# ABC Healthcare Client

# TIAA Plan Outcome Assessment®

An approach to measuring plan effectiveness and employees' retirement readiness

Report Date: May 2021

BUILT TO PERFORM.
CREATED TO SERVE.

# How do you know if your plan is driving better outcomes?

The TIAA Plan Outcome Assessment (POA) was prepared for ABC Healthcare Client to help you evaluate your plan's effectiveness and employees' retirement readiness.

This report includes your plan and participant data as of 03/31/2021 and contains:

- An overview of our approach to measuring the effectiveness of your plan
- A summary of plan outcomes, including your average income replacement ratio
- A snapshot of your employees' retirement readiness
- Steps you can take to drive better plan outcomes

## Driving Better Outcomes


**Plan Design**
Where is there opportunity to drive better outcomes by exploring plan design changes?

**Employee Engagement**
How can you effectively support employees, especially those that need the most help?

**Plan Management**
Are you achieving your plan goals, while also remaining competitive, compliant & cost effective?

**Investment Solutions**
Is your investment lineup helping employees achieve retirement readiness and guaranteed income?

# We leverage our individual advice offer to help you measure plan outcomes and drive employee engagement

### Individual Retirement Readiness

- Age, gender & tenure
- Salary
- Savings & investment behaviors
- Use of individual advice services

### Advice Methodology & Assumptions

- Retirement age 67 with full Social Security benefits
- Current savings rate & investment allocation remains constant through retirement
- Income replacement ratios are calculated on an after-tax basis

### Plan Outcome Assessment

- Average participant income replacement ratio
- Impact of plan design, investment solutions & employee engagement
- Analysis of employee retirement readiness
- Benchmarking plan outcomes

### Integrated Business Planning & Reporting

- Outcomes-based analysis provided in your annual Business Plan, Plan Review & Communication, Education & Advice Plan
- Access to your participant retirement readiness summary, individual income replacement ratios & lists of at-risk employees on PlanFocus®

### Plan Optimization & Investment Solution Consulting

- "What if" scenario modeling of plan design options and features to optimize plan outcomes and costs
- Evaluation of how guaranteed lifetime income[1] options impact plan outcomes

### Personalized Employee Engagement

- Targeted employee communication, education & advice programs
- Employees' projected income in retirement is available on their individual retirement plan account home page

[1]Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability.

# We believe plan-level outcomes can help you assess the effectiveness of your plan in supporting individual retirement readiness

This analysis focuses on your retirement plan's support of your employees' retirement readiness with an emphasis on ***average*** results across the plan and certain employee groups based on behaviors in your plan. However, ***individual retirement readiness is personal and will differ from plan-level results***. Although a complete retirement readiness picture is impossible to know via a plan-level analysis, plan-level outcomes and your participants saving and investing behaviors are important for gauging the effectiveness of your retirement plan in meeting plan goals.

## Individual retirement readiness considerations impacting your plan's outcomes

### Salary Assumptions
This report uses each participant's current salary to project income replacement need in retirement. If a participant's salary grows faster than inflation, we may be underestimating income needs in retirement.

### Life stage
Life stage is important when considering retirement readiness. For example, late-career new hires may have assets held elsewhere, which are not included in this plan-level analysis.

### Healthcare in retirement
A key driver of income replacement needs in retirement relate to how much they may need to cover rising healthcare costs. The individual health of your participants are a key consideration to retirement income planning.

### Investments
This report assumes your participants risk-based asset allocation remains consistent until retirement. Participants should adjust their risk level over time.


### Projections vs Reality
Projections by their very nature can be problematic when compared to the real world experience, especially when time frames extend over decades.  Projections do help frame current behaviors in terms of potential outcomes.

### Social Security
When social security is included in the calculation, we assume full SS benefits in this report. But SS claiming strategies can be complex and may change over the long term given government funding challenges.

### Retirement income needs
Income replacement needs vary based on desired standards of living and level of essential expense needs such as food, housing and healthcare. This report rules of thumb based on salary level.

### Retirement Age
We assume a retirement age of 67 in this report, consistent with the default used in our Advice offer. Most participants retire earlier or later than 67.

# Summary of plan outcomes & employee retirement readiness

**84.0%**

Is the average retirement income replacement ratio and it represents how much income your participants are on track to replace in retirement.

**35%**

Of participants are on track to meet or exceed their target income needs in retirement.



**10.0%**

Is the average total savings rate for your plan including employee and employer contributions.

**100%**

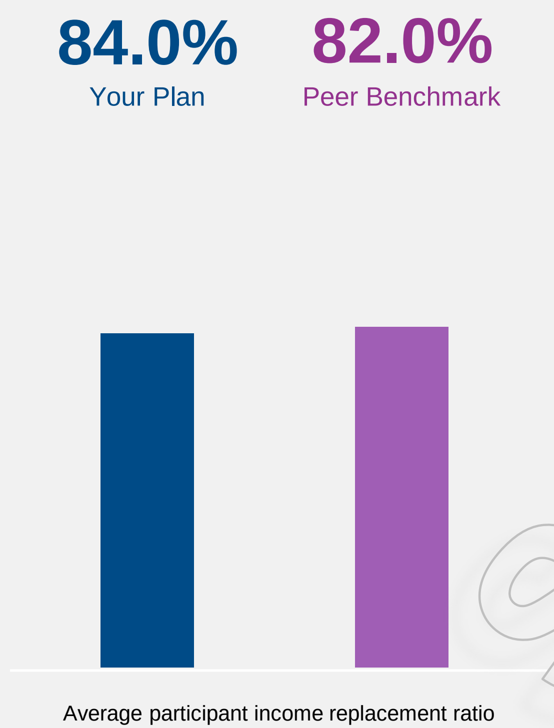
Of employees are making voluntary contributions to the plan[2]

**6.0%**

Of participants may benefit from at least a three risk level change.

The data presented is as of 03/31/2021. This report uses the actual salary and/or compensation data the institution provided to TIAA.

# How is your plan performing relative to your peers?




| | Your Plan | Peer Benchmark |
|---|---|---|
| Average asset balance | $90,000 | $100,000 |
| Average annual salary (pretax) | $80,000 | $100,000 |
| Average annual retirement income (after-tax) | $45,000 | $50,000 |
| Average contribution rate | 10% | 11% |
| Percent of participants making voluntary contributions | 100% | 90% |
| Percent of participants who may benefit from an asset allocation change | 40% | 50% |



The data presented is as of 03/31/2021. This report uses actual salary and/or compensation data the institution provided to TIAA. The peer benchmark represents a group of institutions with TIAA recordkept assets in the hospital market with total plan assets greater than 500M.

# What income sources make up your plan's average ratio?

## Your participants' average retirement income replacement ratio[1]

**84.0%** **Total Plan Assets + Social Security**

**27.0%**
**Variable Income**

Variable income sources include mutual funds & CREF Variable Annuities

**57.0%**
**Guaranteed Lifetime Income**

1.0% TIAA Traditional

56.0% Social Security

## Your actively contributing participants

| | |
|---|---|
| Average account balance | $90,000 |
| Average annual salary (pretax) | $80,000 |
| Average annual retirement income (after-tax) | $45,000 |
| Average contribution rate | 10% |
| Average age | 40 |
| Average tenure in years | 8 |

### Lifetime income with growth potential[2]

**9%** of participants have assets allocated to **CREF Variable Annuities**.

### Lifetime income with guaranteed payments[3]

**15%** of participants have assets allocated to **TIAA Traditional** providing **8.0%** of income replacement.



This data is as of 03/31/2021 and is based on 7,600 participants who are actively contributing to ABC CLIENT HEALTHCARE plan. This report uses actual salary and/or compensation data the institution provided to TIAA. [1]The median income replacement ratio for this analysis is 80.8%. In addition, 5% of your plan's actively contributing participants have assets in other TIAA recordkept plans. When you incorporate the assets from all TIAA recordkept plans, their average income replacement ratio would be 84.2%. [2]Income amount is not guaranteed and may rise or fall based on the performance of the underlying investments. [3]Guarantees subject to TIAA's claims paying ability.

# Different income sources provide various benefits and risks

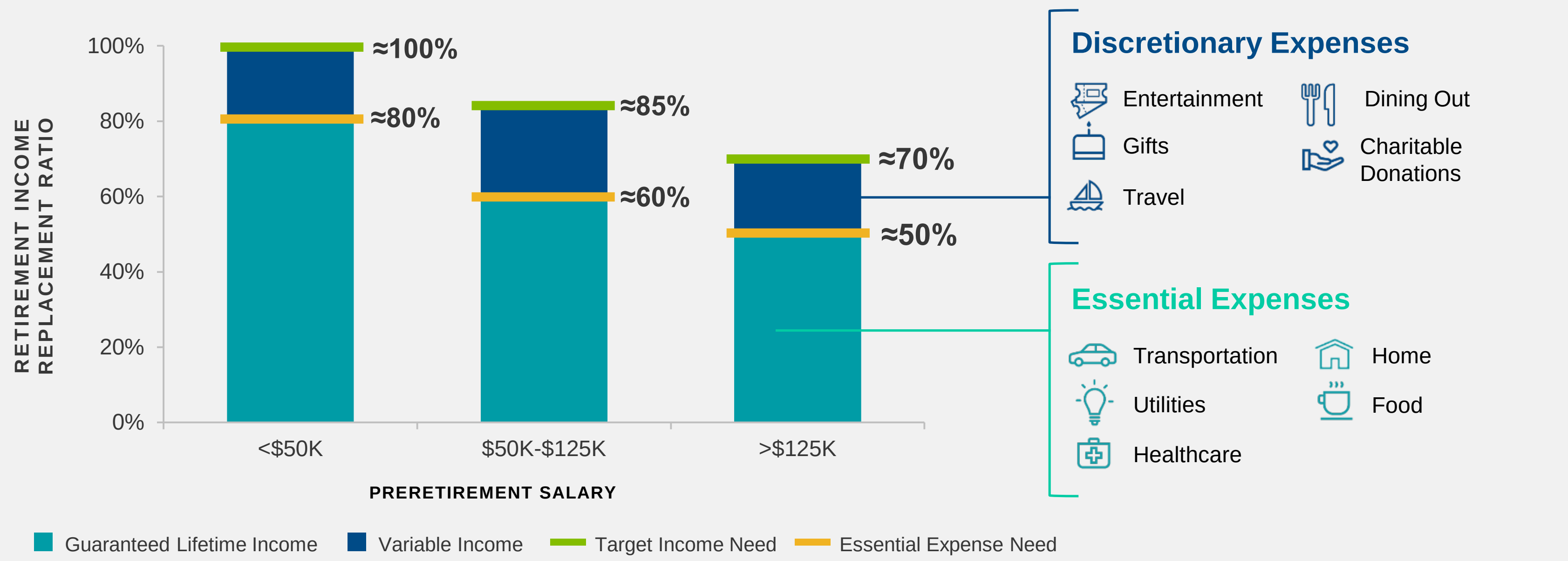
| | | Source of income | Benefits | Risks |
|---|---|---|---|---|
| 27.1% Variable Income | | **Systematic Withdrawal** from mutual funds including Target-date Funds | ✓ Growth potential and inflation protection<br>✓ Liquidity | ✗ Longevity risk<br>✗ Market volatility<br>✗ Withdrawal risk |
| | | **Variable Annuities** i.e., CREF | ✓ Growth potential and inflation protection<br>✓ Lifetime income options<br>✓ Higher income payment potential[1] | ✗ Market volatility<br>✗ Limited liquidity when annuitized |
| 56.8% Guaranteed Lifetime Income | 1.2% | **Fixed Annuities** i.e., TIAA Traditional | ✓ Certainty of fixed payments[2]<br>✓ Lifetime income options<br>✓ Payments may increase over time[3] | ✗ Less growth potential<br>✗ Limited liquidity |
| | 55.6% | **Social Security** | ✓ Certainty of fixed payments<br>✓ Lifetime income | ✗ Payments don't begin until age of eligibility<br>✗ Limited growth potential<br>✗ Risk that Social Security may not exist in its current form[4] |



[1]CREF Variable Annuities have historically provided higher levels of lifetime retirement income compared to annual systematic withdrawal amounts from similarly invested mutual funds. (~6.5% payout rate for annuities vs. 4% for mutual funds systematic withdrawal). Higher amounts are not guaranteed. Past performance is no guarantee of future results. [2]Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. [3] Interest credited to TIAA Traditional Annuity accumulations includes a guaranteed rate, plus additional amounts as may be established on a year-by-year basis by the TIAA Board of Trustees. The additional amounts, when declared, remain in effect through the "declaration year", which begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for periods other than the period for which they are declared. [4]The Social Security Trustee Report projects participants retiring on or after 2034 could face a 21% reduction in benefits without reforms. In this assessment 5,600 of the 7,600 participants will turn 67 on 2034 or later. Assuming a reduction in Social Security for this group, the overall average Income Replacement Ratio for the plan would be 75.3%, compared to 87.2% assuming full Social Security benefits.

# Participant salary can serve as a guide for determining target income replacement rates and essential expense needs

## Suggested target retirement income replacement and essential expense needs by preretirement salary




### In general, experts agreed that retirement income needs vary by salary.[1]

Typically, lower earners have larger portions of their income devoted to essential expenses than higher earners.

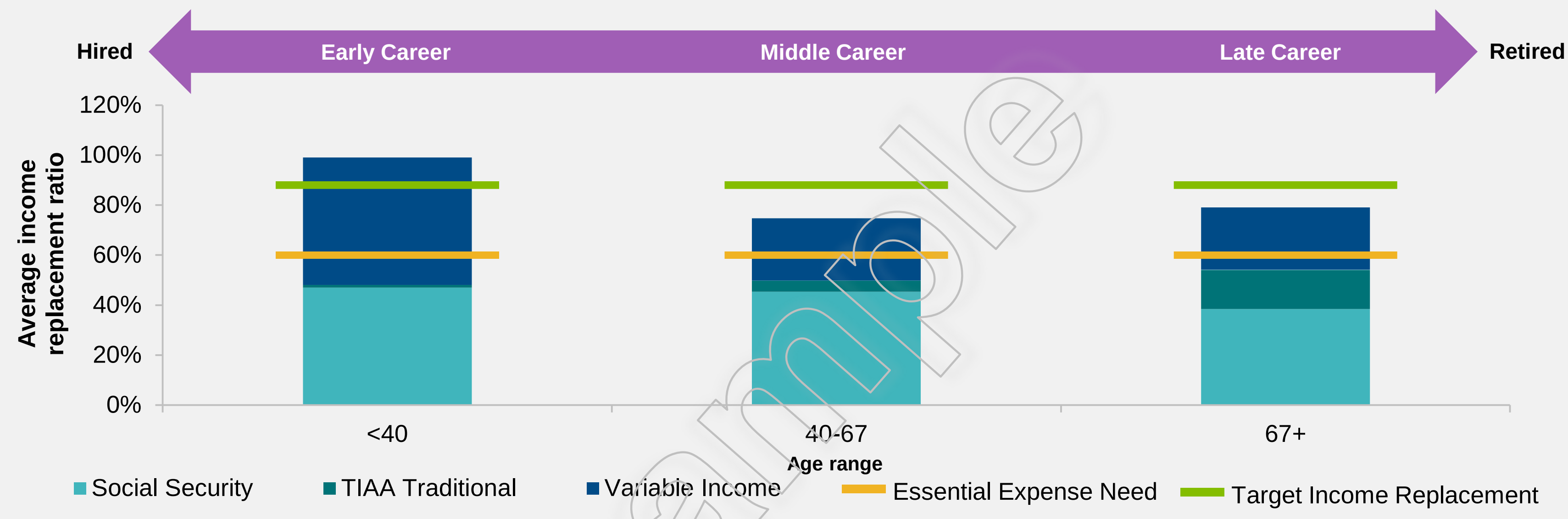
### Essential living expenses include money for necessities and healthcare.

Guaranteed lifetime income sources such as fixed annuities and Social Security provide the certainty needed to cover these “must have” expenses.

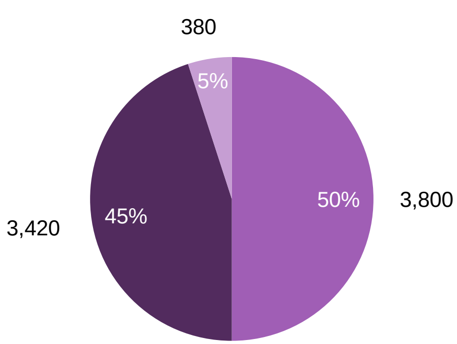
[1]Sources: Aon, The Real Deal, 2018 Retirement Income Adequacy Study, https://www.aon.com/getmedia/59c14111-6414-46a4-adbb-0dba9e0e8676/Aon-Retirement-Solutions-The-Real-Deal-Full-Report-US-2018.asp.

# Your younger employees are less likely to have their guaranteed lifetime income needs in retirement covered by TIAA Traditional

## Average income replacement ratio by participant age range




### Actively Contributing Participants




| Age range | Average annual salary |
|---|---|
| <40 | $65,000 |
| 40-67 | $90,000 |
| 67+ | $91,000 |

Participants who are under 40 are estimated to rely less on TIAA Traditional and more on Social Security for guaranteed lifetime income in retirement.

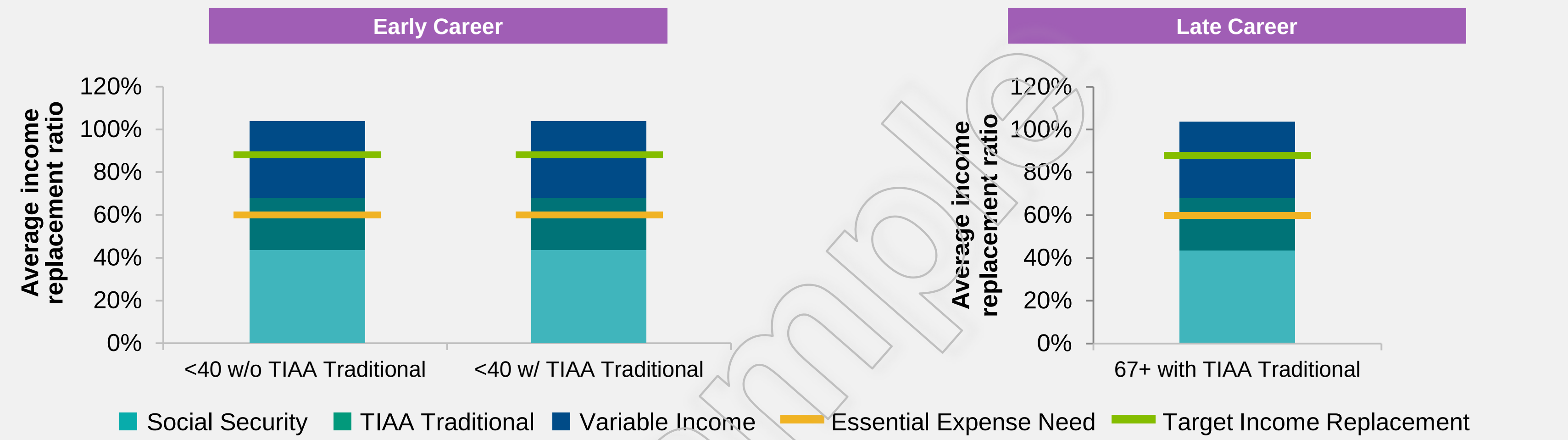
According to the Social Security Trustees Report (2017) Social Security will only be able to fund 79% of payments starting in 2034.



The data presented is as of 03/31/2021. This report uses the actual salary and/or compensation data the institution provided to TIAA.

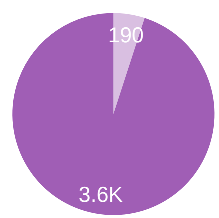
# Comparing retirement readiness across two generations

## Average income replacement ratio by participant age range



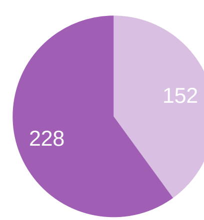

- 95% of your participants <40 aren't currently allocating anything to TIAA Traditional
- These participants may not be able to cover their estimated essential expenses with guaranteed lifetime income sources

A **TIAA RetirePlus® Series Model Portfolio** that includes a fixed annuity could provide **additional guaranteed lifetime income options to help cover essential expenses** along with other benefits.




**Early Career (age <40)**

- with TIAA Traditional
- w/o TIAA Traditional




**Near Retirement (age 67+)**

- with TIAA Traditional
- w/o TIAA Traditional



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# Determining participant retirement readiness

We have developed a high-level “rule of thumb” to help you estimate your participants’ retirement readiness using their average income replacement ratio and preretirement salary.[1]

**Participant Retirement Readiness**

| Participant Salary | Needs Action | In Range | On Track |
|---|---|---|---|
| <$50K | Income Replacement Ratio <80% | Income Replacement Ratio 80% - 100% | Income Replacement Ratio >100% |
| $50K - $125K | Income Replacement Ratio <60% | Income Replacement Ratio 60% - 85% | Income Replacement Ratio >85% |
| >$125K | Income Replacement Ratio <50% | Income Replacement Ratio 50% - 70% | Income Replacement Ratio >70% |

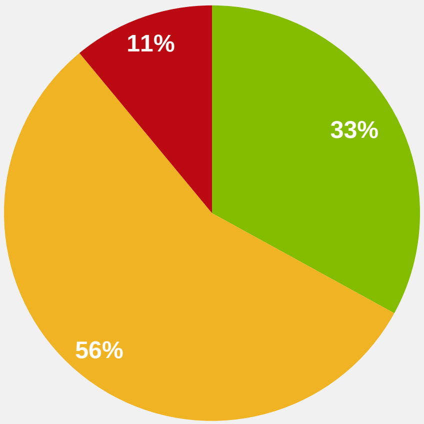
Evaluating **retirement readiness** includes estimating participants’ future **healthcare needs and expenses.**

An average **65 year old couple retiring today** currently **needs more than $296,000** to cover their healthcare costs in retirement.[2]

[1]In general, experts agree that retirement income needs vary by preretirement salary level: Lower earners have larger portions of their retirement income devoted to essential expenses such as housing and healthcare than their higher-earning counterparts. Sources: Aon, The Real Deal, 2018 Retirement Income Adequacy Study, https://www.aon.com/getmedia/59c14111-6414-46a4-adbb-0dba9e0e8676/Aon-Retirement-Solutions-The-Real-Deal-Full-Report-US-2018.asp. [2]Source: EBRI Issue Brief, no.460; Employee Benefits Research Institute, October 8, 2018.

# How many of your employees are on track to meet their target income needs in retirement?

## Participant retirement readiness




**Needs Action**
They are not yet on track to cover their essential expenses in retirement such as housing and healthcare.

**In Range**
They are on track to cover their essential expenses in retirement but haven't yet met their target retirement income needs.

**On Track**
They are on track to meet both their essential expenses and their target retirement income needs.

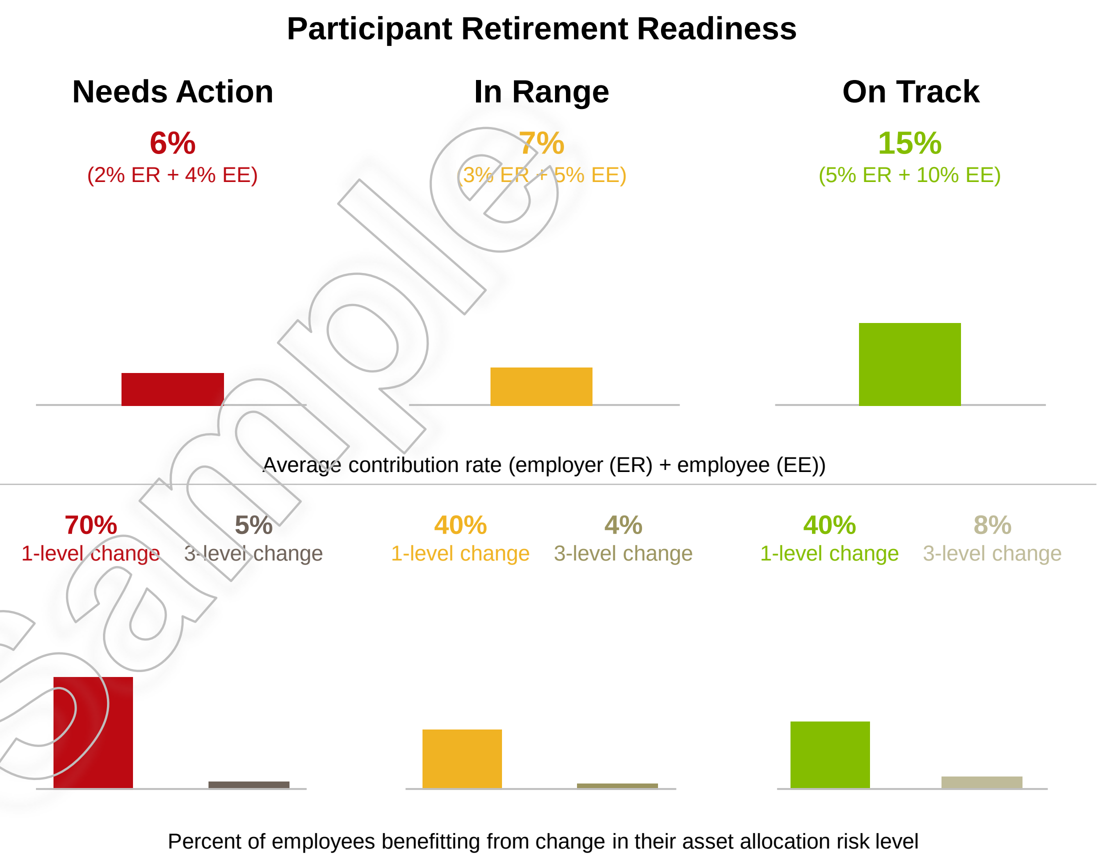
| Retirement Readiness | Needs Action | In Range | On Track |
|---|---|---|---|
| Total active participants | 900 | 4,100 | 2,600 |
| Average annual salary (pretax) | $90,000 | $75,000 | $80,000 |
| Average annual retirement income (after-tax) | $35,000 | $40,000 | $60,000 |
| Average age | 50 | 40 | 40 |
| Average tenure | 5 years | 7 years | 11 years |

The data presented is as of 03/31/2021. This report uses the actual salary and/or compensation data the institution provided to TIAA.

# Impact of employees' saving and investing behavior on retirement readiness

On average, your participants contribute a total of **10%** to their retirement plan and your On Track participants are likely to contribute more than participants who are In Range or Needs Action[1].

On average, **40%** of your employees may benefit from changing their asset allocation one risk level and **6%** of them may benefit from at least a three risk level change.




**45** employees **<40** are invested "very conservative," "conservative" or "moderate conservative." They may benefit from reviewing their current asset allocation strategy to see if they are on track to meet their retirement goals.

The data presented is as of 03/31/2021. This report uses the actual salary and/or compensation data the institution provided to TIAA. [1]See the Appendix to review this same information for only those participants who are receiving an employer contribution.

# Using the POA to help you drive better outcomes

TIAA will help you use an outcome-based approach to delivering new and innovative solutions and programs for your plan and your employees. Here's how we can work together:

- **Share your plan's POA with key stakeholders**, such as the benefits committee, board of directors, or CHRO, to review Plan progress.
- **Help you define retirement plan goals and objectives** using retirement income replacement data (e.g., implementing new plan design, evaluating the impact of guaranteed lifetime income options, etc.).
- **Learn about the defined contribution retiree healthcare approach** from a TIAA Health representative and how it can help your employees cover healthcare expenses in retirement.
- **Help you identify individuals who may be at risk** for not covering their essential expenses or meeting their target income needs in retirement using the POA retirement readiness data
- **Review the POA every year** with your TIAA relationship manager and communications consultant as part of overall business planning and plan review.

# Income replacement ratio methodology and assumptions

## Participant-related salary, contribution, retirement age, income replacement ratio and advice assumptions

- Participant compensation is based on data submitted by the employer. The participant's gross annual income is used for various calculations, including retirement income replacement ratio, estimated Social Security benefits, and estimated federal and state taxes.
- Participant contributions are aggregated for a 12-month period for participants with a balance at the beginning of the period. For participants without a beginning balance or less than one year of service, the contribution amount from the last month of the 12-month period is annualized. As a result, for participants with less than one year of service, the annual estimated contribution may differ from actual. IRS contribution limits are applied and adjusted for participants eligible for catch-up provisions. Morningstar Investment Management LLC shifts any contribution amount above the annual limit to after-tax contributions for modeling purposes.
- All retirement plan contributions are considered to be dedicated solely for retirement. Assets will not be liquidated for use prior to retirement, and all contributions will end at the Target Retirement Age (TRA).
- The TRA value is defaulted to 67 for most plan participants. Participants aged 66 or higher have a TRA that is set two years from the current age. Life expectancy values are estimated by Morningstar and are based on participant age and gender.
- The participant's balance is aggregated for all selected plans. Amounts are designated as pretax and Roth contributions, as appropriate.
- The participant's asset allocation and risk level is assumed to remain constant until TRA. For the purposes of this analysis, asset allocation is categorized into simplified asset classes (i.e., stable value, equities, real estate, fixed income, multi asset and money market). Portfolio risk level assumptions are based on the following:
  - Very Conservative: 0% - 19% of assets allocated to equities
  - Conservative: 20% - 37% of assets allocated to equities
  - Moderate Conservative: 38% - 52% of assets allocated to equities
  - Moderate: 53% - 66% of assets allocated to equities
  - Moderate Aggressive: 67% - 80% of assets allocated to equities
  - Aggressive: 81% - 93% of assets allocated to equities
  - Very Aggressive: 94% - 100% of assets allocated to equities
- The advice provided by Morningstar consists of model portfolios composed of target allocations for the asset classes. Based on the target retirement goals, Morningstar will recommend a specific tolerance level designed to adjust over time based on Morningstar's proprietary methodology which customizes a risk-level trajectory for the participant.
- The hypothetical advice target for the model is a 100% replacement ratio.
- TIAA measures retirement income replacement ratios by calculating the projected stream of distributions from participants' assets and estimated Social Security benefits in current dollars as a percentage of employees' current salaries.
- Using the participant's actual salary and/or compensation, current contribution rates and asset allocation, TIAA leverages the advice engine from Morningstar, an independent expert retained by TIAA, to perform a sophisticated, Monte Carlo analysis (500 total simulations) to project the retirement income replacement ratio.
- The results indicate the participant's 70% probability of achieving the retirement goal. A lower probability of success is associated with better (and less likely) estimated income. Your participants can also model different outcomes for themselves by going online to **TIAA.org/retirementadvisor** (online Retirement Advisor tool).
- Long-term inflation rate is a variable in the Monte-Carlo simulation. All inputs and projections are shown in today's dollars, but inflation is a factor in the Capital Market Assumptions and each participant's salary is expected to grow with inflation.
- Data provided represents inputs into the Morningstar on advice engine for plan management purposes. If a participant uses Retirement Advisor online or has an advice session with a consultant, estimated retirement income is not replaced with any of the information used in the POA report calculations..
- The plan-level retirement income replacement ratio is determined by calculating the average retirement income replacement ratio of all participants in the plan analysis. All actively contributing participants are included in the analysis, unless the participant has annual compensation of less than $5,000, has contributed less than $300 in the previous 12-month period, has a current balance less than $100, or is less than 18 or greater than 81 years of age.

# Income replacement ratio methodology and assumptions

**Annual Updates to Capital Market Assumptions**

Morningstar routinely updates TIAA's advice engine methodology, which powers the POA, to better align assumptions with future market expectations and life expectancy changes. Effective 12/31/2018, our advice applications and tools will reflect the most recent Capital Market Assumptions (CMAs) provided by Morningstar. This routine update, which typically occurs annually, includes the following:

- Adjustment to the long-term average inflation rate, rates of return, risk (standard deviation), and correlation coefficients for all asset classes
- Adjustment of forecasted/projected rates of return used in Monte Carlo simulations, used to assess the likelihood of achieving goals.

This year, there have been slight decreases in the 10 and 20-year rates of return for most Equities and Fixed Income asset classes. As a result, those with more aggressive portfolios closer to retirement will see more of an impact such as a greater decrease in wealth values and a decrease in the probability of achieving goals success while those with more conservative forecasted equity return assumptions will experience reduced equity projections.

Note: The CMAs are available upon request. You have the option to request specific capital market assumptions.

**Updates to Social Security**

- Additional enhancements to our advice engine are being made to update social security projections. Morningstar has refined the Social Security calculations for individuals that have turned 62 years old. The new engine dynamically calculates wage index factors depending on when the investor turns 60 years old, and bend points depending on when the investor turns 62 years old. This may reduce Social Security income projected for active participants over 67.

- Over the past few years we have noted in the POA that uncertainty around the role of Social Security in its current form represents a potential risk to participants and should be factored into interpreting your plan-level outcomes. To help you understand the potential magnitude of this risk, included in this POA is an alternative hypothetical projection of your plan's income replacement ratio assuming participants retiring after 2034 receive reduced level of income (21% less) from Social Security based on the 2018 Social Security Trustees Report. We are not trying to predict what Social Security reform will look like if and when it occurs. But we felt that quantifying the potential impact to plan outcomes absent reforms using the Trustee report as a source could add value to the discussion on the role of Social Security in your plan. This alternative calculation can be found in the footnote on page titled 'Different income sources provide various benefits and risks'.

**Updated assumptions about life expectancy**

Our Morningstar-driven retirement planning applications and tools have been enhanced to reflect increased life expectancy. The POA, as all our tools ,now assumes life expectancy to be longer than average. Please note that this change may have caused the estimated retirement income result to be lower (and the estimated retirement savings needs to be higher) than if a shorter life expectancy was assumed.

The retirement income projection assumes the following estimated life expectancies: a male, age 67, will live until age 91 and a female, age 67, will live until age 93. These assumptions are based on an approach which uses the Gompertz Law of Mortality and the 2012 Society of Actuaries Immediate Annuity Mortality table to determine life expectancy. The approach is developed and owned by Morningstar Investment Management. It is important to note that these life expectancy assumptions are longer than average, meaning that only 30% of the population is estimated to reach these ages. This may cause the estimated retirement income result to be lower (and estimated retirement savings needs to be higher) than if a shorter life expectancy was assumed. These assumptions may not be appropriate for all investors. Forecasts involve known and unknown risks, uncertainties and other factors which may cause the actual results to differ materially and/or substantially from the estimated retirement income result.

**What is the potential impact of all these methodology changes to the POA?**

Taken together, these changes may impact plan-level income-replacement ratios provided via the TIAA Plan Outcome Assessment®. Ultimately, the level of impact to a specific participant or plan sponsor will be unique.

While every plan may be different depending on the demographics and participant savings and investing behaviors, we expect the combined impact of these change could result in a decrease in a plan's average retirement income replacement ratio of approximately 5-7 percentage points, of which the change in life expectancy represents 4-5 percentage points. Plans with more younger participants and/or active participants over age 67 may be impacted more.

These ranges exclude the impact from the down equity markets in 2018. For example, the S&P 500 was down 13.8% in the fourth quarter of 2018 and down 4.4% for the year.

# Important information

The Morningstar tool's advice is based on statistical projections of the likelihood that an individual will achieve their retirement goals. The projections rely on financial and economic assumptions of historical rates of return of various asset classes that may not reoccur in the future, volatility measures and other facts, as well as information the individual provides. Morningstar's advice engine includes tax-rate assumptions, mortality tables, and Social Security estimates.

IMPORTANT: Projections, and other information generated through the TIAA Plan Outcome Assessment and the Morningstar tool regarding the likelihood of various investment outcomes, are hypothetical, do not reflect actual investment results, and are not a guarantee of future results. The projections are dependent in part on subjective and proprietary assumptions, including the rate of inflation and the rate of return for different asset classes, and these rates are difficult to accurately predict. The projections also rely on financial and economic historical assumptions that may not reoccur in the future, volatility measures and other facts. Results may vary with each use and over time.

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s). TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

**You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or log on to TIAA.org for current product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.**

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