



# Managing plan costs in automatic programs

January 2020

## KEY INSIGHTS

- The right combination of automatic program features—working in concert with employer contributions, eligibility, and vesting—can improve effectiveness while helping the plan stay on budget.
- Consider altering plan design components to help manage costs when adopting automatic program features.
- Start by creating a decision-making guide for revisiting plan design and crafting a plan to optimize success within budget limits.

Many plan sponsors have adopted automatic program features to help improve retirement outcomes. Others believe such programs are too expensive. The latter is a possibility—to avoid it, other plan design elements must be taken into account and adjusted to meet cost objectives.

### It's clear: Automatic programs can dramatically increase retirement readiness

A 2013 Employee Benefit Research Institute (EBRI) study projected that 44% of baby boomers and Gen Xers risk running short of money in retirement. That figure, however, is 5% to 8% lower than 2003 estimates—an improvement that EBRI credits to increased use of automatic enrollment. (EBRI, 2012)

## Striking a balance

These elements should be considered within a sound set of fiduciary standards.



---

## Primary leverage points in managing costs associated with automatic program implementation



Employer Contributions



Eligibility



Vesting

### Creating the right balance for the right fit

Effectively balancing costs with the right combination of design elements can help a retirement plan achieve the unique objectives of the company, the plan, and the employees while meeting fiduciary standards.

Remember that changing plan design can affect some employees, while fully implementing automatic programs will affect others. When determining the right design for an organization, it's critical to understand the impact of any change. Creating the right solution depends on:

- The plan's objectives
- The right analytics for decision-making
- Solid employee communications

The illustrations and ideas presented here cover a wide range of options and should serve only as a starting point. Any specific example may not fit a particular company or situation.

With that in mind, there are numerous ways to structure plan design to reduce costs to the desired level—usually by adjusting such basic components as:

- Employer contributions
- Vesting
- Eligibility

Possible limits include:

- Regulatory requirements
- Corporate philosophy or constraints
- Participant demographics
- The impact of changes on employee relations and morale

### The biggest factor: Employer contributions

Changing employer contributions will probably make the largest impact on costs. With an automatic program,

employer contributions are no longer the primary incentive for employees to enroll or increase their savings. Automation takes on that role.

A 2012 Harvard paper shows that higher match rates have little effect on employee contributions. Other approaches—such as automatic enrollment—have much greater potential to increase contributions, often at a lower cost (Brigitte C. Madrian, 2012).

Much depends, however, on a company's talent competition concerns, employee attitudes, and demographics. Incentives may be needed to keep employees in the plan or to prevent them from opting out at enrollment.

When looking to modify contribution design, think about:

1. Changing the match percentage while leaving the basic structure intact
2. Applying a different match to different groups of employees or changing which deferrals are eligible for the match
3. Changing when the match is made, such as moving to end-of-year contributions with a last day rule
4. Switching to a different contribution type, such as profit sharing or nonelective

These changes can be made individually or combined in any way. Note that any change will affect costs and will have different effects on different groups of participants.

Choosing the right contribution design depends on:

- The company's objectives
- Existing plan design
- The desired effect on target employee groups
- The plan budget

---

## Ways to change employer contributions

These can be implemented independently or together.



**Change the match percentage**



**Change the structure of the formula**



**Change the timing of the contribution**



**Move to a different contribution type**

Certain types of changes may require new analytics to determine how new contribution designs may affect nondiscrimination testing—especially if the new design eliminates safe harbor protections.

### Take another look at vesting

Revamping the employer contribution design will probably yield greater savings than changing the vesting schedule. Still, the right schedule can ensure that employees who stay with the company receive the greatest benefits.

A word of caution: Strict rules limit any changes to vesting, especially protected benefits. Also, vested balances can never be taken away from a participant. With that in mind, consider:

1. Creating multiple vesting schedules for each type of contribution—for example, a different schedule for a match versus a profit sharing or nonelective contribution
2. Changing the time vesting that occurs for new contribution types and new hires—lengthen the time on a cliff schedule, or shift to an incremental schedule over a longer time period
3. Calculating vesting by hours of service instead of length of employment

In addition to design, make sure that the cost control analysis includes any forfeitures from unvested money. It's possible to save by enabling forfeitures to cover plan administrative costs or by reducing employer contributions.

### Examine eligibility

To promote positive outcomes, it's best to allow all employees to start saving for retirement as soon as they're hired. Even so, there are ways to manage costs by combining eligibility design with employer contribution and vesting design.

Here, too, there are limits to changes, including minimum age/service and nondiscrimination requirements. New eligibility rules must be planned, managed, and carefully explained. Consider:

1. Redefining who is eligible for each type of contribution used by increasing tenure or age requirements for profit sharing contributions
2. Changing the timing for eligibility—for example, a new hire may be able to participate immediately but would have to work a year before receiving company contributions
3. Changing how eligibility is calculated—for example, switch from length of employment to hours of service

### Two hypothetical companies two different approaches

Having seen how design elements can influence cost and plan effectiveness, let's examine how these elements, combined with automatic program features, can help achieve your plan objectives while staying within budget.

To demonstrate, we have created two hypothetical companies based on the profiles of two current T. Rowe Price clients. Each has different plans, goals, and demographics. Each is considering automatic programs to manage costs and increase participation.

We developed alternate scenarios for each plan, using a T. Rowe Price projection tool. It gives plan sponsors an analysis of projected participant replacement ratios by age group based on the current plan design, then generates alternate scenarios based on possible new designs.

In both cases, we have explored ways to modify plan designs by changing employer contributions and eligibility rules. The results show how effective a creative plan design can be.

---

## Ways to alter eligibility

These can be implemented independently or together.



**Change who is eligible**



**Change the nature of eligibility**



**Change the timing of eligibility**

## Consider the following before applying methods from the illustrations

**These scenarios are purely hypothetical.** Before making any decisions about an existing plan, incorporate actual plan data plus comprehensive cost projection and participant impact models.

To keep things simple, we have only modeled scenarios that stay within the cost structure of the plan itself. It may be possible to divert money from other compensation costs or benefit programs to cover some of the additional expenses of adopting an automatic program.

For a company that is freezing or terminating a defined benefit plan, this may be an ideal time to consider changing the defined contribution plan as well—especially since it's now the primary vehicle to help employees retire successfully.

Remember highly compensated employees, too. A well-designed nonqualified deferred compensation plan is vital to helping them achieve the retirement savings they desire. Here again, automatic features can help, once an employee has enrolled, by automatically depositing into the nonqualified plan contributions over the qualified plan deferral limits.

Modifying plan design requires careful consideration. It takes resources to decide on and implement the changes, and employee reaction must be factored in. But automatic program designs for new hires have generated more positive outcomes over time.

To increase the likelihood of success, an automatic program design should:

- Include all employees through reenrollment
- Use opt-out features for automatic deferral increases
- Thoughtfully reset assets into the qualified default investment alternative

This design can help more employees more quickly. It can also serve as a best-practice consideration when saving and investing for long-term employees and new hires. And all of these results can be achieved while staying on budget.

### Communication is key

Effective employee communication is crucial, especially when periodically reenrolling or thoughtfully resetting participants. A well-crafted opt-out communications plan that is targeted to the affected groups will help ensure that participants aren't surprised by plan changes—and creates an opportunity to present a strong rationale for those changes.

Finally, keep plan committee members involved to gain their perspective and gauge potential corporate and participant reactions.

## Adding a full range of automatic features

### ABC Company Plan

- 3,120 employees
- Low participation
- Most employees not on track for 70% income replacement (from all sources) at retirement

### Features Considered

- Automatic enrollment for all eligible existing employees
- Automatic increase program for all participants

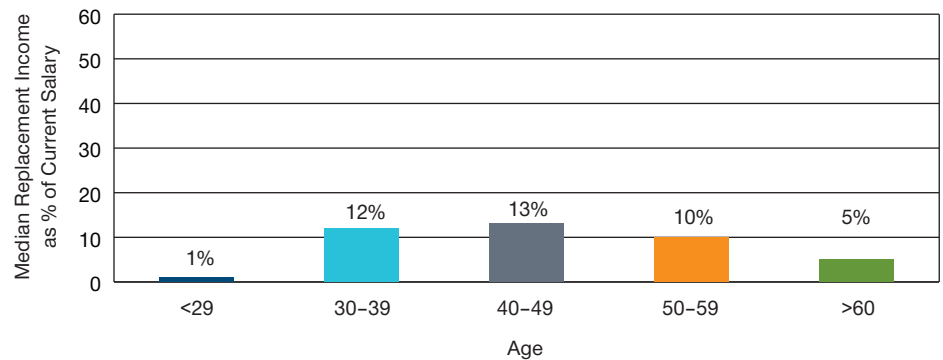
### Concerns

- Costs
- Impact on participant outcomes

## Current Scenario

### Design Features

- 100% match on the first 4% of deferrals
- 4% nonelective contribution
- No automatic program features



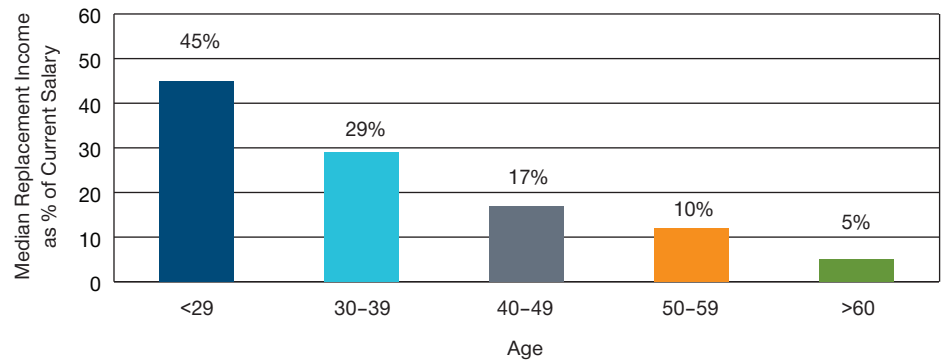
| Matching Contribution | Nonelective Contribution | Total Contribution Costs | Participation Rate |
|-----------------------|--------------------------|--------------------------|--------------------|
| \$4,418,910           | \$7,250,820              | \$11,669,730             | 58.7%              |

## Scenario 1

Make no plan design changes other than adding automatic features.

### Design Features

- 100% match on the first 4% of deferrals
- 4% nonelective contribution
- Auto-enroll all eligible at 4%
- Auto-increase 1% each year up to 10%



| Matching Contribution         | Nonelective Contribution | Total Contribution Costs       | Participation Rate                 |
|-------------------------------|--------------------------|--------------------------------|------------------------------------|
| \$7,236,750<br>a 64% increase | \$7,250,820<br>no change | \$14,487,570<br>a 24% increase | 97.4%<br>(assumes 5% opt-out rate) |

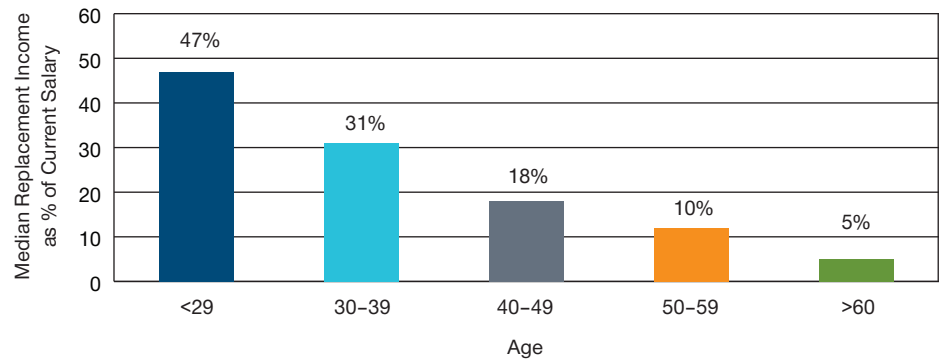
By implementing automatic features, ABC Company could dramatically increase the average replacement ratio for younger employees—and maintain the current average for employees over 60. But without other design changes, average costs would rise 24%.

## Scenario 2

Maintain annual costs close to current rates while improving participant outcomes.

### Design Features

- 100% match on the first 4% of deferrals
- 2.5% nonelective contribution
- Auto-enroll all eligible at 4%
- Auto-increase 1% each year up to 10%



| Matching Contribution         | Nonelective Contribution      | Total Contribution Costs        | Participation Rate                 |
|-------------------------------|-------------------------------|---------------------------------|------------------------------------|
| \$7,236,750<br>a 64% increase | \$4,531,760<br>a 38% decrease | \$11,768,511<br>a 0.8% increase | 97.4%<br>(assumes 5% opt-out rate) |

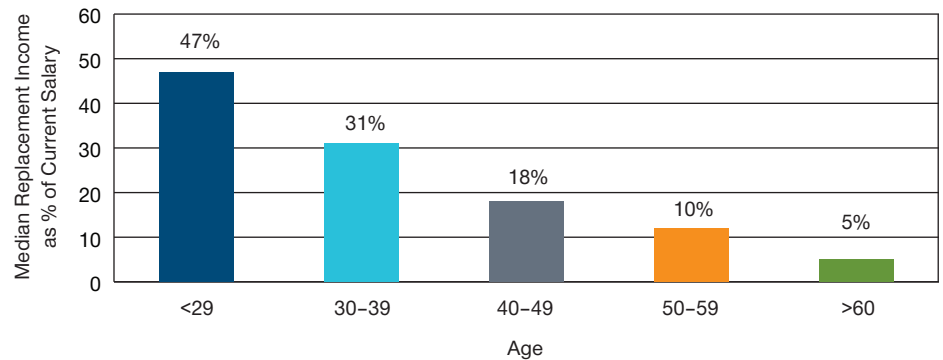
By implementing automatic features—and lowering the nonelective contribution rate to 2.5%—ABC Company could (1) dramatically increase the average replacement rate for younger employees, (2) avoid harming the average for employees over 60, and (3) keep annual costs roughly the same.

## Scenario 3

Reduce annual costs by at least 7% while improving participant outcomes.

### Design Features

- 100% match on the first 4% of deferrals
- 2% nonelective contribution with a last day rule
- Auto-enroll all eligible at 4%
- Auto-increase 1% each year up to 10%



| Matching Contribution         | Nonelective Contribution      | Total Contribution Costs        | Participation Rate                 |
|-------------------------------|-------------------------------|---------------------------------|------------------------------------|
| \$7,236,750<br>a 64% increase | \$3,597,650<br>a 50% decrease | \$10,834,400<br>a 7.2% decrease | 97.4%<br>(assumes 5% opt-out rate) |

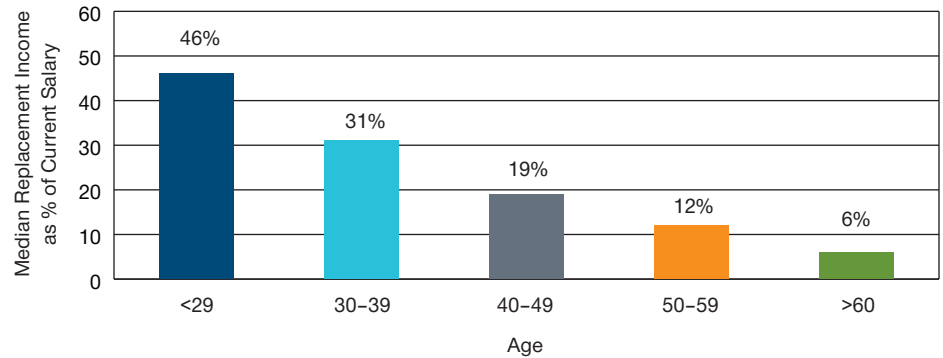
By (1) lowering the contribution rate even further, (2) adding a lastday rule for eligibility to receive the nonelective contribution, and (3) implementing automatic features, ABC Company could improve the average replacement rate for younger employees at the same rate as Scenario 2 while maintaining the average for employees over 60—and actually lower annual costs by 7.2%.

## Scenario 4

Implement automatic programs with a Qualified Automatic Contribution Arrangement (QACA)\* safe harbor design.

### Design Features

- 100% match on the first 1% of deferrals
- 50% match on the next 5% of deferrals
- 4% nonelective contribution
- Auto-enroll all eligible at 6%
- Auto-increase 1% each year up to 10%



| Matching Contribution         | Nonelective Contribution | Total Contribution Costs         | Participation Rate                 |
|-------------------------------|--------------------------|----------------------------------|------------------------------------|
| \$6,332,151<br>a 43% increase | \$7,250,820<br>no change | \$11,768,511<br>a 16.4% increase | 97.4%<br>(assumes 5% opt-out rate) |

If discrimination testing is a concern, ABC Company could implement a QACA safe harbor design. Using this design, ABC Company (1) would not be required to perform discrimination testing, (2) would create significantly better outcomes, and (3) could slightly improve older workers' outcomes. This design would increase annual plan costs by 16.4%.

## Enhancing a plan's current automatic features

### XYZ Company Plan

- 4,233 employees
- Automatically enrolling new hires
- Moderate participation
- Most employees not on track for 70% income replacement (from all sources) at retirement

### Features Considered

- Automatic enrollment for all eligible existing employees
- Automatic increase program for all participants

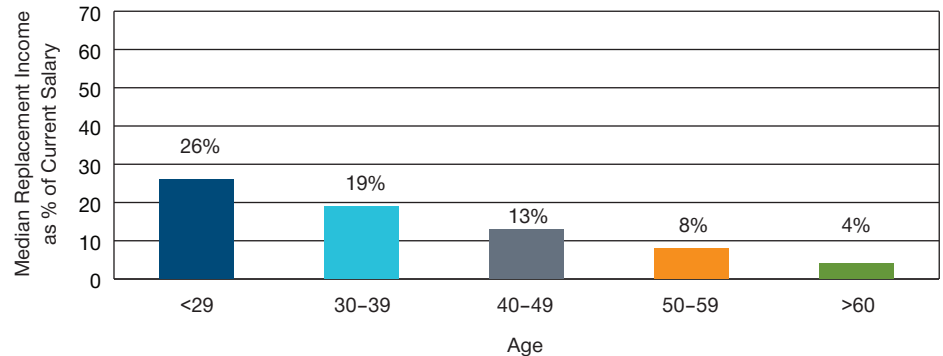
### Concerns

- Costs
- Impact on participant outcome

## Current Scenario

### Design Features

- 100% match on the first 3% of deferrals
- 50% match on the next 3% of deferrals
- Automatic enrollment for new hires at a 3% default deferral rate



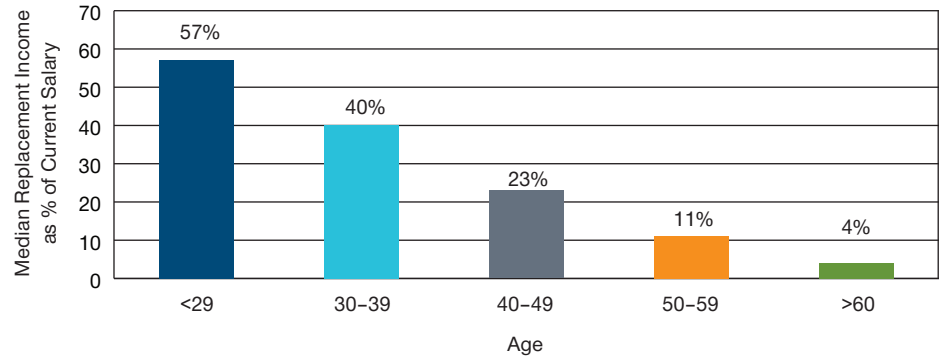
| Matching Contribution | Total Contribution Costs | Nonelective Contribution |
|-----------------------|--------------------------|--------------------------|
| \$7,543,557           | \$7,543,557              | 85.1%                    |

## Scenario 1

Make no plan design changes other than enhancing automatic features.

### Design Features

- 100% match on the first 3% of deferrals
- 50% match on the next 3% of deferrals
- Auto-enroll all eligible at 6%
- Auto-increase 1% each year up to 15%
- Auto-boost deferrals to 6%



| Matching Contribution          | Total Contribution Costs       | Nonelective Contribution           |
|--------------------------------|--------------------------------|------------------------------------|
| \$10,135,134<br>a 34% increase | \$10,135,134<br>a 34% increase | 99.3%<br>(assumes 5% opt-out rate) |

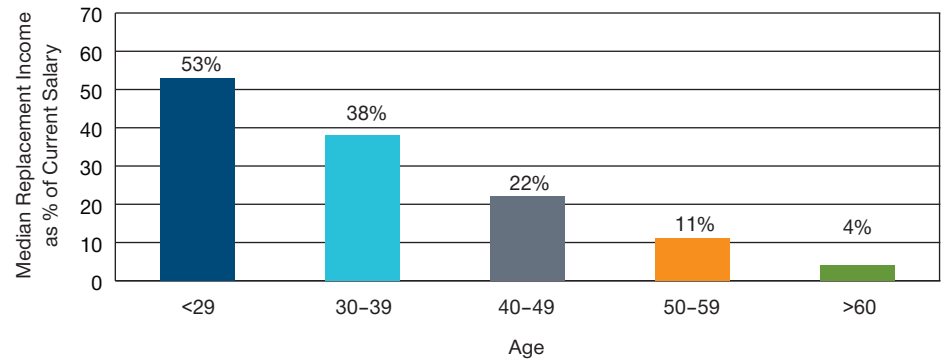
By more fully implementing automatic features, XYZ Company could dramatically increase the average replacement ratio for younger employees—and maintain the current average for employees over 60. But without other design changes, average costs would rise 34%.

## Scenario 2

Maintain annual costs close to current rates while improving participant outcomes.

### Design Features

- 50% match on the first 6% of deferrals
- 25% match on the next 1% of deferrals
- Auto-enroll all eligible at 7%
- Auto-increase 1% each year up to 15%
- Auto-boost deferrals to 7%



| Matching Contribution        | Total Contribution Costs     | Nonelective Contribution           |
|------------------------------|------------------------------|------------------------------------|
| \$7,494,162<br>a 1% decrease | \$7,494,162<br>a 1% decrease | 99.3%<br>(assumes 5% opt-out rate) |

By restructuring the match format, increasing initial default deferral rates, and increasing the auto-boost feature to maximize the new match formula, XYZ Company could (1) dramatically increase the average replacement rate for younger employees, (2) avoid harming the average for employees over 60, and (3) keep annual costs roughly the same.

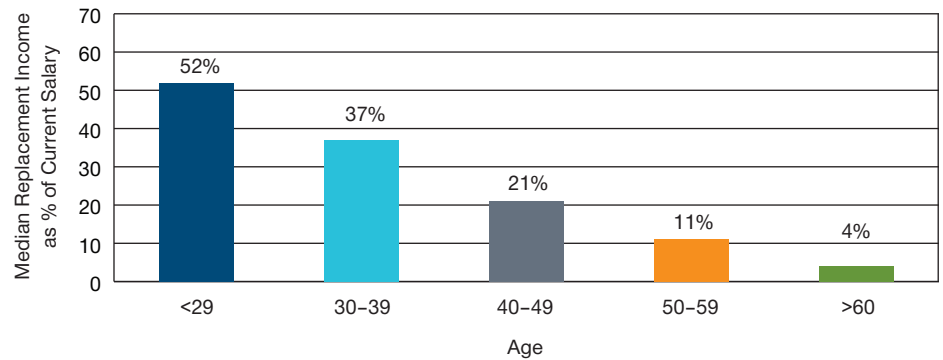


### Scenario 3

Reduce annual costs by at least 10% while improving participant outcomes.

#### Design Features

- 100% match on the first 3% of deferrals
- Auto-enroll all eligible at 6%
- Auto-increase 1% each year up to 15%
- Auto-boost deferrals to 3%



| Matching Contribution        | Total Contribution Costs      | Nonelective Contribution           |
|------------------------------|-------------------------------|------------------------------------|
| \$6,756,756<br>a 1% decrease | \$6,756,756<br>a 10% decrease | 99.3%<br>(assumes 5% opt-out rate) |

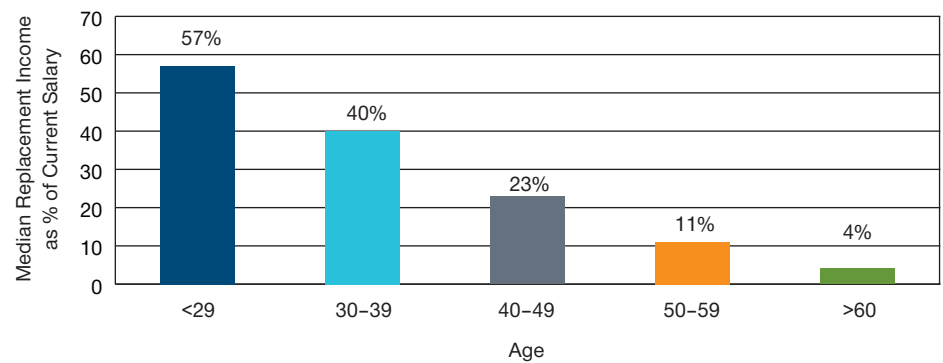
By decreasing the matching deferral rate to 3%, even with an aggressive approach to automatic features, XYZ Company can dramatically improve participant outcomes for all employees younger than 60 while maintaining rates for those 60 and above—all while lowering annual contribution costs by more than 10%.

### Scenario 4

Implement automatic programs with a QACA safe harbor design.

#### Design Features

- 100% match on the first 1% of deferrals
- 50% match on the next 5% of deferrals
- Auto-enroll all eligible at 6%
- Auto-increase 1% each year up to the limit of 10%
- Auto-boost deferrals to 6%



| Matching Contribution        | Total Contribution Costs       | Nonelective Contribution           |
|------------------------------|--------------------------------|------------------------------------|
| \$7,882,882<br>a 1% increase | \$7,882,882<br>a 4.5% increase | 99.3%<br>(assumes 5% opt-out rate) |

If discrimination testing is a concern, XYZ Company could implement a QACA safe harbor design. Using this design, XYZ Company (1) would not be required to perform discrimination testing, (2) would create significantly better outcomes, and (3) could slightly improve older workers' outcomes. This design would increase annual plan costs by 4.5%—a relatively small amount for such a dramatic improvement and safe harbor protections.\*

---

## Decision-making guide

Take these five steps to maximize the plan's value for all parties.

- 1 Establish the most critical plan objective and what types of advanced automatic features are desired.
- 2 Analyze current plan costs and success compared with the core objective and the impact of automatic program design costs without any additional design changes.
- 3 Model various scenarios to optimize plan design within the desired budget, and analyze the impact on specific participant groups. If needed, perform projected discrimination tests (for example, if safe harbor design isn't used).
- 4 Finalize all recommendations, and obtain corporate and committee approval for your new plan design.
- 5 Develop plans for implementation and communication.

You will need to work with your plan design consultant and your ERISA counsel to provide formal plan design options plus detailed cost and impact projections. In addition, T. Rowe Price can supply tools and resources to help you through all five key steps.

### Retirement income projections: The future is uncertain; therefore, we predict many futures

Some tools only generate average outcomes. We have used Monte Carlo simulations that incorporate future uncertainty, producing analyses based on probability.

#### Material assumptions include:

Expected annual returns for asset classes are not based on historical returns. Instead, they are based on assumptions that include historical returns as one factor. That includes our estimates for reinvested dividends and capital gains.

We take these assumptions and factor in a degree of fluctuation in the returns over the long term—then generate random monthly returns for each asset class over a set time period.

Those monthly returns are then used to generate thousands of scenarios, providing a spectrum of possible returns for the modeled asset classes. Success rates are based on those scenarios.

#### Material limitations include:

This analysis relies on assumptions about the returns, combined with the model that generates a wide range of possible return scenarios. Despite our best efforts, we cannot be certain that the model will accurately estimate future returns on these asset classes. As a consequence, the results of this analysis should be viewed as approximations. Users should allow for a margin of error, and not rely heavily on the apparent precision of the results.

Extreme market movements may occur more often than they do in the model.

Some asset classes have relatively short histories. Actual long-term results for each asset class may differ from our assumptions. Those with the shortest history will potentially diverge more.

Market crises can cause asset classes to behave similarly. That could lower the accuracy of our assumptions for projected returns. A crisis could also diminish the benefits of diversifying across asset classes in ways the analysis won't capture. As a result, actual investor returns may be more volatile than those projected in our analysis.

This model does not consider short-term correlations among asset class returns. (“Correlation” measures the degree to which returns are related to, or are dependent on, each other.) It does not reflect the average duration of bull and bear markets, which may be longer than those modeled.

Inflation is assumed to be constant, so our calculations do not reflect variations.

This analysis does not include all asset classes. Other asset classes provide different returns or outcomes.

Taxes and early withdrawal penalties are not taken into account.

The analysis models asset classes, not investment products. So an investor’s actual experience with a given product—such as a mutual fund—may differ from the range generated by the simulation, even if that product’s asset allocation is similar to the one being modeled. Possible reasons for this divergence include (but are not limited to):

- Active management of that product
- Costs, fees, or other expenses associated with that product

Active management for any particular investment product can cause it to have higher or lower returns than the range in this analysis. For example, the securities selected for a product’s portfolio may differ from the broad asset classes modeled in our analysis.

### **Constructing the model portfolio**

Our investment professionals designed five model portfolios based on the principles of Modern Portfolio Theory, which is used to effectively diversify among asset classes.

An effectively diversified portfolio theoretically consists of all investable asset classes, including:

- Equities
- Bonds

- Real estate
- Foreign investments
- Commodities
- Precious metals
- Currencies
- Others

Since it is unlikely that investors would own all these assets, we selected stocks, bonds, and short-term bonds as most appropriate for long-term investors. We did not consider real estate because (1) it’s not liquid, and (2) many investors are homeowners, so they are already significantly exposed to that sector.

We believe the fixed income asset class we chose fairly represents the broad, liquid, domestic capital markets. We also selected short-term investment-grade bonds for stability and eliminated any explicit allocation to cash, believing that individual investors are best positioned to determine their cash allocation based on their near-term needs.

We constructed these portfolios based on our analysis of the complementary behavior of asset classes over long periods of time—enabling us to identify investment mixes that offer greater efficiency through low correlation.

### **Modeling assumptions**

As discussed in the previous section, we selected stocks, bonds, and short-term bonds as the basis for our portfolio.

T. Rowe Price has analyzed a variety of retirement savings strategies using computer simulations to determine the likelihood of success. Success is defined here as having one dollar remaining in the portfolio at the end of the retirement period of each strategy modeled, shown as a percentage in each grid.

The initial withdrawal amount is the percentage of the investments’ initial value withdrawn in the first year, with the entire amount being withdrawn on the first day of the year. In each subsequent

year, the amount withdrawn is adjusted to reflect a 3% annual inflation rate.

Success rates are based on simulating 10,000 possible future market scenarios and various retirement income strategies.

Results of the analysis are primarily driven by the assumed long-term, compound rates of return of each asset class in the scenarios. We made the following assumptions, presented in excess of 3% inflation: stocks, 4.50%; bonds, 2.23%; and short-term bonds, 1.38%.

We subtracted investment expenses from our return assumptions: 0.70% for stocks; 0.60% for bonds; 0.55% for short-term bonds. We believe these estimates reasonably approximate investing in these asset classes through a professionally managed mutual fund or other pooled investment product.

The results are not predictions but should be viewed as reasonable estimates.

#### **IMPORTANT:**

Projections are generated by a T. Rowe Price investment analysis tool which considers the likelihood of various investment outcomes which are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. The simulations are based on a number of assumptions. There can be no assurance that the projected or simulated results will be achieved or sustained. The charts present only a range of possible outcomes. Results may vary with each use and over time, and such results may be better or worse than the simulated scenarios. Clients should be aware that the potential for loss (or gain) may be greater than demonstrated in the simulations.

#### **INVEST WITH CONFIDENCE®**

T. Rowe Price focuses on delivering investment management excellence that investors can rely on—now and over the long term.

To learn more, please visit [troweprice.com](http://troweprice.com).

## **T.RowePrice®**

#### **Important Information**

The projections or other information generated by a T. Rowe Price investment analysis tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. The simulations are based on a number of assumptions. There can be no assurance that the projected or simulated results will be achieved or sustained. The charts present only a range of possible outcomes. Results may vary with each use and over time, and such results may be better or worse than the simulated scenarios. Clients should be aware that the potential for loss (or gain) may be greater than demonstrated in the simulations.

\* Additional fiduciary requirements, including preparation and mailing of required Qualified Automatic Contribution Arrangement (QACA) notices, may add a cost factor.