

DELAWARE COLLEGE INVESTMENT PLAN

09.30.2019 – Fiduciary Due Diligence Report

Due Diligence Begins with Careful Oversight

EXECUTIVE SUMMARY

Plan Information

- Total plan assets as of September 30, 2019 were \$666.7 million. Approximately \$506.7 million (76% of total plan assets) are allocated to an Age-Based option, with approximately \$160.0 million (24% of total assets) allocated to static portfolios, individual funds, or a bank deposit portfolio.
 - **Active Age-Based** – \$396.9 million (60% of total assets)
 - **Index Age-Based** – \$91.6 million (14% of total assets)
 - **Multi-Firm Age-Based** – \$18.2 million (3% of total assets)

Peer Group Review

- Following the peer group rebalancing on 9.30.2019, the Delaware College Investment Plan has been placed in the **Moderate Mid-Equity** peer group (5th most aggressive peer group out of nine), based on its current total weighted equity exposure. Previously the Delaware College Investment Plan was in the **Aggressive Low-Equity** (3rd most aggressive) peer group in the Cammack 529 Age-Based Allocation Universe. The decision to reduce total equity exposure is in line with the general trend of the industry.
- Among peers both the **Active Age-Based** option and **Index Age-Based** option have performed well YTD versus a primarily passive/blend peer group. Both strategies benefit from their diverse asset class exposure. For this peer group, YTD both strategies have benefited from their exposure to international markets. International exposure is typically left out of index-based peers, in favor of US equity.

EXECUTIVE SUMMARY

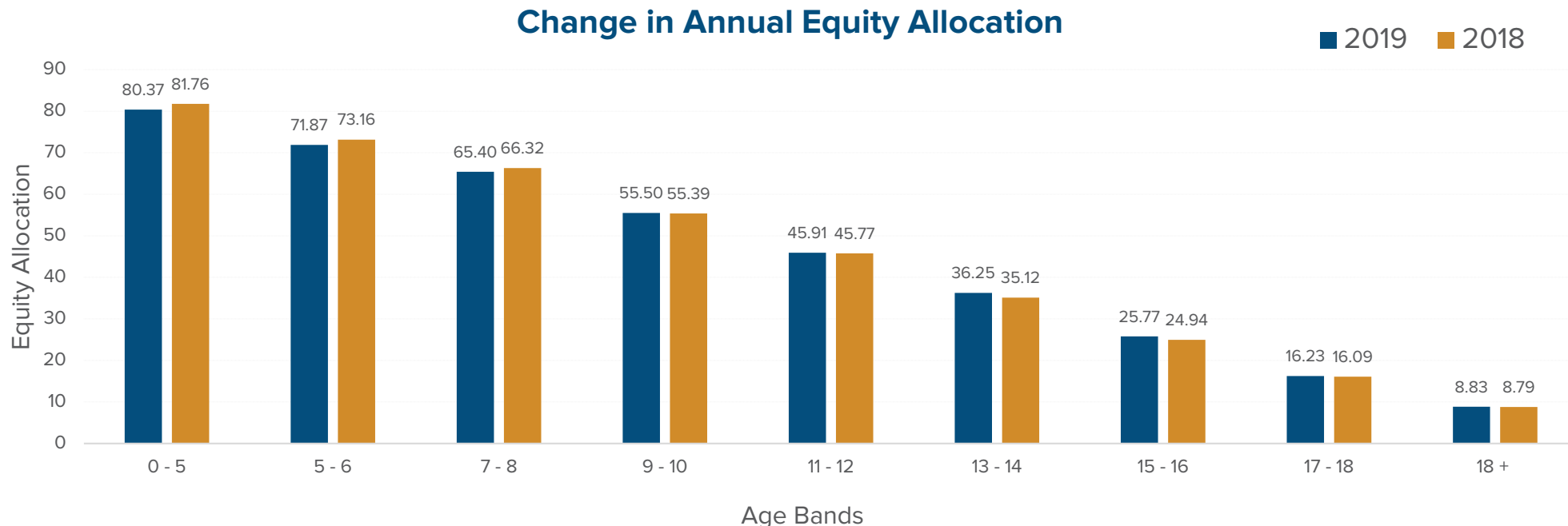
Underlying Holding Review

- A benchmark composite is created for each of the three Age-Based options. The composite mimics the asset allocation for the given quarter and weighs the aggregate performance for each underlying fund accordingly.
 - **Active Age-Based** option – 11 out of 29 funds (38%) outperformed their benchmark for the quarter.
 - **Index Age-Based** option – 2 out of 5 funds (40%) outperformed their benchmark for the quarter.
 - **Multi-Firm Age-Based** option – 18 out of 35 funds (51%) outperformed their benchmark for the quarter.

General Updates

- Beginning 10/1, the **Multi-Firm Age-Based** option is no longer an active option.
- Multi-Firm holders of record at the close on 10/31 will be transitioned to the corresponding **Active Age-Based** option portfolios on 11/1.
- The new **Blend Age-Based** option was introduced on 10/1. We expect the total performance of all age-based series to be more correlated moving forward. The **Blend Age-Based** option will receive its own glidepath placement in the greater peer universe, and may be compared versus different peers, depending on equity exposure.

529 TREND ANALYSIS Q3 2019: ANNUAL PEER EQUITY ALLOCATION REVIEW



Age-Based Industry Trends

As of 9.30.2019, the Cammack 529 Age-Based Allocation Universe was updated with glidepath information for 72 different age-based strategies from the nation's 30 largest 529 plans. When comparing the updated glidepath information to last year's data, common trends in total equity allocation strategy across the industry become apparent:

- Equity allocation generally decreased during the first eight years of saving, while equity allocations increased from age 9 onward. The largest shift came within the 0-5 age-band, where average equity allocations dropped by 1.39%. The smallest change was within the 18+ age category, where there was a slight increase in total equity – from 8.79% to 8.83%.
- Lower equity allocations within the beginning of the glidepath appear to be the result of managers removing weight from US equities. The higher mid-tier equity allocations could be a response to the struggling results of fixed income in a lower interest rate environment and an increased consideration for international/emerging markets.
- The average number of age-bands (covering a range of 0–18+) within the universe was 8.43, with the low end being 5 age-bands and the high end being 17 separate age-bands. We believe the industry is going to continue to move towards more age-bands, as it facilitates a smoother glidepath progression, rather than a stepped progression. Morningstar's recent review of 529 plans highlighted the importance of having progressive equity exposure as opposed to stepped. Progressive glidepaths limit the risk of equity timing for participants. As of 9.30.2019, 33 glidepaths had 9 or more age-bands for their programs, but only 6 had 10 or more.

Source: This information is gathered from 529-program websites and other written representations as of 09.30.2019.

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PEER GROUP ANALYSIS

PEER GROUP ANALYSIS: EQUITY RISK EXPOSURE CATEGORY GROUPING

Cammack LaRhette Advisor's Proprietary 529 Age-Based Allocation Universe Analysis

Conservative Low-Equity	Conservative Mid-Equity	Conservative High-Equity	Moderate Low-Equity	Moderate Mid-Equity	Moderate High-Equity	Aggressive Low-Equity	Aggressive Mid-Equity	Aggressive High-Equity
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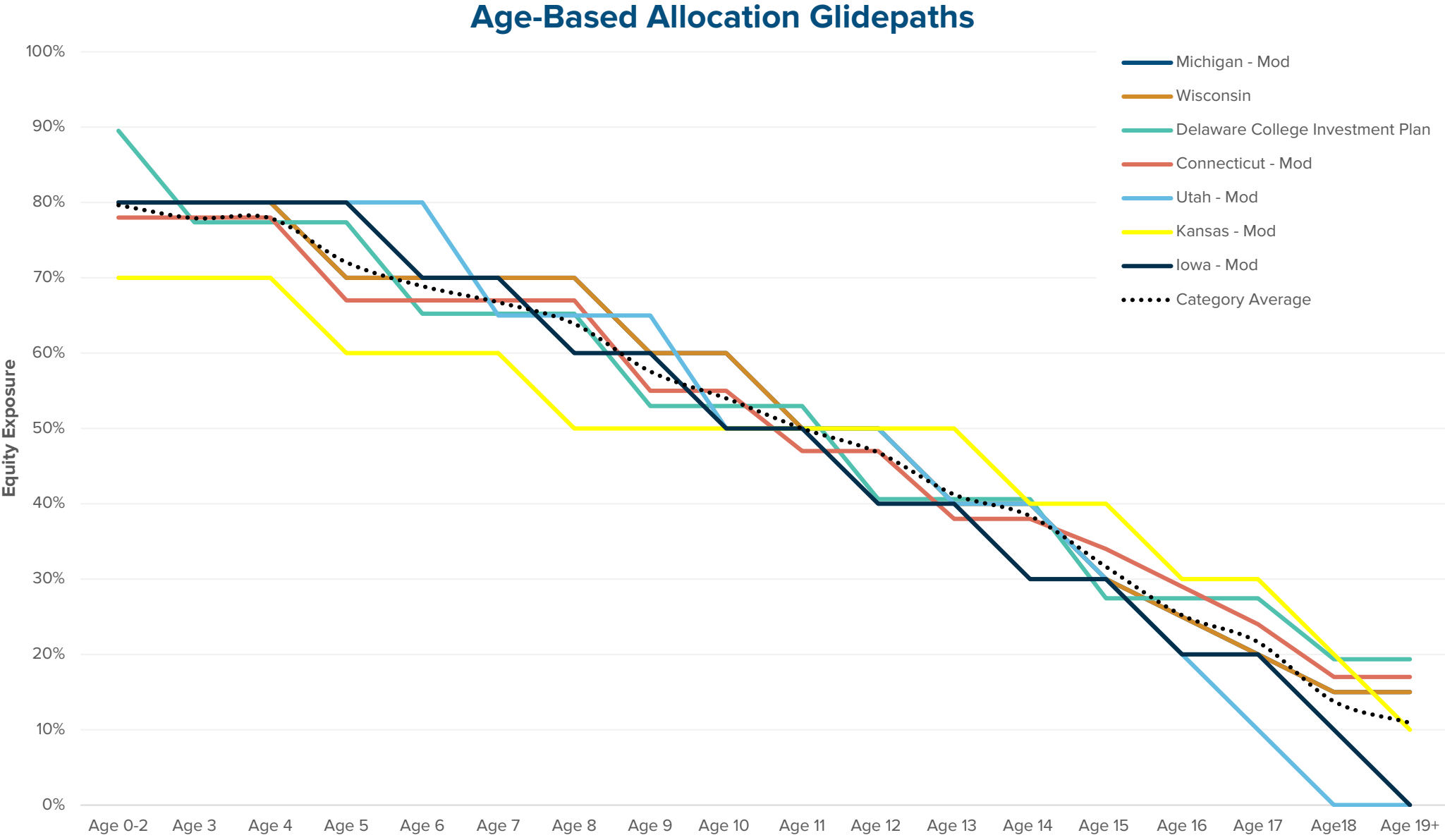
Fund Series	2036	2033	2030	2027	2024	2021	2018	College
Michigan - Mod	80%	80%	70%	60%	40%	25%	15%	15%
Wisconsin	80%	80%	70%	60%	40%	25%	15%	15%
Delaware - MF	90%	77%	65%	53%	41%	27%	19%	19%
Delaware - Active	90%	77%	65%	53%	41%	27%	19%	19%
Delaware - Index	89%	77%	65%	53%	41%	27%	19%	19%
Connecticut - Mod	78%	78%	67%	55%	38%	29%	17%	17%
Utah - Mod	80%	80%	65%	50%	40%	20%	0%	0%
Kansas - Mod	70%	70%	60%	50%	50%	30%	20%	10%
Iowa - Mod	80%	80%	70%	50%	40%	20%	10%	0%

- The total equity exposure score represents a weighted calculation of total equity exposure at various points of the Age-Based glidepath. Delaware's College Investment Plan has been placed in the **Moderate Mid-Equity** peer group, 5th most aggressive out of 9 equity-risk groups.
- Each score is multiplied by a weighted factor, placing a higher emphasis on the years closer to the equity landing point (2027, 2024, and 2021) as these are the years most affected by equity risk sensitivity.

This information is gathered from 529-program websites and other written representations as of 09.30.2019. 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.

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PEER GROUP ANALYSIS:
CATEGORY GLIDEPATH COMPARISON



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PEER GROUP ANALYSIS: INVESTMENT SUMMARY – QUARTERLY ANALYSIS

Active Age-Based Option Review

- The **Active Age-Based** option outperformed in 100% (8 of 8) of the age-bands for the YTD versus peers and performed the best out of the Plan's three Age-Based options on an absolute basis.
- Compared against its peers, the **Active Age-Based** option is positioned well in the current market environment. On an absolute basis, the increasing exposure to international/emerging has greatly benefited performance versus peers YTD. Coupled with this, the glidepath's lowering of total equity exposure (95% in 2018 to 89.5% in 2019 in the youngest age band) has also been beneficial relative to peers.
- The advantages for active management within a volatile market environment continued into the third quarter. Exposure to U.S. Long Treasuries benefited versus the traditional intermediate bond exposure of most peers. The active component of the equity funds continued to be a detractor on returns relative to peers, who typically index this space. Out of the 13 US equity funds within the glidepath, only two of the funds outperformed their analyst assigned-benchmark.

Index Age-Based Option Review

- The **Index Age-Based** option outperformed in 100% (8 of 8) of the age-bands for the YTD versus peers.
- The **Index Age-Based** option continues to lag the active series; however, this is what would expect given the volatile market environment where active series have more opportunities to outperform. Over the longer time periods versus peers, the index series holds up well.
- The **Index Age-Based** option continues to benefit from its more concentrated portfolio relative to peers. In a lowering interest rate environment, the series is positively impacted by the lack of inflation protected or short duration fixed income allocation relative to peers. The portfolio still has a hedge to inflation through commodity exposure, though this continues to be a negative factor on returns for an absolute basis. However, given the concentrated nature of the index portfolio, there are diversification benefits of including commodities for the long-term.

Multi-Firm Age-Based Option Review

- The **Multi-Firm Age-Based** option outperformed in 62.5% (5 of 8) of the age-bands for the YTD versus peers.
- Effective October 1, 2019, the **Multi-Firm Age-Based** option is no longer an active option for participants to elect.

PEER GROUP ANALYSIS:

AGE-BASED ANNUALIZED PERFORMANCE

2036	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.96%	17.06	0.84	-	-	-
Multi-Firm Age-Based Option	1.13%	15.83	0.23	-	-	-
Index Age-Based Option	0.14%	16.56	2.12	-	-	-
Peer Group Average	0.39%	15.87	2.93	8.92	7.19	9.10
Michigan (0-4)	0.16%	16.16	4.28	8.74	7.27	-
Wisconsin (0-4)	0.19%	16.14	3.98	9.28	7.48	-
Connecticut (0-4)	0.30%	15.34	4.16	-	-	-
Utah (0-3)	0.17%	14.77	2.98	8.92	7.04	9.03
Kansas (70%)	0.25%	15.08	4.67	-	-	-
Iowa (Growth)	0.20%	-	3.10	8.73	6.96	9.16
2033	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.91%	16.06	2.13	9.65	7.62	-
Multi-Firm Age-Based Option	1.09%	15.01	1.65	9.42	7.03	-
Index Age-Based Option	0.14%	15.57	3.29	9.59	7.25	-
Peer Group Average	0.38%	14.95	3.69	8.84	7.00	8.31
Michigan (5-8)	0.17%	15.18	4.99	7.99	6.71	-
Wisconsin (5-8)	0.20%	15.19	4.58	8.53	6.95	-
Connecticut (5-8)	0.31%	13.95	4.58	-	-	-
Utah (4-6)	0.17%	14.75	2.83	8.87	7.02	8.78
Kansas (60%)	0.25%	13.85	5.09	7.81	6.41	7.84
Iowa (Blended Growth)	0.20%	-	4.08	-	-	-
2030	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.86%	14.91	3.31	8.75	7.09	-
Multi-Firm Age-Based Option	1.05%	14.03	2.85	8.60	6.59	-
Index Age-Based Option	0.14%	14.47	4.38	8.62	6.71	-
Peer Group Average	0.38%	13.67	4.48	7.98	6.47	
Michigan (9-10)	0.18%	14.03	5.62	7.33	6.25	-
Wisconsin (9-10)	0.21%	14.11	5.18	7.74	6.41	-
Connecticut (9-10)	0.36%	12.47	4.92	-	-	-
Utah (7-9)	0.17%	12.85	3.58	7.47	6.06	7.69
Kansas (50%)	0.25%	12.51	5.47	-	-	-
Iowa (Moderate Growth)	0.20%	-	5.05	7.36	6.21	7.91

Data Sources: DE CIP-Fidelity as of 09.30.2019; Peer Group information is gathered from 529 program websites and other written representations as of 09.30.2019. If any of the above information differs from these updated sources, the source document supersedes the above listing.

PEER GROUP ANALYSIS:

AGE-BASED ANNUALIZED PERFORMANCE

2027	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.81%	13.28	4.07	7.72	6.43	8.58
Multi-Firm Age-Based Option	1.01%	12.48	3.63	7.59	6.02	
Index Age-Based Option	0.14%	12.90	4.93	7.53	6.06	8.73
Peer Group Average	0.37%	12.55	5.03	7.08	5.86	7.93
Michigan (11-12)	0.19%	13.20	6.02	6.69	5.84	-
Wisconsin (11-12)	0.22%	13.39	5.85	6.91	5.86	-
Connecticut (11-12)	0.36%	11.75	5.15	-	-	-
Utah (10-12)	0.18%	10.92	4.07	6.04	4.96	6.48
Kansas (50%)	0.25%	12.51	5.47	-	-	-
Iowa (Blended Moderate Growth)	0.20%	-	6.04	-	-	-
2024	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.76%	11.71	4.78	6.66	5.74	7.83
Multi-Firm Age-Based Option	0.98%	11.14	4.42	6.64	5.46	
Index Age-Based Option	0.14%	11.38	5.50	6.51	5.36	7.97
Peer Group Average	0.37%	11.24	5.52	6.10	5.20	6.72
Michigan (13-14)	0.20%	12.20	6.66	5.86	5.24	-
Wisconsin (13-14)	0.29%	12.04	5.64	6.47	5.41	-
Connecticut (13-14)	0.36%	10.91	5.65	-	-	-
Utah (13-14)	0.18%	9.65	4.66	4.89	3.97	5.14
Kansas (40%)	0.25%	10.86	5.46	5.84	5.05	6.1
Iowa (Conservative Growth)	0.20%	-	6.9	5.96	5.36	6.54
2021	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.70%	10.04	5.44	5.59	4.98	6.96
Multi-Firm Age-Based Option	0.94%	9.55	4.42	6.64	5.46	-
Index Age-Based Option	0.14%	9.70	6.06	5.43	4.59	7.01
Peer Group Average	0.36%	9.43	5.67	5.27	4.52	6.13
Michigan (15-16)	0.19%	10.01	6.27	4.81	4.38	-
Wisconsin (15-16)	0.31%	9.88	5.47	5.28	4.47	-
Connecticut (15-16)	0.35%	9.92	5.66	-	-	-
Utah (15-16)	0.17%	7.20	4.43	3.88	3.21	4.42
Kansas (30%)	0.25%	9.17	5.41	-	-	-
Iowa (Blended Conservative Growth)	0.20%	-	7.86	-	-	-

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PEER GROUP ANALYSIS:

AGE-BASED ANNUALIZED PERFORMANCE

2018	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.63%	8.20	5.78	4.38	4.07	5.89
Multi-Firm Age-Based Option	0.89%	7.89	5.38	4.45	3.96	-
Index Age-Based Option	0.14%	8.02	6.15	4.19	3.70	5.84
Peer Group Average	0.35%	7.87	5.90	4.26	3.84	5.19
Michigan (16-17)	0.18%	8.85	5.86	4.34	3.99	-
Wisconsin (16-17)	0.32%	9.02	5.46	4.81	4.11	-
Connecticut (16-17)	0.34%	8.88	5.24	-	-	-
Utah (16-17)	0.17%	4.67	5.05	3.11	2.60	3.78
Kansas (20%)	0.25%	7.46	5.34	-	-	-
Iowa (Income)	0.20%	-	8.80	4.55	4.47	5.25
College	Net Expense	YTD	1 - Year	3 - Year	5 - Year	10 - Year
Delaware College Investment Plan						
Active Age-Based Option	0.65%	8.42	5.90	3.98	3.57	4.08
Multi-Firm Age-Based Option	0.89%	7.95	5.38	4.08	3.54	-
Index Age-Based Option	0.17%	8.04	6.24	3.82	3.29	3.86
Peer Group Average	0.34%	6.87	5.76	3.71	3.25	3.88
Michigan (18+)	0.16%	7.24	5.18	3.64	3.36	-
Wisconsin (18+)	0.32%	7.00	5.03	3.94	3.32	-
Connecticut (18+)	0.29%	6.26	3.99	-	-	-
Utah (18+)	0.17%	4.03	4.93	2.80	2.41	3.69
Kansas (10%)	0.25%	5.98	5.46	-	-	-
Iowa (Blended Income)	0.20%	-	9.70	-	-	-

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BENCHMARK ANALYSIS

BENCHMARK ANALYSIS:

INVESTMENT SUMMARY – QUARTERLY ANALYSIS

Active Age-Based Option Review

- The **Active Age-Based** option's underlying mutual fund composite underperformed the composite benchmark in 7 out of 8 age-bands for Q3, with each fund averaging a loss of 0.17%. YTD the average outperformance for all age-bands is 0.15%.
- 38% of underlying funds (11 of 29) outperformed their respective benchmarks for Q2, with all funds averaging a loss of 0.43% versus their respective benchmarks.
- The largest outperformance was from Fidelity® Emerging Markets Fund, which has an average weighting of 6.73% in each age-band and outperformed its benchmark by 3.01%.
- The most substantial underperformance came from Fidelity® Blue Chip Growth Fund, which has an average weighting of 2.67% in each age-band and underperformed its benchmark by 3.98%.

Index Age-Based Option Review

- The **Index Age-Based** option's underlying mutual fund composite underperformed the composite benchmark in all age-bands for Q3, with each fund average a loss of 0.07%. YTD the average underperformance for all age-bands is 0.28%.
- 40% of underlying funds (2 of 5) outperformed their respective benchmarks for Q3, with all funds averaging a gain of 0.27% to their respective benchmarks.
- The largest outperformance was from Fidelity® Series Commodity Strategy Fund, which has an average weighting of 1.16% in each age-band and outperformed its benchmark by 1.65%.
- The most substantial underperformance came from Fidelity® Total Market Index Fund, which has an average weighting of 33.68% in each age-band and underperformed its benchmark by 0.27%.

Multi-Firm Age-Based Option Review

- The **Multi-Firm Age-Based** option outperformed the composite benchmark in all age-bands for Q3, with each option averaging a gain of 0.06%. YTD the average outperformance for all age-bands is 0.37%.
- 51% of underlying funds (18 of 35) outperformed their respective benchmarks for Q3, with all funds averaging a loss of 0.03% versus their respective benchmarks.
- The largest outperformance was from Fidelity® Canada Fund, which has an average weighting of 0.79% in each age-band and outperformed its benchmark by 3.00%.
- The most substantial underperformance came from Fidelity® Real Estate Income Fund, which has an average weighting of 0.47% in each age-band and underperformed its benchmark by 3.35%.

BENCHMARK ANALYSIS: PERFORMANCE DATA

2036	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	-0.21	1.04	9.35	7.14	9.46
Active Benchmark	0.18	2.38	10.13	7.55	9.61
Multi-Firm Age-Based Option	-0.19	0.58	9.57	7.24	9.66
Multi-Firm Benchmark	-0.25	1.09	9.36	6.75	9.03
Index Age-Based Option	0.44	2.37	9.85	7.46	9.60
Index Benchmark	0.56	2.90	10.15	7.56	9.70
2033	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	0.08	2.24	8.49	6.58	8.64
Active Benchmark	0.41	3.31	9.10	6.89	8.74
Multi-Firm Age-Based Option	0.10	1.81	8.70	6.69	8.94
Multi-Firm Benchmark	0.04	2.21	8.45	6.20	8.25
Index Age-Based Option	0.68	3.41	8.90	6.89	8.80
Index Benchmark	0.78	3.87	9.17	6.98	8.89
2030	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	0.37	3.38	7.61	5.99	7.79
Active Benchmark	0.63	4.19	8.07	6.22	7.84
Multi-Firm Age-Based Option	0.36	2.90	7.79	6.09	8.14
Multi-Firm Benchmark	0.30	3.20	7.51	5.61	7.41
Index Age-Based Option	0.89	4.32	7.91	6.27	7.93
Index Benchmark	0.97	4.71	8.16	6.35	8.02
2027	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	0.54	4.03	6.63	5.25	6.77
Active Benchmark	0.74	4.61	6.95	5.40	6.77
Multi-Firm Age-Based Option	0.54	3.61	6.80	5.38	7.16
Multi-Firm Benchmark	0.48	3.86	6.50	4.92	6.43
Index Age-Based Option	1.02	4.85	6.86	5.54	6.93
Index Benchmark	1.09	5.20	7.10	5.64	7.01

Data Source: DE CIP-Fidelity as of 09.30.2019; Morningstar source material as of 09.30.2019. If any of the above information differs from these updated sources, the source document supersedes the above listing.

BENCHMARK ANALYSIS: PERFORMANCE DATA

2024	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	1.03	5.51	5.69	4.69	5.85
Active Benchmark	1.15	5.84	5.94	4.80	5.91
Multi-Firm Age-Based Option	0.74	4.36	5.81	4.67	6.18
Multi-Firm Benchmark	0.67	4.55	5.50	4.24	5.46
Index Age-Based Option	1.16	5.42	5.79	4.80	5.92
Index Benchmark	1.22	5.72	6.03	4.91	5.99
2021	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	1.34	6.49	4.65	3.97	4.81
Active Benchmark	1.37	6.46	5.02	4.17	5.05
Multi-Firm Age-Based Option	0.93	5.10	4.73	3.89	5.10
Multi-Firm Benchmark	0.86	5.23	4.41	3.48	4.39
Index Age-Based Option	1.29	5.96	4.64	3.99	4.81
Index Benchmark	1.34	6.21	4.87	4.11	4.87
2018	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	1.50	6.90	3.93	3.43	4.09
Active Benchmark	1.48	6.85	4.00	3.43	4.04
Multi-Firm Age-Based Option	0.98	5.25	4.01	3.33	4.30
Multi-Firm Benchmark	0.92	5.39	3.70	2.95	3.64
Index Age-Based Option	1.31	6.00	3.88	3.39	4.02
Index Benchmark	1.35	6.23	4.11	3.53	4.08
College	QTR	1 - Year	3 - Year	5 - Year	10 - Year
Active Age-Based Option	0.99	5.67	3.86	3.15	3.88
Active Benchmark	1.01	5.63	3.88	3.13	3.76
Multi-Firm Age-Based Option	0.98	5.25	4.01	3.33	4.30
Multi-Firm Benchmark	0.92	5.39	3.70	2.95	3.64
Index Age-Based Option	1.31	6.00	3.88	3.39	4.02
Index Benchmark	1.35	6.23	4.11	3.53	4.08

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BENCHMARK ANALYSIS:

STATIC & INDIVIDUAL ANNUALIZED PERFORMANCE

Static Portfolio	Net Expense	1 - Year	3 - Year	5 - Year	10 - Year
DE Agrsv Gro (Fid Funds)	0.99%	0.31	10.04	7.87	9.72
Composite Benchmark		1.69	10.94	8.21	10.48
DE Agrsv Gro (Fid Index)	0.13%	1.15	10.38	7.75	10.23
Composite Benchmark		1.56	10.55	7.90	10.43
DE Consv (Fid Funds)	0.53%	5.86	2.18	2.06	2.34
Composite Benchmark		5.91	2.10	2.07	1.89
DE Consv (Fid Index)	0.20%	4.64	1.60	1.65	1.99
Composite Benchmark		4.80	1.82	1.82	2.18
DE Mod Growth (Fid Funds)	0.89%	3.75	8.22	6.72	8.42
Composite Benchmark		4.58	8.65	6.92	8.87
DE Mod Growth (Fid Index)	0.13%	4.38	8.17	6.44	8.53
Composite Benchmark		4.45	8.34	6.60	8.76

Individual Portfolio	Net Expense	1 - Year	3 - Year	5 - Year	10 - Year
DE 500 Index	0.11%	4.14	13.27	10.69	13.03
DE Fidelity 500 Index BM		4.25	13.39	10.84	13.24
DE Bank Deposit	0.50%	1.86	1.11	0.75	-
N/A	-	-	-	-	-
DE International Index	0.15%	-1.11	5.59	2.80	4.60
DE International Index BM		-1.05	5.94	3.03	4.85
DE Intmdt Treasury Index	0.12%	11.95	2.10	3.18	3.63
DE Intmdt Treasury Index BM		11.98	2.24	3.38	3.91
DE Money Market	0.57%	1.82	1.03	0.62	0.31
DE Money Market BM		2.41	1.56	1.00	0.55
DE Total Market Index	0.11%	2.76	12.70	10.30	12.92
DE Total Market index BM		2.81	12.78	10.40	13.09

APPENDIX

ASSET ALLOCATION: AGE-BASED OPTIONS – Q3 2019

Active Age-Based Option	Ticker	2036	2033	2030	2027	2024	2021	2018	College	Benchmark
	FDSCX	2.89%	2.47%	2.05%	1.62%	1.20%	0.75%	0.47%	0.47%	Benchmark 1: Russell 2000 TR USD
	FLCSX	5.54%	4.74%	3.93%	3.12%	2.31%	1.44%	0.90%	0.90%	Benchmark 1: Russell 1000 TR USD
	FCNTX	3.48%	2.98%	2.47%	1.96%	1.45%	0.90%	0.57%	0.57%	Benchmark 1: Russell 1000 Growth TR USD
	FSLVX	7.66%	6.56%	5.44%	4.32%	3.19%	1.99%	1.25%	1.25%	Benchmark 1: Russell 1000 Value TR USD
	FRESX	0.90%	0.76%	0.63%	0.50%	0.37%	0.23%	0.15%	0.15%	Benchmark 1: S&P United States REIT TR USD
	FGRTX	4.10%	3.51%	2.91%	2.31%	1.71%	1.06%	0.67%	0.67%	Benchmark 1: Russell 1000 TR USD
	FDGRX	7.44%	6.36%	5.28%	4.19%	3.10%	1.93%	1.21%	1.21%	Benchmark 1: Russell 1000 Growth TR USD
	FLPSX	2.94%	2.52%	2.09%	1.66%	1.22%	0.76%	0.48%	0.48%	Benchmark 1: Russell Mid Cap Value TR USD
	FVDFX	7.64%	6.54%	5.43%	4.31%	3.18%	1.98%	1.24%	1.24%	Benchmark 1: Russell 1000 Value TR USD
	FBGRX	5.17%	4.42%	3.67%	2.92%	2.15%	1.34%	0.84%	0.84%	Benchmark 1: Russell 1000 Growth TR USD
	FDSSX	10.50%	8.94%	7.47%	5.92%	4.38%	2.72%	1.71%	1.71%	Benchmark 1: Russell 1000 Growth TR USD
	FICDX	0.99%	0.86%	0.74%	0.60%	0.47%	0.34%	0.25%	0.25%	Benchmark 1: MSCI ACWI Ex USA NR USD
	FDIVX	10.17%	8.87%	7.56%	6.25%	4.92%	3.52%	2.65%	2.65%	Benchmark 1: MSCI ACWI Ex USA Growth NR USD
	FOSFX	10.11%	8.81%	7.51%	6.22%	4.90%	3.50%	2.64%	2.64%	Benchmark 1: MSCI ACWI Ex USA Growth NR USD
	FEMKX	10.00%	9.02%	8.04%	7.05%	6.06%	5.00%	4.35%	4.35%	Benchmark 1: MSCI EM NR USD
	FBNDX	2.01%	14.14%	24.19%	30.25%	29.97%	31.11%	32.59%	42.17%	Benchmark 1: BBgBarc US Agg Bond TR USD
	FTBFX	0.00%	0.00%	0.00%	0.00%	0.20%	2.49%	0.00%	0.00%	Benchmark 1: S&P 500 TR USD
	FCBFX	0.00%	0.00%	0.02%	0.00%	1.46%	2.00%	1.29%	0.00%	Benchmark 1: BBgBarc US Corp Bond TR USD
	FNBGX	0.00%	0.00%	0.39%	0.03%	4.86%	6.67%	8.29%	0.00%	Benchmark 1: BBgBarc US Government Long TR USD
	FRGXX	0.67%	0.67%	2.04%	7.30%	12.22%	18.13%	24.67%	24.67%	Benchmark 1: ICE BofAML USD 3M Dep OR CM TR USD
	FSHBX	0.17%	0.17%	0.51%	1.83%	3.06%	4.54%	6.17%	6.17%	Benchmark 1: BBgBarc US Govt/Credit 1-3 Yr TR USD
	FCSSX	3.47%	3.46%	3.45%	3.44%	3.43%	3.42%	3.42%	3.42%	Benchmark 1: Morningstar Lng-Only Cmdty TR USD
	SPHIX	0.76%	0.76%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	Benchmark 1: ICE BofAML US High Yield TR USD
	FFRHX	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	Benchmark 1: S&P/LSTA Leveraged Loan TR
	FNMIX	0.71%	0.71%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	Benchmark 1: JPM EMBI Global Diversified TR USD
	FRIFX	0.48%	0.48%	0.48%	0.48%	0.47%	0.47%	0.47%	0.47%	Benchmark 1: S&P United States REIT TR USD
	FIPDX	2.03%	2.03%	2.02%	2.02%	2.01%	2.01%	2.00%	2.00%	Benchmark 1: BBgBarc US Treasury US TIPS TR USD

Index Age-Based Option	Ticker	2036	2033	2030	2027	2024	2021	2018	College	Benchmark
	FSKAX	61.67%	53.36%	44.92%	36.51%	27.96%	18.78%	13.13%	13.13%	Benchmark 1: Russell 1000 TR USD
	FSGGX	27.35%	23.71%	20.03%	16.32%	12.58%	8.59%	6.14%	6.14%	Benchmark 1: MSCI ACWI Ex USA NR USD
	FXNAX	9.59%	21.61%	32.03%	37.69%	43.89%	49.67%	49.58%	49.58%	Benchmark 1: BBgBarc US Agg Bond TR USD
	FRGXX	0.00%	0.00%	1.70%	8.25%	14.39%	21.77%	29.94%	29.94%	Benchmark 1: ICE BofAML USD 3M Dep OR CM TR USD
	FCSSX	1.38%	1.29%	1.25%	1.14%	1.07%	1.06%	1.06%	1.06%	Benchmark 1: Morningstar Lng-Only Cmdty TR USD

ASSET ALLOCATION: AGE-BASED OPTIONS – Q3 2019

Multi-Firm Age-Based Option	Ticker	2036	2033	2030	2027	2024	2021	2018	College	Benchmark
	QUERX	2.96%	2.53%	2.10%	1.67%	1.23%	0.77%	0.48%	0.48%	Benchmark 1: Russell 1000 TR USD
	LSVEX	6.16%	5.27%	4.38%	3.48%	2.57%	1.60%	1.00%	1.00%	Benchmark 1: Russell 1000 Value TR USD
	AUUIX	4.70%	4.02%	3.34%	2.65%	1.96%	1.22%	0.77%	0.77%	Benchmark 1: Russell 1000 TR USD
	FDGRX	5.71%	4.89%	4.06%	3.22%	2.38%	1.48%	0.93%	0.93%	Benchmark 1: Russell 1000 Growth TR USD
	JUEMX	16.62%	14.22%	11.80%	9.38%	6.92%	4.31%	2.71%	2.71%	Benchmark 1: Russell 1000 TR USD
	LBISX	7.35%	6.29%	5.22%	4.15%	3.06%	1.91%	1.20%	1.20%	Benchmark 1: Russell 1000 Value TR USD
	LSGRX	4.37%	3.74%	3.11%	2.47%	1.82%	1.13%	0.71%	0.71%	Benchmark 1: Russell 1000 Growth TR USD
	PSPTX	2.94%	2.52%	2.09%	1.66%	1.22%	0.76%	0.48%	0.48%	Benchmark 1: Russell 1000 TR USD
	VSENX	7.59%	6.49%	5.39%	4.28%	3.16%	1.97%	1.24%	1.24%	Benchmark 1: Russell 2000 TR USD
	BIGIX	3.81%	3.32%	2.83%	2.34%	1.85%	1.32%	0.99%	0.99%	Benchmark 1: MSCI ACWI Ex USA Growth NR USD
	CIVIX	3.81%	3.32%	2.83%	2.34%	1.84%	1.32%	0.99%	0.99%	Benchmark 1: MSCI ACWI Ex USA Value NR USD
	FICDX	1.38%	1.20%	1.02%	0.85%	0.67%	0.48%	0.36%	0.36%	Benchmark 1: MSCI ACWI Ex USA NR USD
	MINIX	4.06%	3.54%	3.02%	2.50%	1.97%	1.40%	1.06%	1.06%	Benchmark 1: MSCI ACWI Ex USA NR USD
	MRSIX	3.92%	3.42%	2.92%	2.41%	1.90%	1.36%	1.02%	1.02%	Benchmark 1: MSCI ACWI Ex USA NR USD
	TROIX	4.26%	3.71%	3.17%	2.62%	2.06%	1.47%	1.11%	1.11%	Benchmark 1: MSCI ACWI Ex USA NR USD
	AEMGX	4.96%	4.48%	3.99%	3.50%	3.01%	2.48%	2.16%	2.16%	Benchmark 1: MSCI EM NR USD
	PRZIX	4.95%	4.47%	3.98%	3.49%	3.00%	2.48%	2.15%	2.15%	Benchmark 1: MSCI EM NR USD
	FBNDX	0.20%	1.41%	2.46%	3.03%	3.65%	4.23%	4.22%	4.22%	Benchmark 1: BBgBarc US Agg Bond TR USD
	FTBFX	0.30%	2.11%	3.68%	4.53%	5.46%	6.33%	6.31%	6.31%	Benchmark 1: BBgBarc US Agg Bond TR USD
	MWTIX	0.40%	2.82%	4.92%	6.06%	7.30%	8.46%	8.44%	8.44%	Benchmark 1: BBgBarc US Agg Bond TR USD
	PTTRX	0.40%	2.82%	4.92%	6.06%	7.30%	8.46%	8.44%	8.44%	Benchmark 1: BBgBarc US Agg Bond TR USD
	PDBZX	0.30%	2.12%	3.69%	4.55%	5.48%	6.35%	6.34%	6.34%	Benchmark 1: BBgBarc US Agg Bond TR USD
	WATFX	0.40%	2.82%	4.92%	6.06%	7.30%	8.46%	8.44%	8.44%	Benchmark 1: BBgBarc US Agg Bond TR USD
	PRRIX	2.03%	2.02%	2.02%	2.01%	2.01%	2.00%	2.00%	2.00%	Benchmark 1: BBgBarc US Treasury US TIPS TR USD
	FRGXX	0.25%	0.25%	0.77%	2.73%	4.58%	6.79%	9.25%	9.25%	Benchmark 1: ICE BofAML USD 3M Dep OR CM TR USD
	FCNVX	0.42%	0.42%	1.28%	4.56%	7.63%	11.32%	15.41%	15.41%	Benchmark 1: BBgBarc Govt/Corp 1 Yr Duration TR USD
	PTSHX	0.17%	0.17%	0.51%	1.82%	3.05%	4.53%	6.17%	6.17%	Benchmark 1: BBgBarc Govt/Corp 1 Yr Duration TR USD
	CRSOX	3.43%	3.43%	3.42%	3.41%	3.40%	3.39%	3.39%	3.39%	Benchmark 1: Morningstar Lng-Only Cmdty TR USD
	BHYIX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Benchmark 1: Morningstar Lng-Only Cmdty TR USD
	HWHIX	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	Benchmark 1: ICE BofAML US High Yield TR USD
	MHYIX	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	Benchmark 1: ICE BofAML US High Yield TR USD
	FFRHX	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	Benchmark 1: ICE BofAML US High Yield TR USD
	FNMIX	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	Benchmark 1: S&P/LSTA Leveraged Loan TR
	FRIFX	0.71%	0.71%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	Benchmark 1: JPM EMBI Global Diversified TR USD
	PRRIX	0.48%	0.48%	0.48%	0.47%	0.47%	0.47%	0.47%	0.47%	Benchmark 1: S&P United States REIT TR USD

CREATING CAMMACK LARHETTE ADVISOR’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:

STEP 5:

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 Cammack 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 Cammack 529 Age-Based Allocation Universe each release equity exposure and other data at varying internals. If any of the information within this report differs from updated sources, the updated source document supersedes the data in this report.

GLOSSARY AND STANDARD DISCLOSURES

DEFINITIONS

Terms	Definition & Application
Composite Benchmark	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.
Composite Data Points	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.
Peer Group	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.
Standard Deviation	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.

GLOSSARY AND STANDARD DISCLOSURES

Morningstar information was obtained from "Morningstar, Inc."

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The asset information included in this report is provided by the plan vendor(s) based on raw data. It has not been subjected to a validation process or any manual controls. There may be variances between the raw data reports and the comparative financials that are subjected to the processes detailed in an SSAE 16 (formerly SAS 70 report). The information should be used for the purposes of this report alone, and cannot be relied upon for other usages.

The 529 program information compiled to create this report and the Cammack 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 Cammack 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

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