Lifetime Income Score

What are the common traits of a successful retirement income strategy?

In a continuing cycle of economic uncertainty, change seems to be the only constant. However, we recently conducted a study that reveals another area of stability — steady support from plan sponsors and advisors.

As American workers try to navigate through their financial concerns, our findings reinforce the high premium they place on employers and advisors to help guide them toward a successful retirement outcome.

Although employees' perceptions and attitudes across many different economic categories show a notable decline, their thoughts and beliefs about their financial future — surprisingly — show an uptick.

This interesting contrast raises an all-important question: Why?

It's reasonable to conclude that the answer lies partly in the simple idea that employees continue to engage in and commit to their workplace savings plan. However, hard evidence suggests that employees are more comfortable putting their trust in the capable hands of employers and personal advisors.

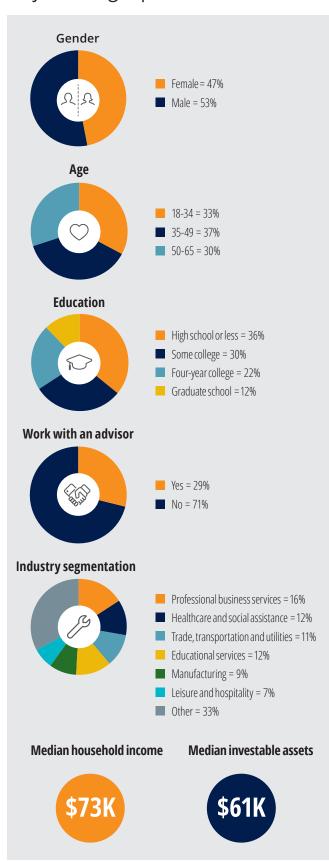
The results from our study indicate greater appreciation for modern plan design and validate the importance of professional advice to drive measurably higher confidence levels and income replacement percentages.

We are pleased to offer our Lifetime Income ScoreSM (LIS) report. This report includes survey results from more than 4,000 American workers aged 18 to 65. Based on individual responses, it estimates the percentage of working income — the LIS — that American households are on track to replace in retirement

The LIS metric includes projected Social Security benefits (if available), defined benefit and defined contribution assets, personal savings, home equity and business ownership. It provides a comprehensive overview of Americans' current readiness for retirement — and suggests ways to improve it.



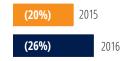
Key demographics



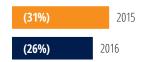
Section I: A contrast in economic and retirement confidence

Market performance and political uncertainty at any given point in time certainly influence people's views on the state of the economy. It's no surprise that responses from the LIS study — conducted throughout January and February in 2016 — follow this trend. Across several economic indicators, year-over-year confidence wanes based on employee responses.

The economy will be in a recession over the next 12 months



The stock market will be higher over the next 12 months

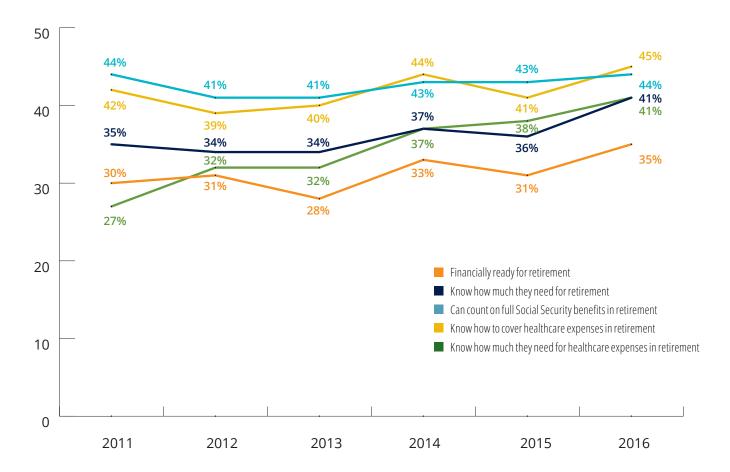


Long-term interest rates will be higher over the next 12 months



As the market goes, so goes people's attitudes toward the economy — but not their confidence in their financial future. Interestingly, this area shows a rare immunity to negativity.

In fact, the responses show employee beliefs trending in the opposite direction. The percentages of those who state that they are very confident or somewhat confident across five retirement-related areas are on par, up modestly or at historic highs compared with the previous five years.



Additionally, the study shows improvements in three important areas.

Viewing retirement as a savings objective



Saving to pay down debt



Median LIS



Even in a best-case scenario, expectations may be to see these numbers as flat. However, the fact that they are improving deserves further exploration. With an understanding as to why these numbers are bucking the trend, people can take steps to further the cause that is creating this more optimistic outlook.

Further insight into the results from the LIS study reveals that plan sponsors and advisors serve as the driving force behind these statistical anomalies.

Section II: The ripple effect

Above all else, the LIS study again confirms that having access to a workplace plan is a critical starting point. This alone lifts an LIS by 35 percentage points.



There is some encouraging news in this area: The percentage of employees who report that they are eligible to participate in a plan is up slightly from last year.

Eligible to participate in a plan



With plan access on the rise, the next step is to maximize plan effectiveness. Rome was not built in a day — and neither was the model retirement plan design. Although it has taken time, plan sponsors are starting to adopt some of the most influential and modern plan design features, creating a positive ripple effect across the workplace savings landscape.

Actively contributing 401(k) participants who were automatically enrolled



These numbers alone are powerful, but what's more impressive is the correlation between the broader adoption of auto-enrollment and the rise in LIS results

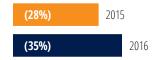
LIS with 401(k) auto-enrollment



There is no stronger endorsement for auto-enrollment than this important fact: It works.

Meanwhile, auto-escalation continues to build momentum. Adoption of auto-escalation has long lagged behind its auto-enrollment companion, but it's quickly gaining ground as a powerful counterpart.

Actively contributing 401(k) participants who elected auto-escalation



Evidence points to auto-escalation as being one of the single biggest contributors to helping people arrive at 100% income replacement in retirement.

LIS with 401(k) auto-escalation



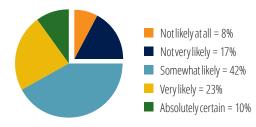
Aside from the obvious benefit of saving more, a new element to the LIS study in 2016 sheds additional light on the importance of auto-escalation. For the first time, the survey asked respondents to identify the number of times they have increased their savings percentage.

Of those who are actively contributing to a 401(k), 403(b) or 457 plan and not using auto-escalation, only 5% indicate that they have increased their contribution amount six to 10 times. There is — as expected — a direct connection between the number of increases and LIS results.



Clearly, people need a nudge in this area. Not only do they need one, but they also want one. The survey also asked actively contributing participants — whose retirement date was five years or more in the future — if they would consider participating in a program in which their employer automatically increases their contribution to the IRS maximum over a five-year period. Overall, 75% say that they would be somewhat likely, very likely or absolutely certain to sign up.

INTEREST IN AUTO-ESCALATION TO IRS MAXIMUM

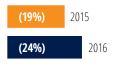


These results effectively end the debate as to whether auto-escalation borders on plan sponsors overstepping their bounds.

Section III: Planning with a professional versus doing it yourself

As a complement to the modern plan design features plan sponsors are pursuing, professional advisors are providing a steadying hand to give American workers greater confidence about their future. Employees are turning to the experts more often, as evidenced by the year-over-year increase in those who are getting professional assistance to improve their financial decisions.

Relationship with a traditional advisor



In addition, employers are increasingly using their workplace savings plan to provide access to an advisor.

Advisor connected to plan for households that have a member who is eligible to participate in a workplace plan and has an advised account



As the percentage of those who are engaging an advisor for help continues to grow, there is a strong sense of urgency for industry leaders to ensure that legislation doesn't impede this positive momentum by enacting a fiduciary definition proposal that effectively makes it more costly and complex for people to pursue the valuable services of an advisor.

In addition, LIS results rise significantly when individuals get advice.

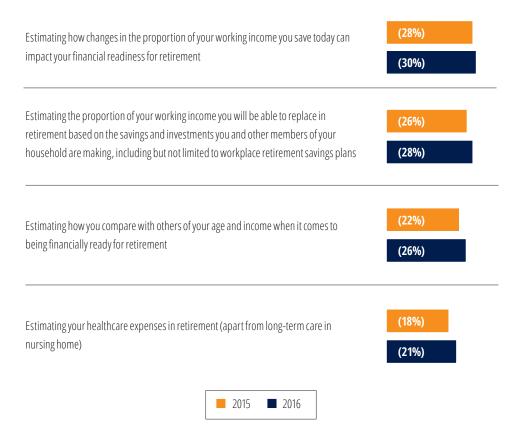


On the sometimes bumpy road to 100% income replacement, advice can help keep people on a smooth track.

Lifetime Income Score Report

Section IV: More employees wanting a glimpse of their future

With plan sponsors and advisors serving as trusted guides, technology is then the final element to help ensure success. Online resources help people stay the course with their retirement strategy. Across virtually every category, the LIS study shows increased availability in these key types of resources compared with last year.



These types of resources act as important supplements to the steps that plan sponsors are taking to modernize their plan design and the roles that advisors are playing to drive more successful retirement outcomes.

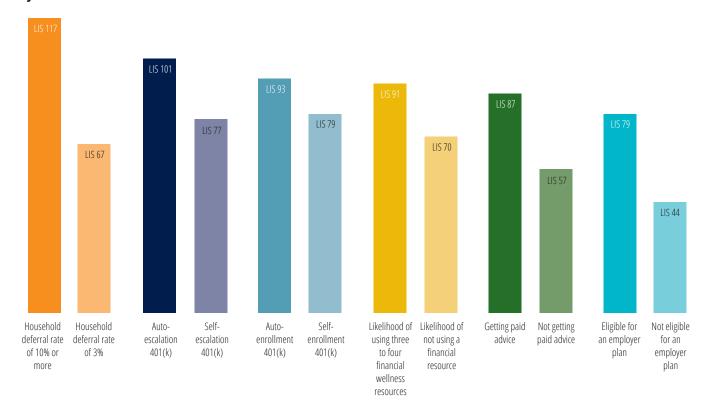
Conclusion

In an environment of constant change, a three-pronged approach can help keep the needle pointed in the right direction. We continue to witness several important trends:

- · Growing adoption of innovative and modern plan designs
- Providing greater access to the valued services that advisors provide
- · Increasing the availability of leading, technology-driven planning resources

The results from these positive developments speak for themselves.

Key LIS results



A transformation of the retirement system is underway — one that will allow more people to easily navigate their way toward 100% replacement of their working income for life.

Core securities, when offered, are offered through GWFS Equities, Inc. and/or other broker-dealers.

 $GWFS \ Equities, Inc., Member \ FINRA/SIPC, is a wholly owned subsidiary of Great-West \ Life \& Annuity Insurance Company.$

The charts, graphs and screen prints in this presentation are for ILLUSTRATIVE PURPOSES ONLY.

Empower Retirement refers to the products and services offered in the retirement markets by Great-West Life & Annuity Insurance Company (GWL&A), Corporate Headquarters: Greenwood Village, CO; Great-West Life & Annuity Insurance Company of New York, Home Office: NY, NY; and their subsidiaries and affiliates. The trademarks, logos, service marks and design elements used are owned by their respective owners and are used by permission.

The research, views and opinions contained in these materials are intended to be educational, may not be suitable for all investors and are not tax, legal, accounting or investment advice. Readers are advised to seek their own tax, legal, accounting and investment advice from competent professionals. Information contained herein is believed to be accurate at the time of publication; however, it may be impacted by changes in the tax, legal, regulatory or investing environment.

IMPORTANT: The projections, or other information generated by the Lifetime Income ScoreSM regarding the likelihood of various investment outcomes, are hypothetical in nature. They do not reflect actual investment results and are not guarantees of future results. The results may vary with each use and over time.

The Lifetime Income ScoreSM represents an estimate of the percentage of current income that an individual might need to replace from savings in order to fund retirement expenses. This income estimate is based on the individual's amount of current savings, as well as future contributions to savings (as provided by participants in the survey), and includes investments in 401(k) plans, IRAs, taxable accounts, variable annuities, cash value of life insurance, and income from defined benefit pension plans. It also includes future wage growth from present age (e.g., 45) to the retirement age of 65 (1% greater than the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W)), as well an estimate for future Social Security benefits.

The calculations also take into account mortality rates for a variety of commonly diagnosed health conditions, including high blood pressure, high cholesterol, Type 2 diabetes, cancer of any type, and cardiovascular disease of any type apart from high blood pressure. In addition, the model also takes into account the consistent use of tobacco on a household basis.

The Lifetime Income Score estimate is derived from the present value discounting of the future cash flows associated with an individual's retirement savings and expenses. It incorporates the uncertainty around investment returns (consistent with historical return volatility), as well as the mortality uncertainty that creates a retirement horizon of indeterminate length. Specifically, the Lifetime Income Score procedure begins with the selection of a present value discount rate based on the individual's current retirement asset allocation (stocks, bonds and cash). A rate is determined from historical returns such that 90% of the empirical observations of the returns associated with the asset allocation are greater than the selected discount rate. This rate is then used for all discounting of the survival probability-weighted cash flows to derive a present value of a retirement plan.

Representatives of Empower Retirement do not offer or provide investment, fiduciary, financial, legal or tax advice or act in a fiduciary capacity for any client unless explicitly described in writing. Please consult with your investment advisor, attorney and/or tax advisor as needed.

Alternative spending levels in retirement are examined in conjunction with the discounting process until the present value of cash flows is exactly zero. The spending level that generates a zero retirement plan present value is the income estimate selected as the basis for the Lifetime Income Score. In other words, it is an income level that is consistent with a 90% confidence in funding retirement. It is viewed as a sustainable spending level and one that is an appropriate benchmark for retirement planning.

 $The survey is \ not \ a \ prediction, and \ results \ may \ be \ higher \ or \ lower \ based \ on \ actual \ market \ returns.$

Distributed by GWFS Equities, Inc.

 $\hbox{@2017 Great-West Life \& Annuity Insurance Company. All rights reserved.}$

ERMKT-OTH-1553-1701 AM93957-0117

