Innovation and How to Deliver Greater Lifetime Value

A review of key findings from the CANNEX research paper "Comparing a Novel In-Plan Income Solution to Alternatives"

About the CANNEX Analysis

CANNEX, a leading independent actuarial and research firm, analyzed how a Target Date Fund (TDF) with Lifetime Income Builder compares first to a traditional TDF with similar characteristics, and second to a single premium immediate annuity (SPIA). For this research, CANNEX ran a forecasting scenario analysis assuming a participant began to allocate to the TDF at age 50, made ongoing contributions, and retired at age 65.

To analyze the results, CANNEX compared the TDFs using the following metrics. ***Accumulated Value*** is defined as the account value after a 15-year accumulation period. ***Income Value*** is defined as the actuarial present value of the future income stream from a retirement strategy. Each income payment is discounted to the present by the time value of money and the probability that the retiree will survive to receive that payment, and then summed to arrive at the *Income Value* of that income stream. ***Lifetime Ruin Probability*** (LRP) is defined as the probability of running out of funds while the retiree is still alive.

The full report can be found at cannex.com.

ARS designed Lifetime Income Builder to revolutionize how the industry delivers institutional income. Once embedded within a target date fund's (TDF) glidepath, it prioritizes both growth and income results — not one over the other — making this investment truly unique.

A TDF with Lifetime Income Builder provides:

- **Greater lifetime value in 98% of scenarios**[1]
- **Equivalent or greater income in 100% of scenarios**
- **Equivalent or greater growth results in 77% of scenarios**[2]

This investment provides benefits that can improve participants' confidence in their retirement plans and has the potential to make a significant difference in their quality of life. The solution:

- **Is never annuitized and maintains complete liquidity,** while producing the same income levels as a single premium immediate annuity (SPIA).
- **Eliminates longevity risk,** while a participant in a traditional TDF has a 37% chance of running out of income during their lifetime.[3]
- **Insulates from sequence of returns risk,** caused by market volatility, by locking in high-water marks on the entire fund account value.[4]
- **Is packaged as a TDF,** a familiar and hands-free investment, which eliminates participant-level decisions in both the accumulation and decumulation phases.

This report will outline the data that supports these conclusions.

[1] Lifetime Value measures the amount of income received per dollar of accumulated value. This statistic was developed by ARS.

[2] Based on results over a 15 year period with a +/-10% threshold.

[3] Average based on CANNEX data: 33.3% chance for males and 41.3% for females. LRP analysis assumes the same withdrawal percentage of 6% was applied to calculate income for both TDFs.

[4] The value of the Target Date Fund account is measured on the last business day of each calendar quarter and on either the last date that contributions can be made to the Fund, or the month prior to income activation.

The Making of Today's Income Crisis

Americans are underprepared for retirement. Savings levels are low, life expectancies are rising, and many investors do not have the expertise or guidance needed to confidently make their savings last throughout retirement. This is a crisis that has been brewing for decades.

> *The industry needs to start thinking differently. Growth and income cannot be mutually exclusive.*

With the shift away from pension plans to defined contribution plans, investment decisions and risk have now been placed on the participant, regardless of whether or not they have the knowledge required to make effective investment decisions. To address that issue, the retirement industry set out to educate participants and provide solutions that focus on accumulation of assets.

The introduction of target date funds was a welcome innovation because it created a hands-free approach to wealth generation. While TDFs have simplified saving and investing for many Americans, participants are still left on their own when it comes to income planning. The true goal of every retirement plan is to provide a paycheck in retirement, but even investors with substantial assets don't necessarily know how to transform a portfolio into a stream of income.

The Need for Fresh Thinking

The industry needs to start thinking differently. Up until now, planning for the accumulation of wealth has been the focus, and planning for retirement spending has been a separate goal. Accumulation is important, and investors will always need immediate value. This is why an investment that offers ample growth opportunity and provides access to assets will always be a demand. But growth and income cannot be mutually exclusive.

To move forward, we need to consider solutions that are designed to balance growth, income, and liquidity. Just as TDFs helped Americans accumulate assets in a hands-free, confident manner, the decumulation of wealth needs to be made just as simple. This requires true product innovation.

A New Approach to Retirement Investing

With the passing of the SECURE Act, many solutions have been introduced with a focus on delivering guaranteed income. The majority of these designs wrap a retirement portfolio in a retail annuity structure. In doing so, they introduce expensive fees and restrictions which often reduce the benefits traditional investments — like the TDF — were designed to accomplish.

Lifetime Value: A New Measure of Success

Product innovation needs to put the participant at the center of the design. This means we need to design something entirely different than what the industry has seen in the past, and we need a new way to measure the success of such products. "Lifetime Value" is that measurement. It considers the relationship between accumulation and income, unlike previous metrics that have only looked at those values separately. "Lifetime Value" measures the amount of income received per dollar of accumulation. Through this metric, we can gauge if the *Income Value* generated from the solution is sufficient enough to offset any difference in performance.

To provide an investment that delivers better outcomes for participants, ask these questions:

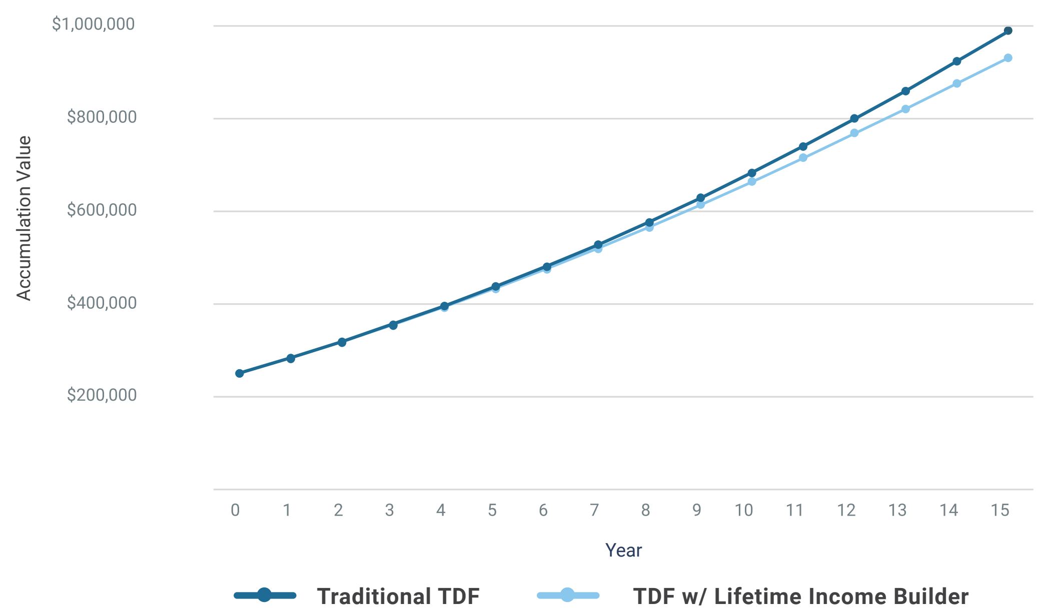
- **Does the solution perform similarly to its industry benchmarks?**
- **How much income will participants receive in retirement and for how long?**
- **Are participants ever required to give up access to any portion of their assets?**
- **Is the solution's Lifetime Value, the amount of income produced per dollar of accumulation, greater than other solutions?**

The CANNEX research focused on quantifying accumulation and income. ARS explored the implications of these results by running our own analysis, using CANNEX's data.

Key Findings of the CANNEX Research

Average Annual Growth of TDFs over 15 Years

A TDF with Lifetime Income Builder produces comparable growth to a traditional TDF over a 15-year accumulation period. The graph below plots the average *Accumulated Value* of all scenarios. The TDFs perform within an average of 0.39% of one another annually.

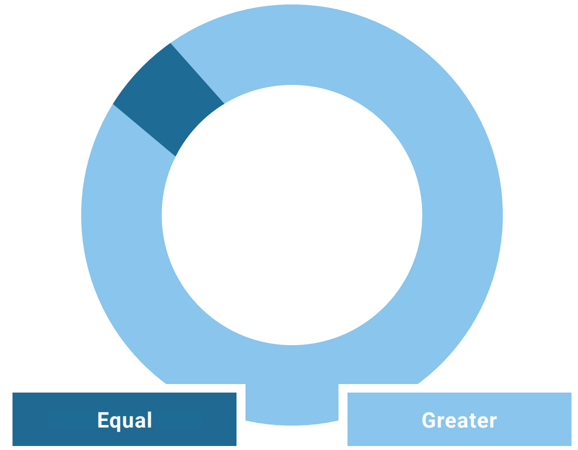


Difference in Distribution of Accumulated Values

An analysis of the difference in *Accumulated Value* at age 65 shows the TDF with Lifetime Income Builder performs equal (+/- 10% over 15 years) or better than the traditional TDF in 77% of scenarios.

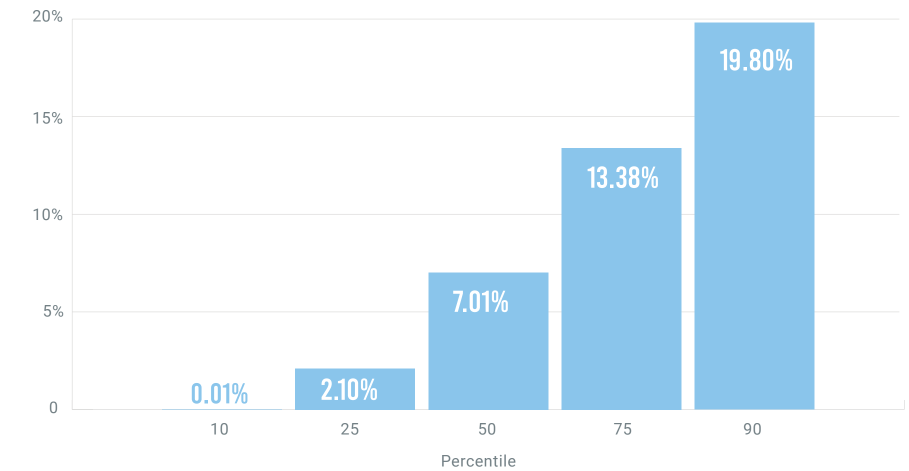
Scenarios with Greater or Equal *Income Value*

A TDF with Lifetime Income Builder provides a greater *Income Value* in 90% of scenarios compared to the traditional TDF. *Income Value* is defined as the present value of income.



% Difference of *Income Value*

In all market conditions, a TDF with Lifetime Income Builder produces more income for the participant, with the potential to reach up to 19.80% higher income at the 90th percentile.



For financial professional use only. Not for distribution to the public.

For financial professional use only. Not for distribution to the public.

What Do These Results Mean?

CANNEX's analysis provided the growth and income results, but what is the impact of these results on a participant's retirement outcome? Combining the results into a single analysis provides greater insight on the long-term value a TDF with Lifetime Income Builder can provide.

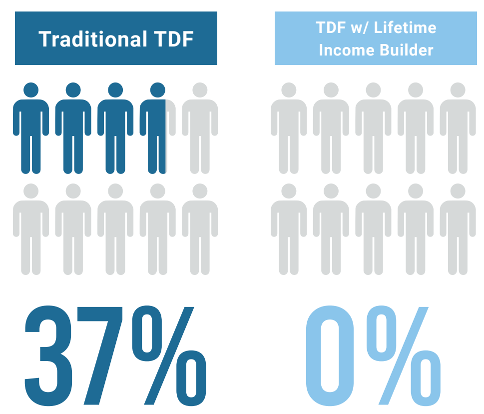
The Participant Will Never Run Out of Money

First, we explored how much income the participant would receive annually, and for how long.

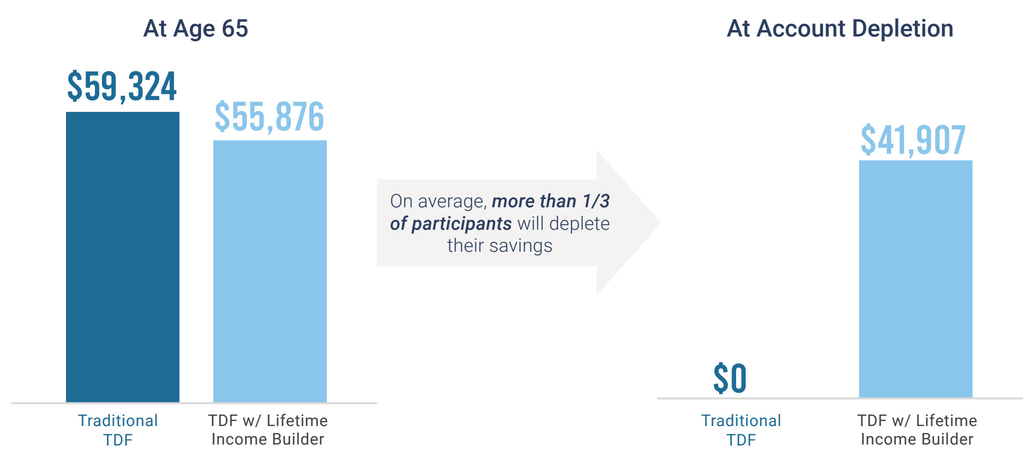
CANNEX's LRP analysis concludes that more than one-third of participants will deplete their account value during their lifetime, no matter which TDF they choose. However, a participant in the TDF with Lifetime Income Builder will receive income payments for the rest of their life.

To demonstrate this difference numerically, we looked at the average *Accumulation Value* at age 65, then calculated income at the target date and at account depletion.[6]

Probability of Running Out of Income[5]



Annual Income Generated by TDFs



As this scenario demonstrates, the *Accumulation Value* is not solely responsible for the participant's long-term success. The ability to insulate a portfolio from market volatility and address longevity risk is critical to deliver a steady stream of income for life. As we stand today, many retirees may run out of money without these additional retirement income benefits.

[5] Traditional TDF: 33% of males and 41% of women. TDF w/ Lifetime Income Builder: 31% of males and 36% of women. LRP analysis assumes the same withdrawal percentage of 6% was applied to calculate income for both TDFs.

[6] Income at age 65: 6% of the *Accumulated Value* at age 65. Income at account depletion: 4.5% of *Accumulated Value* at age 65. This analysis did not take the TDF w/ Lifetime Income Builder's high-water mark into consideration when calculating income. If it had, these values may have been greater.

Participants Receive Greater Total Lifetime Value

We then explored how much income the participant would receive per dollar of accumulated value. This "Lifetime Value" demonstrates the balance of the solutions' income and accumulation outputs. We plotted the difference in Lifetime Value and the difference in performance (TDF with Lifetime Income Builder relative to traditional TDF) in the following visual.

Difference in Accumulation vs. Difference in Lifetime Value[7]

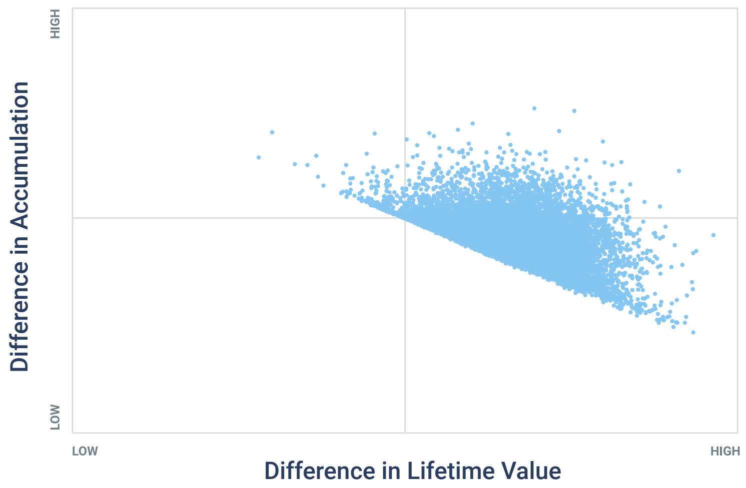
TDF w/ Lifetime Income Builder relative to traditional TDF

High-High: 20% of all scenarios. The TDF with Lifetime Income Builder produces greater lifetime value and greater performance than a traditional TDF.

Higher Lifetime Value: 78% of scenarios. The TDF with Lifetime Income Builder produces greater lifetime value with lower performance than a traditional TDF.

Higher Performance: 2% of scenarios. The TDF with Lifetime Income Builder produced greater performance and a lower lifetime value.

Low-Low: 0% of scenarios. There are no scenarios in which the TDF with Lifetime Income Builder produces lower lifetime value and lower performance.



While there are scenarios where a traditional TDF may outperform a TDF with Lifetime Income Builder, **the majority of scenarios (98%) produce more income per dollar of accumulation.** These results suggest that even in the scenarios where we see a difference in *Accumulation Value*, performance is offset by the income the solution generates in retirement.

[7] **Analysis Methodology**: Difference in accumulation: the performance of the TDF with Lifetime Income Builder's *Accumulation Value* at the target retirement age of 65, relative to the traditional TDF. Stronger values means the participant's account grew more than it would have if invested in a traditional TDF. Difference in lifetime value: the difference between the "lifetime value ratios", defined as *Income Value/ Accumulation Value*. A higher "lifetime value" means over the participant's lifetime, the income generated by that TDF is significant enough in value to off-set any trade-off in accumulated value. A greater difference means the TDF with Lifetime Income Builder would provide greater income per dollar of accumulated value than a traditional TDF.

Conclusion

For many years, the industry has been focused on asset accumulation. But when considering the best outcome for a participant, income should be the key objective. Accumulation is important, but the biggest focus should be on driving a paycheck throughout the participant's retirement. To do this, we need to focus on how the two values work together, rather than viewing them as exclusive goals. Creating a solution that delivers on both values requires fresh thinking and true product innovation.

A TDF with Lifetime Income Builder has been proven to provide participants with equivalent performance, superior income, and greater lifetime value when compared to a traditional TDF. It offers comparable income to a SPIA while maintaining full liquidity, eliminating the negatives traditionally associated with this product type. It is packaged together in a single, fully liquid package that makes the solution flexible and easy to understand and adopt. Finally, it is the most efficient and effective way to reduce sequence of returns and longevity risks in a retirement portfolio. These benefits are the direct result of product innovation that drives greater results to help participants achieve security and stability in retirement.

Want to learn more about Lifetime Income Builder?

Contact us at **480-892-0000** or visit www.arsfinancial.com

About ARS

ARS designs, develops, and facilitates distribution of institutional lifetime income products that help Americans solve their biggest challenge in retirement—outliving their money. Founded in 2020, the company’s over-arching philosophy centers on delivering better participant outcomes through innovation. It is led by industry veterans with a combined 175 years of experience in retirement plans, annuities, and asset management. ARS is headquartered in Scottsdale, Arizona.

ARS's patent-pending income solution, Lifetime Income Builder, is a guaranteed lifetime income solution created specifically for institutional retirement platforms. Lifetime Income Builder was designed on a fixed indexed annuity (FIA) chassis with a guaranteed lifetime withdrawal benefit (GLWB), then given a daily market value to enable compatibility with investment products. When embedded within a portfolio’s glidepath, Lifetime Income Builder functions like any other investment, acting as its own asset class.

The research referenced in this document was performed by CANNEX with the intent of ensuring a rigorous and impartial assessment of a TDF with Lifetime Income Builder and a traditional TDF. In addition to the independent assessment provided by CANNEX, the summary presented here is based on our analysis of the research results with a focus on aspects that highlight the strengths of our solution. Readers are encouraged to refer to the original white paper for a comprehensive understanding of the methodology, analysis and results.