76     |               |               |
| <b>DE Coll Inv PI Index 2027 Port</b>  | 0.16        | 34%        | -5.13 60   | -17.63 40  | -15.42 53     | 1.05 52       | 2.90 26       |
| US 529 Target-Enrollment 2027          | 0.12        | 37%        | -4.99      | -17.95     | -15.62        | 1.25          | 3.22          |
| Gold Rated Peers (2027)                | 0.07        | 37%        | -4.79      | -17.78     | -15.00        |               |               |
| Silver Rated Peers (2027)              | 0.13        | 38%        | -5.00      | -17.98     | -15.68        | 1.26          | 3.58          |
| <b>DE Coll Inv PI Active 2024 Port</b> | 0.24        | 21%        | -4.44 76   | -14.70 69  | -13.67 76     | 1.00 39       | 2.44 57       |
| <b>DE Coll Inv PI Blend 2024 Port</b>  | 0.16        | 21%        | -4.55 85   | -14.90 80  | -13.76 84     |               |               |
| <b>DE Coll Inv PI Index 2024 Port</b>  | 0.16        | 21%        | -4.15 63   | -14.12 50  | -12.51 59     | 0.79 59       | 2.57 28       |
| US 529 Target-Enrollment 2024          | 0.12        | 22%        | -3.58      | -13.10     | -11.42        | 1.55          | 2.99          |
| Gold Rated Peers (2024)                | 0.07        | 23%        | -3.30      | -12.77     | -10.83        |               |               |
| Silver Rated Peers (2024)              | 0.14        | 22%        | -3.63      | -12.94     | -11.33        | 1.76          | 3.47          |
| <b>DE Coll Inv PI Active 2021 Port</b> | 0.24        | 14%        | -3.97 66   | -12.00 69  | -11.49 66     | -0.04 74      | 1.65 55       |
| <b>DE Coll Inv PI Blend 2021 Port</b>  | 0.16        | 14%        | -4.13 93   | -12.07 79  | -11.60 89     |               |               |
| <b>DE Coll Inv PI Index 2021 Port</b>  | 0.16        | 13%        | -3.60 56   | -11.34 56  | -10.38 53     | 0.00 45       | 1.88 26       |
| US 529 Target-Enrollment 2021          | 0.17        | 10%        | -2.60      | -8.26      | -7.49         | 1.53          | 1.77          |
| Gold Rated Peers (2021)                | 0.11        | 13%        | -3.03      | -11.20     | -10.08        |               |               |
| Silver Rated Peers (2021)              | 0.18        | 7%         | -1.88      | -6.00      | -5.23         | 2.30          |               |
| <b>DE Coll Inv PI Active Coll Port</b> | 0.24        | 14%        | -4.02 85   | -12.02 79  | -11.50 79     | -0.48 75      | 1.15 61       |
| <b>DE Coll Inv PI Blend Coll Port</b>  | 0.16        | 14%        | -4.00 78   | -12.05 81  | -11.50 77     |               |               |
| <b>DE Coll Inv PI Index Coll Port</b>  | 0.16        | 13%        | -3.60 68   | -11.33 60  | -10.37 64     | -0.40 60      | 1.36 37       |
| US 529 Target-Enrollment College       | 0.12        | 14%        | -2.87      | -9.62      | -8.64         | 0.41          | 1.80          |
| Gold Rated Peers (College)             | 0.07        | 13%        | -2.37      | -8.72      | -7.64         |               |               |
| Silver Rated Peers (College)           | 0.13        | 14%        | -2.76      | -9.03      | -7.94         | 1.26          | 2.35          |

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### Active Age-Based Option Review

- The **Active Age-Based** underlying mutual fund composite outperformed the composite benchmark in 8 out of 8 age-bands for Q3, with each age-band averaging outperformance of +0.37% versus the composite benchmark.
- 74% of underlying funds (23 of 31) outperformed their respective benchmarks for Q3 2022, with all funds averaging outperformance of +0.47% versus their respective benchmarks.
- The largest weighted outperformance was from Fidelity® Series Investment Grade Bond Fund, which has an average weighting of 21.90% in each age-band and outperformed its benchmark by 0.46%.
- The most substantial weighted underperformance came from Fidelity® Series Stock Selector Large Cap Value Fund, which has an average weighting of 2.72% in each age-band and underperformed its benchmark by -0.75%.

### Blend Age-Based Option Review

- The **Blend Age-Based** underlying mutual fund composite outperformed the composite benchmark in 8 out of 8 age-bands for Q3, with each age-band averaging outperformance of +0.27% versus the composite benchmark.
- 71% of underlying funds (22 of 31) outperformed their respective benchmarks for Q3 2022, with all funds averaging outperformance of +0.51% versus their respective benchmarks.
- The largest weighted outperformance was from Fidelity® Series Blue Chip Growth Fund, which has an average weighting of 4.97% in each age-band and outperformed its benchmark by 1.91%.
- The most substantial weighted underperformance came from Fidelity® Series Investment Grade Securitized Fund, which has an average weighting of 4.58% in each age-band and underperformed its benchmark by -0.37%.

### Index Age-Based Option Review

- The **Index Age-Based** underlying mutual fund composite underperformed the composite benchmark in 8 out of 8 age-bands for Q3, with each age-band averaging underperformance of -0.14% versus the composite benchmark.
- 11% of underlying funds (1 of 9) outperformed their respective benchmarks for Q3 2022, with all funds averaging essentially the same performance as their respective benchmarks.



## BENCHMARK ANALYSIS

Period Ending 09.30.22 | Q3 22

| 2039                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -6.67 | -21.94   | 4.42     | 4.75     | 7.16      |
| Active Benchmark        | -7.14 | -21.95   | 2.58     | 3.76     | 6.69      |
| Blend Age-Based Option  | -6.77 | -21.86   | 3.65     | 4.47     | 6.97      |
| Blend Benchmark         | -7.23 | -21.56   | 2.41     | 3.60     | 6.56      |
| Index Age-Based Option  | -7.02 | -20.75   | 2.90     | 5.29     | 7.89      |
| Index Benchmark         | -6.74 | -18.72   | 4.09     | 5.31     | 7.90      |

| 2036                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -6.41 | -20.93   | 3.24     | 3.99     | 6.20      |
| Active Benchmark        | -6.87 | -21.00   | 1.54     | 3.05     | 5.72      |
| Blend Age-Based Option  | -6.53 | -20.92   | 2.51     | 3.69     | 5.91      |
| Blend Benchmark         | -6.95 | -20.70   | 1.40     | 2.92     | 5.61      |
| Index Age-Based Option  | -6.70 | -19.75   | 1.92     | 4.43     | 6.77      |
| Index Benchmark         | -6.46 | -18.04   | 2.93     | 4.45     | 6.78      |

| 2033                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -6.58 | -19.49   | 2.52     | 3.48     | 5.29      |
| Active Benchmark        | -7.00 | -19.56   | 1.02     | 2.63     | 4.83      |
| Blend Age-Based Option  | -6.70 | -19.51   | 1.86     | 3.19     | 4.97      |
| Blend Benchmark         | -7.05 | -19.32   | 0.90     | 2.53     | 4.75      |
| Index Age-Based Option  | -6.78 | -18.43   | 1.39     | 3.84     | 5.78      |
| Index Benchmark         | -6.59 | -17.02   | 2.22     | 3.85     | 5.78      |

| 2030                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -6.28 | -17.70   | 1.69     | 2.90     | 4.34      |
| Active Benchmark        | -6.67 | -17.78   | 0.37     | 2.10     | 3.89      |
| Blend Age-Based Option  | -6.41 | -17.75   | 1.08     | 2.59     | 3.94      |
| Blend Benchmark         | -6.69 | -17.61   | 0.28     | 2.03     | 3.83      |
| Index Age-Based Option  | -6.40 | -16.75   | 0.73     | 3.14     | 4.72      |
| Index Benchmark         | -6.25 | -15.67   | 1.39     | 3.15     | 4.73      |

Data Source: DE CIP-Fidelity as of 09.30.2022; Morningstar source material as of 09.30.2022. If any of the above information differs from these updated sources, the source document supersedes the above listing.



# BENCHMARK ANALYSIS

Period Ending 09.30.22 | Q3 22

| 2027                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -5.43 | -14.93   | 1.10     | 2.37     | 3.44      |
| Active Benchmark        | -5.79 | -15.03   | -0.01    | 1.67     | 3.01      |
| Blend Age-Based Option  | -5.56 | -15.04   | 0.58     | 2.05     | 2.98      |
| Blend Benchmark         | -5.78 | -14.93   | -0.06    | 1.63     | 2.98      |
| Index Age-Based Option  | -5.44 | -14.00   | 0.36     | 2.55     | 3.73      |
| Index Benchmark         | -5.33 | -13.23   | 0.85     | 2.56     | 3.73      |

| 2024                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -4.52 | -11.56   | 0.60     | 1.86     | 2.46      |
| Active Benchmark        | -4.82 | -11.67   | -0.22    | 1.31     | 2.10      |
| Blend Age-Based Option  | -4.63 | -11.68   | 0.20     | 1.52     | 1.95      |
| Blend Benchmark         | -4.79 | -11.62   | -0.25    | 1.28     | 2.08      |
| Index Age-Based Option  | -4.40 | -10.66   | 0.15     | 2.01     | 2.69      |
| Index Benchmark         | -4.33 | -10.22   | 0.46     | 2.02     | 2.70      |

| 2021                    | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -4.03 | -9.36    | 0.37     | 1.59     | 1.88      |
| Active Benchmark        | -4.28 | -9.46    | -0.23    | 1.15     | 1.57      |
| Blend Age-Based Option  | -4.14 | -9.49    | 0.07     | 1.25     | 1.36      |
| Blend Benchmark         | -4.26 | -9.45    | -0.26    | 1.13     | 1.56      |
| Index Age-Based Option  | -3.82 | -8.46    | 0.14     | 1.76     | 2.09      |
| Index Benchmark         | -3.78 | -8.23    | 0.34     | 1.76     | 2.09      |

| College                 | QTR   | 1 - Year | 3 - Year | 5 - Year | 10 - Year |
|-------------------------|-------|----------|----------|----------|-----------|
| Active Age-Based Option | -4.03 | -9.36    | 0.37     | 1.59     | 1.88      |
| Active Benchmark        | -4.28 | -9.46    | -0.23    | 1.15     | 1.57      |
| Blend Age-Based Option  | -4.14 | -9.49    | 0.07     | 1.25     | 1.36      |
| Blend Benchmark         | -4.26 | -9.45    | -0.26    | 1.13     | 1.56      |
| Index Age-Based Option  | -3.82 | -8.46    | 0.14     | 1.76     | 2.09      |
| Index Benchmark         | -3.78 | -8.23    | 0.34     | 1.76     | 2.09      |

Data Source: DE CIP-Fidelity as of 09.30.2022; Morningstar source material as of 09.30.2022. If any of the above information differs from these updated sources, the source document supersedes the above listing.



## BENCHMARK ANALYSIS

Period Ending 09.30.22 | Q3 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>-22.29</b> | <b>4.75</b>  | <b>5.08</b> | <b>8.53</b> |
| Composite Benchmark              | -            | -20.85        | 4.25         | 5.37        | 8.55        |
| <b>DE Agrsv Gro (Fid Index)</b>  | <b>0.13%</b> | <b>-20.97</b> | <b>3.99</b>  | <b>5.01</b> | <b>8.31</b> |
| Composite Benchmark              | -            | -20.85        | 4.24         | 5.22        | 8.51        |
| <b>DE Consvr (Fid Funds)</b>     | <b>0.50%</b> | <b>-6.84</b>  | <b>-0.76</b> | <b>0.70</b> | <b>0.92</b> |
| Composite Benchmark              | -            | -6.05         | -0.68        | 0.80        | 0.95        |
| <b>DE Consvr (Fid Index)</b>     | <b>0.13%</b> | <b>-6.18</b>  | <b>-0.85</b> | <b>0.63</b> | <b>0.76</b> |
| Composite Benchmark              | -            | -6.05         | -0.68        | 0.80        | 0.93        |
| <b>DE Mod Growth (Fid Funds)</b> | <b>0.87%</b> | <b>-20.56</b> | <b>2.50</b>  | <b>3.68</b> | <b>6.48</b> |
| Composite Benchmark              | -            | -19.38        | 2.14         | 3.86        | 6.48        |
| <b>DE Mod Growth (Fid Index)</b> | <b>0.13%</b> | <b>-19.51</b> | <b>1.90</b>  | <b>3.54</b> | <b>6.12</b> |
| Composite Benchmark              | -            | -19.38        | 2.13         | 3.74        | 6.33        |

| Individual Portfolio             | Net Expense  | 1 - Year      | 3 - Year     | 5 - Year     | 10 - Year    |
|----------------------------------|--------------|---------------|--------------|--------------|--------------|
| <b>DE 500 Index</b>              | <b>0.11%</b> | <b>-15.58</b> | <b>8.05</b>  | <b>9.12</b>  | <b>11.55</b> |
| DE Fidelity 500 Index BM         | -            | -15.47        | 8.16         | 9.24         | 11.70        |
| <b>DE Bank Deposit</b>           | <b>0.50%</b> | <b>0.48</b>   | <b>0.38</b>  | <b>0.82</b>  | <b>0.51</b>  |
| N/A                              | -            | -             | -            | -            | -            |
| <b>DE International Index</b>    | <b>0.15%</b> | <b>-25.24</b> | <b>-1.77</b> | <b>-1.26</b> | <b>3.42</b>  |
| DE International Index BM        | -            | -25.05        | -1.37        | -0.89        | 3.72         |
| <b>DE Intmdt Treasury Index</b>  | <b>0.12%</b> | <b>-13.82</b> | <b>-3.30</b> | <b>-0.29</b> | <b>0.40</b>  |
| DE Intmdt Treasury Index BM      | -            | -13.80        | -3.18        | -0.19        | 0.60         |
| <b>DE Total Market Index</b>     | <b>0.11%</b> | <b>-18.12</b> | <b>7.41</b>  | <b>8.38</b>  | <b>11.16</b> |
| DE Total Market index BM         | -            | -18.05        | 7.51         | 8.48         | 11.28        |
| <b>DE Stable Value Portfolio</b> | <b>0.53%</b> | <b>-</b>      | <b>-</b>     | <b>-</b>     | <b>-</b>     |
| N/A                              | -            | -             | -            | -            | -            |

Data Source: Fidelity as of 09.30.2022



# APPENDIX



| Active Age-Based Option | Ticker | 2039   | 2036   | 2033   | 2030   | 2027   | 2024   | 2021   | College | Benchmark                              |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|----------------------------------------|
|                         | FJACX  | 0.84%  | 0.70%  | 0.56%  | 0.42%  | 0.29%  | 0.15%  | 0.06%  | 0.06%   | Russell 2000 TR USD                    |
|                         | FVWSX  | 5.11%  | 4.23%  | 3.40%  | 2.53%  | 1.73%  | 0.88%  | 0.38%  | 0.38%   | Russell 1000 Growth TR USD             |
|                         | FBLEX  | 5.95%  | 4.92%  | 3.96%  | 2.95%  | 2.02%  | 1.04%  | 0.46%  | 0.46%   | Russell 1000 Value TR USD              |
|                         | FNKLX  | 4.75%  | 3.93%  | 3.15%  | 2.34%  | 1.60%  | 0.83%  | 0.36%  | 0.36%   | Russell 1000 Value TR USD              |
|                         | FSAEX  | 1.85%  | 1.53%  | 1.23%  | 0.92%  | 0.63%  | 0.33%  | 0.14%  | 0.14%   | Russell 1000 Growth TR USD             |
|                         | FGLGX  | 8.25%  | 6.83%  | 5.49%  | 4.09%  | 2.80%  | 1.44%  | 0.62%  | 0.62%   | Russell 1000 TR USD                    |
|                         | FCGSX  | 8.67%  | 7.17%  | 5.76%  | 4.30%  | 2.94%  | 1.51%  | 0.66%  | 0.66%   | Russell 1000 Growth TR USD             |
|                         | FDMLX  | 4.19%  | 3.47%  | 2.79%  | 2.08%  | 1.43%  | 0.74%  | 0.33%  | 0.33%   | Russell Mid Cap Value TR USD           |
|                         | FIOOX  | 2.70%  | 2.24%  | 1.80%  | 1.34%  | 0.92%  | 0.48%  | 0.21%  | 0.21%   | Russell 1000 Value TR USD              |
|                         | FSBDX  | 4.39%  | 3.64%  | 2.92%  | 2.17%  | 1.48%  | 0.76%  | 0.33%  | 0.33%   | Russell 1000 Growth TR USD             |
|                         | FSOPX  | 2.81%  | 2.33%  | 1.87%  | 1.39%  | 0.96%  | 0.49%  | 0.24%  | 0.24%   | Russell 2000 TR USD                    |
|                         | FIGSX  | 7.19%  | 6.13%  | 5.14%  | 4.10%  | 3.14%  | 2.14%  | 1.52%  | 1.52%   | MSCI ACWI Ex USA Growth NR USD         |
|                         | FSTSX  | 1.93%  | 1.65%  | 1.38%  | 1.10%  | 0.84%  | 0.57%  | 0.40%  | 0.40%   | MSCI World Ex USA SMID Growth NR USD   |
|                         | FINVX  | 7.35%  | 6.28%  | 5.26%  | 4.20%  | 3.21%  | 2.17%  | 1.54%  | 1.54%   | MSCI ACWI Ex USA Value NR USD          |
|                         | FCNSX  | 3.14%  | 2.68%  | 2.25%  | 1.80%  | 1.38%  | 0.94%  | 0.67%  | 0.67%   | MSCI ACWI Ex USA NR USD                |
|                         | FSOSX  | 7.24%  | 6.17%  | 5.18%  | 4.13%  | 3.16%  | 2.15%  | 1.53%  | 1.53%   | MSCI ACWI Ex USA Growth NR USD         |
|                         | FEMSX  | 13.11% | 11.70% | 10.28% | 8.80%  | 7.41%  | 5.97%  | 5.08%  | 5.08%   | MSCI EM NR USD                         |
|                         | FHKFX  | 1.46%  | 1.31%  | 1.15%  | 0.98%  | 0.83%  | 0.66%  | 0.57%  | 0.56%   | MSCI EM NR USD                         |
|                         | FSIGX  | 0.90%  | 11.87% | 17.99% | 26.77% | 31.09% | 30.74% | 27.92% | 27.92%  | Bloomberg US Agg Bond TR USD           |
|                         | FTLTX  | 6.17%  | 6.45%  | 6.08%  | 5.70%  | 4.88%  | 4.27%  | 4.25%  | 4.24%   | Bloomberg US Government Long TR USD    |
|                         | FYBTX  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.99%  | 2.74%  | 3.99%  | 3.99%   | Bloomberg US Govt/Credit 1-3 Yr TR USD |
|                         | FGNXX  | 0.34%  | 0.54%  | 0.53%  | 0.53%  | 4.54%  | 11.58% | 16.60% | 16.60%  | ICE BofA USD 3M Dep OR CM TR USD       |
|                         | FCSSX  | 1.24%  | 1.04%  | 1.04%  | 1.03%  | 1.02%  | 1.02%  | 1.02%  | 1.02%   | Bloomberg Commodity TR USD             |
|                         | FSHNX  | 0.00%  | 0.57%  | 0.57%  | 0.56%  | 0.55%  | 0.54%  | 0.54%  | 0.54%   | ICE BofA US High Yield TR USD          |
|                         | FFHCX  | 0.06%  | 0.11%  | 0.11%  | 0.11%  | 0.11%  | 0.11%  | 0.11%  | 0.11%   | S&P/LSTA Leveraged Loan TR             |
|                         | FEDCX  | 0.00%  | 0.54%  | 0.54%  | 0.53%  | 0.52%  | 0.52%  | 0.51%  | 0.51%   | JPM EMBI Global Diversified TR USD     |
|                         | FSEDX  | 0.00%  | 0.18%  | 0.18%  | 0.18%  | 0.18%  | 0.18%  | 0.17%  | 0.17%   | JPM GBI-EM Global Diversified TR USD   |
|                         | FSREX  | 0.06%  | 0.31%  | 0.31%  | 0.31%  | 0.30%  | 0.30%  | 0.30%  | 0.30%   | S&P United States REIT TR USD          |
|                         | FSIPX  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%   | Bloomberg US Treasury US TIPS TR USD   |
|                         | FSTZX  | 0.00%  | 0.00%  | 1.03%  | 5.58%  | 13.01% | 20.50% | 25.29% | 25.29%  | BBg US TIPS 0-5 Years                  |
|                         | FSTDY  | 0.12%  | 0.10%  | 5.97%  | 5.98%  | 2.30%  | 0.09%  | 0.09%  | 0.09%   | BBg US TIPS 5+ Years                   |
|                         | FSTQX  | 0.23%  | 1.42%  | 2.07%  | 3.02%  | 3.67%  | 4.08%  | 4.05%  | 4.05%   | BBG ATI, xUSxEM RICC,USH               |

Data Source: Fidelity as of 09.30.2022



**Blend Age-  
Based Option**

| Ticker | 2039   | 2036   | 2033   | 2030  | 2027   | 2024   | 2021   | College | Benchmark                              |
|--------|--------|--------|--------|-------|--------|--------|--------|---------|----------------------------------------|
| FNK LX | 5.52%  | 4.57%  | 3.67%  | 2.74% | 1.88%  | 0.97%  | 0.43%  | 0.43%   | Russell 1000 Value TR USD              |
| FGLGX  | 7.69%  | 6.36%  | 5.11%  | 3.79% | 2.62%  | 1.34%  | 0.59%  | 0.59%   | Russell 1000 TR USD                    |
| FIOOX  | 14.72% | 12.19% | 9.79%  | 7.31% | 5.01%  | 2.57%  | 1.13%  | 1.13%   | Russell 1000 Value TR USD              |
| FSBDX  | 10.89% | 9.01%  | 7.24%  | 5.39% | 3.71%  | 1.90%  | 0.83%  | 0.83%   | Russell 1000 Growth TR USD             |
| FSOPX  | 3.68%  | 3.04%  | 2.44%  | 1.82% | 1.25%  | 0.65%  | 0.29%  | 0.29%   | Russell 2000 TR USD                    |
| FHOFX  | 6.90%  | 5.71%  | 4.59%  | 3.42% | 2.35%  | 1.21%  | 0.53%  | 0.53%   | Russell 1000 Growth TR USD             |
| FIGSX  | 6.32%  | 5.38%  | 4.51%  | 3.60% | 2.76%  | 1.88%  | 1.33%  | 1.33%   | MSCI ACWI Ex USA Growth NR USD         |
| FSTSX  | 1.93%  | 1.65%  | 1.38%  | 1.10% | 0.84%  | 0.57%  | 0.40%  | 0.40%   | MSCI World Ex USA SMID Growth NR USD   |
| FINVX  | 6.46%  | 5.51%  | 4.62%  | 3.69% | 2.82%  | 1.90%  | 1.35%  | 1.35%   | MSCI ACWI Ex USA Value NR USD          |
| FCNSX  | 3.15%  | 2.68%  | 2.25%  | 1.80% | 1.38%  | 0.94%  | 0.67%  | 0.67%   | MSCI ACWI Ex USA NR USD                |
| FHLFX  | 2.71%  | 2.31%  | 1.94%  | 1.55% | 1.18%  | 0.79%  | 0.56%  | 0.56%   | MSCI ACWI Ex USA NR USD                |
| FSOSX  | 6.36%  | 5.42%  | 4.54%  | 3.63% | 2.78%  | 1.89%  | 1.34%  | 1.34%   | MSCI ACWI Ex USA Growth NR USD         |
| FEMSX  | 13.12% | 11.71% | 10.30% | 8.81% | 7.42%  | 5.93%  | 5.08%  | 5.09%   | MSCI EM NR USD                         |
| FHKFX  | 1.46%  | 1.31%  | 1.15%  | 0.99% | 0.83%  | 0.66%  | 0.56%  | 0.57%   | MSCI EM NR USD                         |
| FSIGX  | 0.27%  | 3.57%  | 5.40%  | 8.04% | 9.33%  | 9.23%  | 8.38%  | 8.38%   | Bloomberg US Agg Bond TR USD           |
| FHMFx  | 0.18%  | 2.32%  | 3.52%  | 5.22% | 6.06%  | 5.99%  | 5.44%  | 5.44%   | Bloomberg US Corp Bond TR USD          |
| FHPFX  | 0.19%  | 2.49%  | 3.77%  | 5.60% | 6.50%  | 6.43%  | 5.84%  | 5.84%   | Bloomberg US Agg Bond TR USD           |
| FHNFX  | 0.27%  | 3.50%  | 5.31%  | 7.90% | 9.17%  | 9.07%  | 8.24%  | 8.24%   | Bloomberg Government 1-5 Yr TR USD     |
| FTLTX  | 6.18%  | 6.46%  | 6.09%  | 5.71% | 4.87%  | 4.28%  | 4.24%  | 4.24%   | Bloomberg US Government Long TR USD    |
| FYBTX  | 0.00%  | 0.00%  | 0.00%  | 0.00% | 0.99%  | 2.75%  | 3.99%  | 3.99%   | Bloomberg US Govt/Credit 1-3 Yr TR USD |
| FGNXX  | 0.00%  | 0.00%  | 0.00%  | 0.00% | 1.01%  | 2.79%  | 4.05%  | 4.05%   | ICE BofA USD 3M Dep OR CM TR USD       |
| FHQFX  | 0.34%  | 0.54%  | 0.53%  | 0.53% | 3.51%  | 8.79%  | 12.55% | 12.55%  | Bloomberg Corp 1 Yr Duration TR USD    |
| FCSSX  | 1.25%  | 1.04%  | 1.04%  | 1.03% | 1.02%  | 1.02%  | 1.02%  | 1.02%   | Bloomberg Commodity TR USD             |
| FSHNX  | 0.00%  | 0.57%  | 0.57%  | 0.56% | 0.55%  | 0.55%  | 0.54%  | 0.54%   | ICE BofA US High Yield TR USD          |
| FFHCX  | 0.06%  | 0.11%  | 0.11%  | 0.11% | 0.11%  | 0.11%  | 0.11%  | 0.11%   | S&P/LSTA Leveraged Loan TR             |
| FEDCX  | 0.00%  | 0.53%  | 0.53%  | 0.53% | 0.52%  | 0.52%  | 0.51%  | 0.51%   | JPM EMBI Global Diversified TR USD     |
| FSEDX  | 0.00%  | 0.18%  | 0.18%  | 0.18% | 0.18%  | 0.18%  | 0.18%  | 0.18%   | JPM GBI-EM Global Diversified TR USD   |
| FSREX  | 0.06%  | 0.31%  | 0.31%  | 0.31% | 0.30%  | 0.29%  | 0.30%  | 0.30%   | S&P United States REIT TR USD          |
| FSIPX  | 0.00%  | 0.00%  | 0.00%  | 0.00% | 0.00%  | 0.00%  | 0.00%  | 0.00%   | Bloomberg US Treasury US TIPS TR USD   |
| FSTZX  | 0.00%  | 0.00%  | 1.03%  | 5.59% | 13.01% | 20.56% | 25.30% | 25.30%  | Bloomberg US TIPS 0-5 Year TR USD      |
| FSTDx  | 0.11%  | 0.10%  | 5.98%  | 6.00% | 2.30%  | 0.10%  | 0.10%  | 0.09%   | Bloomberg Treasury 5+ Yr TR USD        |
| FSTQX  | 0.23%  | 1.42%  | 2.07%  | 3.03% | 3.67%  | 4.09%  | 4.05%  | 4.05%   | Bloomberg Global Aggregate TR USD      |

Data Source: Fidelity as of 09.30.2022





| Index Age-<br>Based Option | Ticker | 2039   | 2036   | 2033   | 2030   | 2027   | 2024   | 2021   | College                             | Benchmark                       |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------------------------------------|---------------------------------|
|                            | FCFMX  | 54.24% | 45.67% | 37.64% | 29.26% | 21.51% | 13.34% | 8.48%  | 8.48%                               | DJ US Total Stock Market TR USD |
| FSGEX                      | 35.65% | 30.04% | 24.77% | 19.27% | 14.19% | 8.82%  | 5.56%  | 5.56%  | MSCI ACWI Ex USA NR USD             |                                 |
| FIFZX                      | 4.13%  | 17.25% | 23.38% | 32.09% | 35.13% | 34.69% | 31.81% | 31.81% | Bloomberg US Agg Bond TR USD        |                                 |
| FTLTX                      | 4.93%  | 4.55%  | 4.18%  | 3.82%  | 3.43%  | 2.86%  | 2.86%  | 2.86%  | Bloomberg US Government Long TR USD |                                 |
| FHQFX                      | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 5.77%  | 14.63% | 20.86% | 20.86% | Bloomberg 3-6 Mo Tsy                |                                 |
| FSIPX                      | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | 0.00%  | Bloomberg 1-10 TIPS                 |                                 |
| FSTZX                      | 0.00%  | 0.00%  | 1.01%  | 5.56%  | 12.99% | 20.47% | 25.28% | 25.28% | Bloomberg US TIPS 0-5 Year TR USD   |                                 |
| FSTDY                      | 0.00%  | 0.00%  | 5.86%  | 5.89%  | 2.23%  | 0.00%  | 0.00%  | 0.00%  | Bloomberg Treasury 5+ Yr TR USD     |                                 |
| FSTQX                      | 1.04%  | 2.46%  | 3.12%  | 4.05%  | 4.68%  | 5.09%  | 5.04%  | 5.04%  | Bloomberg Global Aggregate TR USD   |                                 |

Data Source: Fidelity as of 09.30.2022



## 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.

Assign each Age-Based allocation to one of the nine risk-based categories, based on their relative scores from highest to lowest:

|                |                                |                               |                               |
|----------------|--------------------------------|-------------------------------|-------------------------------|
| <b>STEP 5:</b> | 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. |