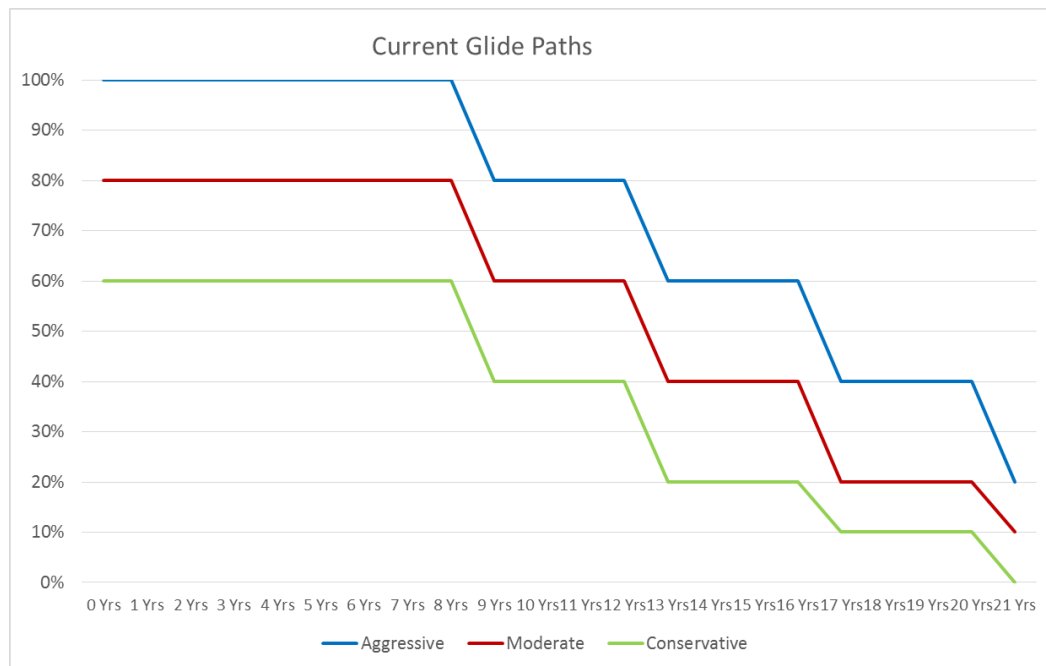


Memorandum

To: CollegeCounts 529 Board
From: Union Bank & Trust / Wilshire Funds Management
Date: May 5, 2016
Re: Recommended Glide Path Changes

During our fourth quarter review meeting in February 2016, Wilshire Funds Management (“WFM”) discussed proposed changes to the glide paths of the CollegeCounts Age-Based portfolios. These proposed changes were the result of a comprehensive review of the existing Age-Based portfolio glide paths conducted by WFM’s Portfolio Management team. The objective of the review, which also included a comparative analysis with other large college savings plan providers, was to identify any improvements that can be made to the current glide paths of the Age-Based portfolios. The current glide paths are depicted below.

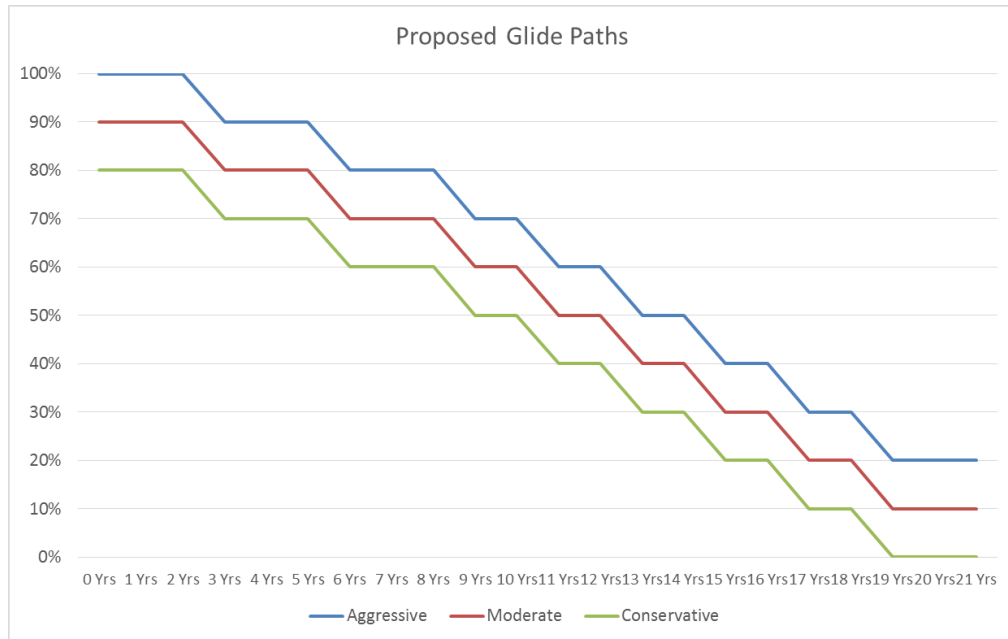


As a result of the review, WFM identified several enhancements that can be made to the existing Age-Based portfolio glide paths:

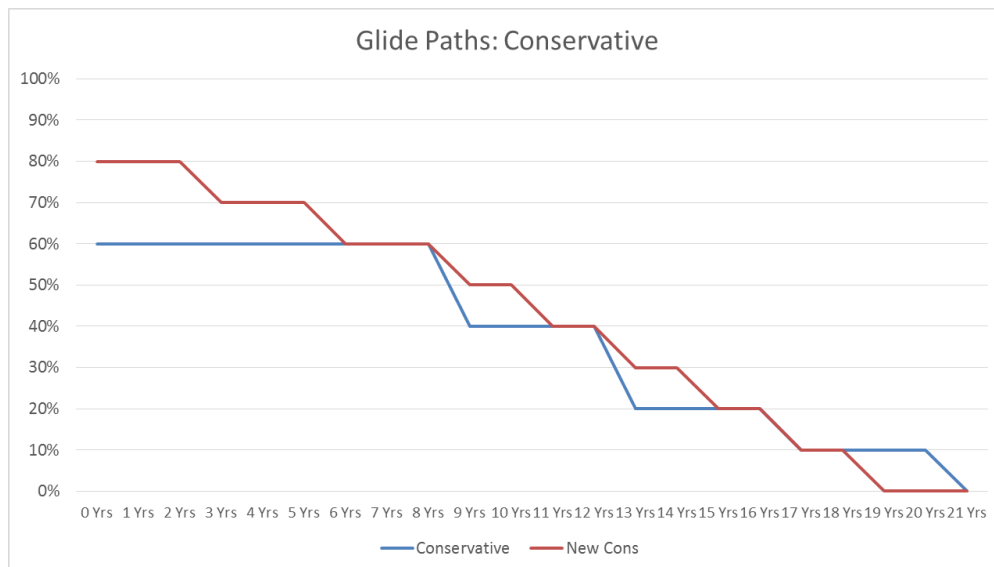
- **Smoothing of the equity allocation changes over time** – more frequent, but smaller, equity allocation step-downs is preferable
- **Temper the differences between the Aggressive and Conservative glide paths** – while the Moderate glide path appears to be appropriately placed, the equity allocation differences between the Aggressive and Conservative glide paths are very significant, which can lead to notably different client outcomes

- **Improve the symmetry and consistency of all three glide paths over time** – because of the large allocation differences and the large equity allocation step downs, the symmetry of the current glide paths breaks down in the later years

With these enhancements in mind, WFM proposed the new Age-Based portfolio glide paths depicted below.



While the proposed changes to the Moderate glide path were fairly small, the changes to the Aggressive and Conservative glide paths were more significant. The Aggressive glide path became less aggressive and, as depicted below, the Conservative glide path became less conservative.



During the review meeting in February, some concerns were raised about the proposed Conservative glide path and its starting equity allocation being 20% higher than the current Conservative glide path. There was some discussion about modifying the early portion of the proposed glide path and having it start at a lower equity allocation. More specifically, there was discussion about maintaining a 60% equity allocation until age nine and then following the new proposed glide path from that point forward.

After further analysis, WFM recommends moving forward with the proposed glide paths without any additional modifications. While we understand the concerns regarding the higher starting equity allocation for the Conservative glide path, we believe it is prudent to maintain consistency and symmetry across all three glide paths. It is also important to note that the average equity allocation over the life of the proposed Conservative glide path is only 5% higher (42% vs. 37%) than the current Conservative glide path. While the proposed Conservative glide path does have a higher average equity allocation than the existing Conservative glide path over the first nine years (70% vs. 60%), over the final seven years, when it is most prudent to be conservative, the proposed Conservative glide path actually has a lower average equity allocation than the existing Conservative glide path (9% vs. 11%).

In Exhibit A on the following page, we provide additional detail on the impact our proposed changes will have from an expense, expected return, and expected risk perspective on each of the underlying Target Fund portfolios, which are the building blocks for the Age-Based portfolios. As displayed, the impacts are fairly modest at the Target Fund portfolio level. Importantly, as shown below, the proposed glide path changes will result in a net neutral to net positive change in the weighted-average fund expenses across the Age-Based portfolios.

AL Advisor	
Aggressive	Average Fund Fee Expense
New	0.51%
Old	0.55%
Change	-0.05%

AL Direct	
Aggressive	Average Fund Fee Expense
New	0.09%
Old	0.09%
Change	0.01%

Moderate	Average Fund Fee Expense
New	0.49%
Old	0.51%
Change	-0.02%

Moderate	Average Fund Fee Expense
New	0.08%
Old	0.09%
Change	0.00%

Conservative	Average Fund Fee Expense
New	0.46%
Old	0.45%
Change	0.01%

Conservative	Average Fund Fee Expense
New	0.08%
Old	0.08%
Change	0.00%

Note: Percentages are rounded

Exhibit A – Target Fund Statistics

	AL Advisor										
Acquired Fund Fee Expense	Target Fund 0	Target Fund 10	Target Fund 20	Target Fund 30	Target Fund 40	Target Fund 50	Target Fund 60	Target Fund 70	Target Fund 80	Target Fund 90	Target Fund 100
New	0.26%	0.36%	0.42%	0.46%	0.50%	0.51%	0.52%	0.54%	0.54%	0.53%	0.54%
Old	0.27%	0.33%	0.40%	0.44%	0.49%	0.51%	0.53%	0.55%	0.58%	0.59%	0.60%
Change	-0.01%	0.02%	0.02%	0.02%	0.01%	0.00%	-0.01%	-0.02%	-0.04%	-0.06%	-0.06%

Expected Returns	Target Fund 0	Target Fund 10	Target Fund 20	Target Fund 30	Target Fund 40	Target Fund 50	Target Fund 60	Target Fund 70	Target Fund 80	Target Fund 90	Target Fund 100
New	2.00%	2.45%	2.83%	3.22%	3.57%	3.94%	4.26%	4.59%	4.94%	5.25%	5.60%
Old	1.98%	2.40%	2.83%	3.19%	3.55%	3.90%	4.25%	4.59%	4.93%	5.26%	5.60%
Change	0.02%	0.05%	0.00%	0.03%	0.01%	0.03%	0.00%	-0.01%	0.01%	-0.01%	0.01%

Expected Risk	Target Fund 0	Target Fund 10	Target Fund 20	Target Fund 30	Target Fund 40	Target Fund 50	Target Fund 60	Target Fund 70	Target Fund 80	Target Fund 90	Target Fund 100
New	1.87%	3.01%	4.26%	5.70%	6.99%	8.42%	9.71%	11.05%	12.50%	13.81%	15.27%
Old	1.76%	2.74%	4.24%	5.55%	6.93%	8.29%	9.68%	11.06%	12.45%	13.84%	15.23%
Change	0.11%	0.27%	0.02%	0.15%	0.06%	0.13%	0.03%	-0.01%	0.05%	-0.03%	0.04%

	AL Direct										
Acquired Fund Fee Expense	Target Fund 0	Target Fund 10	Target Fund 20	Target Fund 30	Target Fund 40	Target Fund 50	Target Fund 60	Target Fund 70	Target Fund 80	Target Fund 90	Target Fund 100
New	0.08%	0.08%	0.07%	0.07%	0.08%	0.08%	0.09%	0.09%	0.09%	0.10%	0.11%
Old	0.08%	0.08%	0.07%	0.07%	0.07%	0.08%	0.09%	0.09%	0.10%	0.10%	0.11%
Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

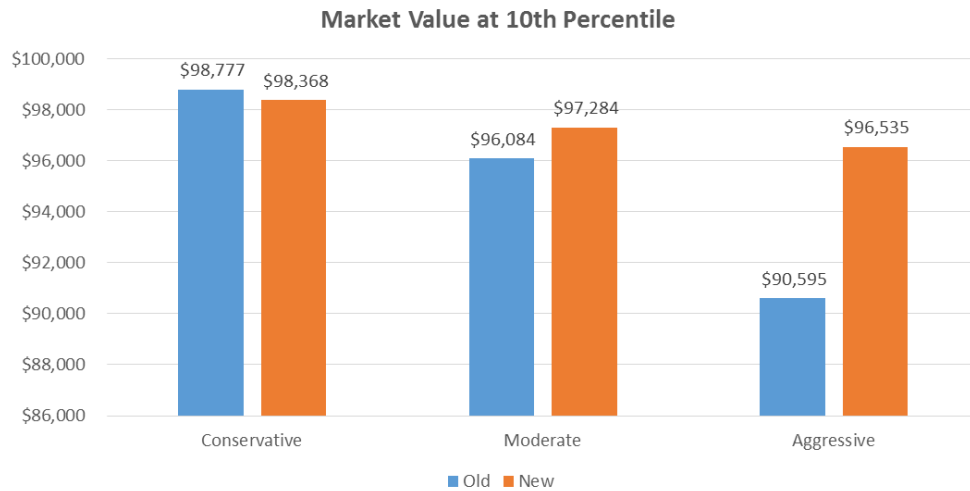
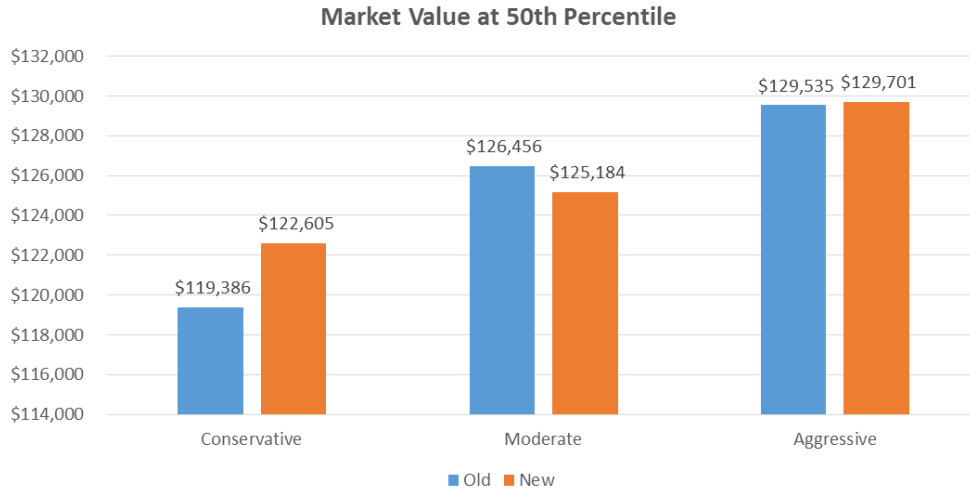
Expected Returns	Target Fund 0	Target Fund 10	Target Fund 20	Target Fund 30	Target Fund 40	Target Fund 50	Target Fund 60	Target Fund 70	Target Fund 80	Target Fund 90	Target Fund 100
New	1.98%	2.38%	2.76%	3.14%	3.49%	3.80%	4.22%	4.54%	4.89%	5.24%	5.61%
Old	1.98%	2.36%	2.75%	3.12%	3.48%	3.84%	4.20%	4.55%	4.90%	5.25%	5.60%
Change	0.00%	0.02%	0.01%	0.02%	0.01%	-0.04%	0.03%	0.00%	-0.01%	-0.01%	0.01%

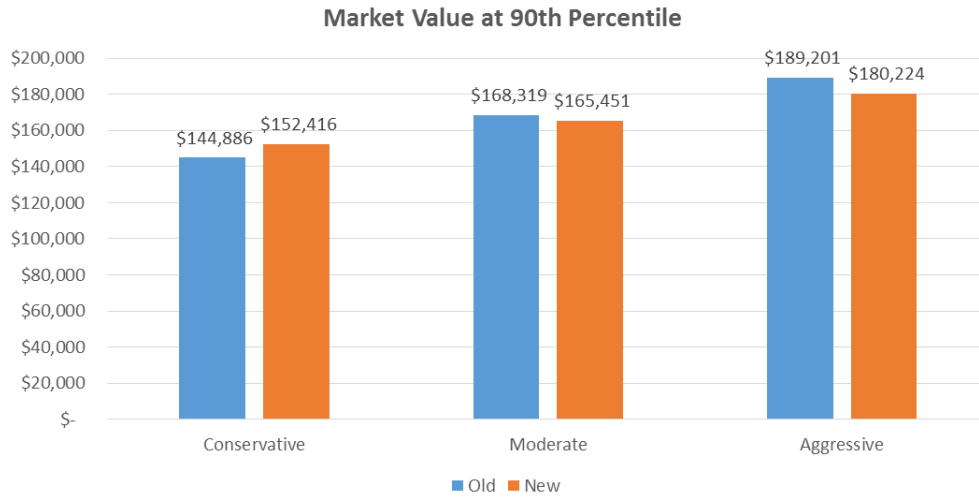
Expected Risk	Target Fund 0	Target Fund 10	Target Fund 20	Target Fund 30	Target Fund 40	Target Fund 50	Target Fund 60	Target Fund 70	Target Fund 80	Target Fund 90	Target Fund 100
New	2.10%	3.08%	4.28%	5.52%	6.74%	7.91%	9.61%	10.91%	12.30%	13.77%	15.30%
Old	2.08%	2.87%	4.15%	5.35%	6.68%	8.04%	9.47%	10.89%	12.34%	13.80%	15.27%
Change	0.02%	0.22%	0.13%	0.17%	0.06%	-0.13%	0.15%	0.02%	-0.04%	-0.03%	0.03%

Exhibit B – Monte-Carlo Simulations

The following charts show the results of two Monte-Carlo simulations comparing the proposed new glide paths versus the existing glide paths.

Simulation 1: Assume participant invests \$5,000 at the beginning of each year until age 17, what is the accumulated balance at age 17?





Simulation 2: What is the probability of a loss of 5% or greater from age 17 through age 20?

