



**Investment Horizons**

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Office of Regulations and Interpretations  
Employee Benefits Security Administration  
Room N-5655  
U.S. Department of Labor  
200 Constitution Avenue NW  
Washington, DC 20210

Attention: Pension Benefit Statements Project

Re: RIN 1210-AB20

To whom it may concern:

The DOL should be commended for beginning to address one of the more important problems inherent in both the management of 401(k) plans and the interpretation of the 401(k) fiduciary duties of loyalty, prudence, and disclosure. The problem is that 401(k) plan participants are being asked to provide their own retirement income security, but they lack the knowledge or skills to do it.

As outlined below, this problem has been largely ignored to date because too many of the involved parties—sponsors, providers, fiduciaries, ERISA attorneys, and even the DOL—have continued to view 401(k) plans as supplemental savings plans (what they originally were) rather than as core retirement plans (what, for most American workers, they have become).

While simply adding annuity projections to existing benefit statements would certainly be a step in the right direction, such information by itself will be of little help to most participants since they will not understand how to interpret the projections or how to go about remedying any problems the projections point out. If the DOL really expects 401(k) plans to be meaningful retirement programs for American workers, the regulations must also include a requirement to show simple action steps that the participants can take.

**About Investment Horizons**

Investment Horizons focuses on providing:

- holistic assessments (see Appendix A: Sample Retirement Readiness Assessment) for plan sponsors and advisors showing whether or not a company's overall retirement program—including 401(k) plans, other types of defined contribution plans, and defined benefit pensions—when combined with Social Security will provide employees (as a whole or by segments) with a financially secure retirement (tasks that are rarely, if ever, done by recordkeepers and investment managers);

- targeted, personalized participant communications—such as gap (shortfall) analyses and the value of the employer’s match—that can be used to address the needs and challenges of various employee groups.

### **The rationale behind these suggestions**

The Mad Hatter in *Alice in Wonderland* pointed out that if you don’t know where you’re going, it doesn’t make a difference in which direction you go. Unfortunately, many research studies have demonstrated that the average 401(k) participant doesn’t know where he is going, and this state of being “lost” likely explains why average contribution rates are much lower than they should be for Americans age 40 and over.

These surveys found that there exists “relatively low levels of financial literacy among Americans” (FINRA’s *Financial Capability in the United States—2012 Report of National Findings*). Unless these low levels of financial literacy among 401(k) participants are reflected in how the fiduciaries interpret their fiduciary duties, the United States will have a large population of retirees, perhaps the majority of them, who will be in a constant state of financial distress.

Recognizing the extent of financial illiteracy among American workers, Congress sanctioned QDIAs, auto-enrollment, and auto-escalation of participant contribution rates. Unfortunately, there is no evidence to suggest that auto-enrollment and QDIAs are really helping most 401(k) participants to significantly enhance their retirement security. After all, unless 401(k) participants are contributing at high enough rates, their chances of achieving a financially secure retirement will be only wishful thinking even if their QDIAs always have the perfect asset allocation.

(I am not suggesting that these programs be dropped. These programs can be valuable tools if automatically enrolled employees are shown a comparison of the default contribution rate and the one that is projected to enable them to achieve the targeted replacement ratio. See Appendix B for a sample of a report that does this).

Surveys of participants have found that they also realize the predicament they are in and are asking for help. SSgA’s *Biannual DC Investor Survey* (January 2013) reported that 74% of participants want to be shown how contributing more to their 401(k) plan will benefit them.

SSgA’s finding is reinforced by one from the 2013 Merrill Lynch/Age Wave survey, *Americans’ Perspectives on New Retirement Realities and the Longevity Bonus*:

*“In previous decades, ‘getting rich’ and ‘retiring early’ were often heralded as the ideal retirement plan. Today, pre-retirees and retirees are more than seven times [88% versus 12%] more likely to say their financial goal is ‘saving enough to have financial peace of mind’ versus ‘accumulating as much wealth as possible’.”*

These surveys demonstrate that 401(k) participants want—and realize they need—what sponsors, recordkeepers, and the investment managers of their QDIAs are not giving them: concrete examples of why and how they should change their behavior. Showing an income stream in isolation—that is, without illustrating how the projected income stream compares to the income stream the participant will need to live comfortably during retirement and without showing suggested contribution rates—most likely will have little meaning to the average participant and, thus, has little chance of getting participants to increase their contribution rates.

Unfortunately, there is another reason why simply providing an annuity amount will probably not result in the desired behavior change. Most Americans have little faith in either their employers or Wall Street. The *Maritz Research Hospitality Group 2011 Employee Engagement Poll* found that:

- *“Slightly more than one in 10 Americans believes their company’s leaders are ethical and honest.”*
- *“Only 12 percent of employees believe their employer genuinely listens to and cares about its employees, and only seven percent of employees believe senior management’s actions are completely consistent with their words.”*

The Chicago Booth/Kellogg School *Financial Trust Index* (Wave 18, released May 31, 2013) found that only 32% of Americans trust mutual fund companies. Only 19% have faith in the stock market.

Employees want transparency. When it comes to parting with their hard-earned money, transparency means being shown to what extent increasing their 401(k) contributions will improve their chances of achieving a financially secure and comfortable retirement.

Probably the best way of communicating this information is to provide each participant annually with a personalized report showing him where he is on the road to retirement security. The report would show, factoring in the participant’s current account balance and contribution rate, the number of years it will take to deplete the participant’s projected 401(k) account balance at retirement if annual withdrawals are made that, along with Social Security and other company retirement benefits, will provide him with his targeted income goals. It should also show him what might be a reasonable income goal since few participants are able to identify this target on their own.

The report should also show two other contributions rates—one to get the participant on-track (assuming federal and plan guidelines are not violated) and another that might be more affordable (see Appendix C: Sample Gap Analysis Report). “On-track” means having a targeted inflation-adjusted income stream that the participant will likely not outlive based upon the specified assumptions, one of which is a post-retirement life span.

What to use for the post-retirement life span is an important issue in its own right. The Society of Actuaries Annuity-2000 tables with 1% mortality improvement shows that a male age 65 has a life expectancy of 21.9 years, a 40% chance of living to age 90, and a 23% chance of making it to 95. If he is married to a woman of the same age, their joint life expectancy is 29.2 years.

Since assuming death occurs 30 years after retirement creates a need for a much larger suggested contribution rate than one based upon dying 22 years after retirement, perhaps the DOL should require the report to have a table showing both suggested contribution rates.

The assumptions used in the report’s calculations must be prominently displayed—not buried in a footnote in small print. Further, participants would be told, in no uncertain terms, what almost all of them already know: Assumptions are not set in stone. After all, assumptions that look reasonable today may, in the future with the benefit of hindsight, be considered to have been overly optimistic or downright foolish. The participants will also be reminded that, as the assumptions change, the number of years it will take to deplete their account balances will also change—for better or for worse.

An important question to ask is: Why haven’t participants been given the actionable information they need to take full advantage of their 401(k) plan and maximize their chances of achieving a financially secure and comfortable retirement?

In discussing reports like the one shown in Appendix C with plan sponsors, we have been told by the majority of them that their 401(k) committees do not want to provide their employees with personalized gap analyses. In addition, when we ask the sponsors whether or not they ever made a holistic assessment of the effectiveness of their entire retirement program—factoring in projected income from the 401(k) plan, Social Security, and other company retirement/wealth building programs—they usually say they have not.

Our observations coincide with those of others:

- The Deloitte/International Foundation *Annual 401(k) Benchmarking Survey, 2011 Edition* found that only 20% of 401(k) plan sponsors have conducted a retirement readiness assessment to determine expected retirement income replacement ratios.
- The *Deloitte/ISCEBS 2012 Top Five Total Rewards Priorities Survey* found that helping employees achieve a comfortable and secure retirement was not one of the top five corporate priorities either for 2012 or for the next three years even though the same survey found that 83% of the respondents rank the ability to afford their own retirement and post-retirement health care as their number one concern.
- The 2012 CFO/Prudential survey, *THE FUTURE OF RETIREMENT AND EMPLOYEE BENEFITS: Finance Executives Share Their Perspectives*, found that having a workforce that can afford to retire was not among the top five benefit priorities in over 80% of the companies they surveyed.

The almost universal justification given for not providing personalized gap analyses or assessing the retirement readiness of their employees is: ERISA counsel has said neither ERISA nor the DOL regulations state that 401(k) fiduciaries have a duty to monitor the employees' retirement readiness or help participants determine what they should be contributing to their 401(k) plan.

The highly regarded ERISA attorney, Fred Reish, has succinctly summarized this position (“Crystal Ball, Part 2: Help sponsors manage 401(k) plan risk”, *Plan Sponsor*, September, 2012):

*“I have found nothing in the law indicating that plan sponsors or fiduciaries are obliged to operate their plans to produce ‘adequate’ benefits, other than the general requirement that fiduciaries act prudently in fulfilling their duties. Nonetheless, the fiduciary standard is evolutionary, not static. In the years ahead, a greater burden may fall on fiduciaries, such as plan committee members, to help participants accumulate benefits that are adequate for retirement. That could include, for example, projections of retirement income and gap analysis. For the moment, though, these remain in the realm of best practices.”*

This perspective provides sponsors and fiduciaries with a justification, perhaps more correctly a cover, for not upsetting employees and likely causing morale problems by telling them how much they really should contribute to the plan. It also allows the sponsor and provider to avoid incurring the costs associated with providing personalized gap analyses and retirement readiness assessments (or, alternatively, making the participants pay for them out of plan assets—which they also fear may upset the employees).

ERISA attorneys, then, rather than viewing “ambiguity” in the regulations as the DOL’s tool to incorporate new knowledge and realities into fiduciary behavior, seem to be taking the position that unless ERISA or the regulations specifically state that some task or behavior must be performed, the fiduciaries have no obligation to do it. Perhaps this is why fiduciaries are ignoring all the research that has appeared over the last several years about consumer behavior and the knowledge levels, behaviors, and attitudes of 401(k) participants.

In attempting to justify their positions, ERISA attorneys from some of the country’s largest law firms have argued that they are most often called on to tell the client what the law is, not what it should be. If a client asks about providing 401(k) gap analysis to participants, the attorney would tell the client it’s not required, and not regulated, and that if the plan fiduciary undertakes a discretionary action, the plan fiduciary will bear the risk of providing this information, as well as have limited or no defense if a claim is brought as a result.

I am not an attorney. However, a frequent reading of *The Wall Street Journal* and *The New York Times* and books like Judge Richard Posner's *How Judges Think* and *The Behavior of Federal Judges* (co-authored with Lee Epstein and William M. Landes) has led me to a different conclusion. That conclusion is succinctly summarized by the late, highly regarded jurist, Henry J. Friendly (*The Courts and Social Policy: Substance and Procedure*):

*“The courts must address themselves in some instances to issues of social policy, not because this is particularly desirable, but because often there is no feasible alternative.”*

Thus, if the DOL wishes to act in the best interest of both the participants (by providing them with gap analyses) and the sponsors (by minimizing a potential source of unnecessary litigation), the DOL should remove the ambiguity in the regulations and require the annual distribution of gap analyses. Otherwise, the DOL is leaving sponsors and their legal counsel at the mercy of judges who will be forced to decide how ambiguous regulations should have been interpreted.

Perhaps this also explains why 401(k) fiduciaries are behaving as if their 401(k) plans are supplemental savings plans for middle and upper management (as they originally were in the 1980s and 90s) rather than their companies' primary pension plan. In fact, from the participants' perspectives, the 401(k) plan functions, and must be managed, as an off-set defined benefit pension plan.

The participant must first determine his potential liabilities—an annual inflation-adjusted income stream providing about 80 percent of his final salary for as long as he lives. Then he has to subtract from (i.e., “offset”) each year's income need the income he is projected to receive from Social Security, other retirement plans (if any), and personal savings (if any). His next step is to calculate the net present value at retirement of the projected unfunded retirement income he needs. Lastly, the participant must determine the average contribution rate that is required to create an account value at retirement equal to the net present value at retirement of his annual income shortfalls.

The average financially unsophisticated 401(k) participant can't perform the just described calculations. Thus, if the DOL wants to significantly increase the likelihood that 401(k) plans will become meaningful retirement programs, it has to implement regulations that focus on outcomes—participants achieving a financially secure and comfortable retirement—rather than participation rates and supposedly more appropriate asset allocations via QDIAs.

Requiring participants to receive annually a gap analysis like the one shown in Appendix C would be a big step in the right direction. Other benefits of providing a gap analysis would include:

- making younger workers understand why it is never too early to start investing for retirement, the benefits of tax-sheltered investing, and why they should take full advantage of their employer's match;
- the disadvantages of taking loans and withdrawals as well as cashing out distributions on terminations rather than rolling over to another 401(k) plan or an IRA (thus reducing plan leakage);
- helping participants to evaluate whether or not purchasing an annuity—either as an in-plan option during their working years or at retirement—makes sense for them.

To further help the typical unsophisticated American worker, the DOL should clarify what is involved in fulfilling the duties of loyalty, prudence, and disclosure including the need to incorporate into those duties evolving knowledge—continually changing facts and circumstances. After all, what was reasonable and prudent yesterday might, in light of what we know today, be just the opposite.

The recent remarks (in “*Longevity in the Age of Twitter*”) of Blackrock's Chairman and CEO, Laurence D. Fink, at the Stern School of Business validate this viewpoint:

*“Second, the asset management industry – including my company, BlackRock – needs to do a better job as well. As an industry, we need to measure our performance not against benchmarks but against investors’ objectives or liabilities. That means much less of a focus on short-term sales and products – and more on investors’ long-term needs. Investors don’t care if a fund holds mid-cap stocks or Mexican government debt. Investors want products that will provide long-term outcomes to help buy a house, send a kid to college or fund a decent retirement.”*

(Helping participants achieve their long-term goals is also a win for investment managers like Blackrock. After all, as time progresses, the profitability of their defined benefit businesses will continue to dwindle. Getting employees to contribute more to 401(k) plans can help offset this loss of revenue.)

Sponsors have also commented that their recordkeepers could neither easily provide the participants with personalized gap analyses nor the fiduciaries and plan sponsor with retirement readiness assessments of the plan as a whole. Instead, sponsors often commented that their recordkeepers encouraged them to take advantage of the marketing pieces from managed account providers such as Financial Engines.

These personalized sales pieces are provided by managed account vendors in the hopes of convincing participants of the need for their services. These sales pieces often present the participants’ retirement prospects abstractly through the use of metaphors such as the red, green, and yellow lights of a traffic signal. Metaphors, however, are not a substitute for what participants want—concrete examples of the likely benefits of hiking up their contribution rates.

An obvious question that arises is: Why haven’t recordkeepers developed the capability to provide participants with personalized reports that show them where they are the road to retirement security? After all, targeted, personalized messaging is widely used by large corporations to sell all types of things—from expensive cars to books on a particular subject to courses on specific hobbies.

In a 2010 *Plan Sponsor* article, “The 401(k) Destination”, Fred Reish asked that question to recordkeepers:

*“[T]hey tell me that they use their budget for new products and services primarily to meet the demands and requests of plan sponsors (and, of course, for satisfying the compliance requirements imposed by the government). So, we come full circle. Plan sponsors aren’t giving a high priority to providing participants with information about benefit adequacy and needed deferrals.”*

This sponsor behavior should surprise no one. As noted earlier, sponsors do not want to upset employees by telling many of their participants that they should be doubling, tripling or even quadrupling their 401(k) contributions. Sponsors want their employees to view the plan as a valuable benefit, not as something that will cause them to decrease their take-home pay.

But that answer is not the whole story. In working with clients of all sizes, we often find that the required data to generate gap analyses for participants (and plan-level retirement readiness assessments for sponsors—another essential tool if 401(k) plans are to managed as retirement, rather than savings, plans) must be manually extracted from the recordkeeper’s database. In addition, 401(k) recordkeepers often don’t have current contribution rates, salaries, and, if other retirement programs exist, the necessary data to include their projected benefits in the analyses.

A common reaction that I often hear from sponsors and recordkeepers is: “We provide participants with on-line calculators. We give them the tools they need to figure out where they are regarding their retirement prospects.”

That's true. What sponsors and recordkeepers don't give participants is an understanding (that actually gets internalized) of the importance of using the tools, the knowledge needed—such as the assumptions to use and how to revise them over time—to intelligently use them, or how to implement or question the calculator's output. Sponsors and recordkeepers are using these tools (which they know are not helping participants) as a lame excuse to avoid addressing an unpleasant situation.

One other point—When I ask sponsors and recordkeepers how much usage their calculators get, I always get the same answer: The percentage of participants who use calculators is in the low to mid-single digits.

Quite frankly, recordkeepers should not be judged too harshly for this state of affairs. After all, there is no reason to expect a good recordkeeper to also be a good data analyst. The software required for each task is quite different, and in the past, calculating a participant's retirement readiness was a task seldom, if ever, requested of recordkeepers or anyone else.

Three obvious questions arise:

- What is the cost to develop meaningful participant gap analyses (and plan-level retirement readiness assessments for sponsors)?
- Who should bear the costs—sponsors, recordkeepers, investment managers, participants or all four groups?
- Do the benefits justify the cost?

Developing these reports is neither easy nor inexpensive. However, these reports could be a money-making tool for recordkeepers—especially those who are bundled providers—and investment managers. After all, if participants are contributing 7% of pay and the participant reports get them to increase contribution rates to 11% of pay, the costs of creating the reports could be easily recouped within a few years (because of the additional asset-based fees generated).

Alternatively, if recordkeepers don't want to develop the required technology to assess retirement readiness, they don't have to. They can partner with firms like Investment Horizons. In fact, taking this route might keep costs down since our overhead is much smaller and our agility is much greater than a large recordkeeper.

Sponsors and participants should also contribute to the ongoing costs of producing the reports. After all, both have a lot to gain. The benefits to participants are obvious. The benefits to sponsors of providing gap analyses to participants include minimizing the likelihood that the sponsor will be saddled with a demoralized and less productive workforce that won't be able to retire at the company's normal retirement age.

Sponsors like to counter with the argument that, from their prospective, providing reports to a workforce that has a high rate of turnover simply doesn't make sense. In fact, it is a waste of money.

The fallacy (beyond the fact that it ignores what is in the best interest of the participants) with this argument is easy to identify. If companies always had young workforces, that argument would make sense. The reality is, however, that workers age, most don't die before they retire, and companies will have larger populations of older workers—baby boomers, many of whom will be at the company for only relatively short periods of time (seven to fifteen years)—who want to retire and whose employers want them to retire. After all, keeping them on the payroll only increases health care costs, decreases productivity due to morale issues, and encourages younger desired talent to leave.

Thus, from both the perspectives of national policy and maximizing value for the sponsors' shareholders, providing gap analyses makes tons of sense and providing them should be incorporated into the regulations.

### **Determining assumptions**

Now let's move on to the issue of how to arrive at the assumptions that are to be used in creating reports that are meaningful to participants. In the ANPRM, the DOL outlined requirements that:

- “(1) Projections be meaningful to participants and beneficiaries,*
- (2) projections not be overly burdensome for plan administrators to perform, and*
- (3) any regulatory framework does not disturb current projection and illustration best practices or stifle innovation in this area.”*

Admittedly, in the 401(k) investment arena where it's the participants' money at risk, there are plenty of so-called “best practices”. In the world of defined benefit plans and endowments, though, the term “investment best practice” is often considered to be an oxymoron. After all, as MIT professor Andrew Lo has observed (*Markets Behaving Badly: A Framework for Dealing with Human Behavior*, RBC Perspectives: Realities of Risk, June 2013):

*"It's clear that 'business as usual' is no longer working - there have been fundamental changes in the global economy. Behavior plays a large role and rational expectations and market efficiency have very little to say that would explain the kind of market behavior we have observed. In that respect, behavioral economists have provided a number of counter examples.”*

For example, defined benefit sponsors are asking: Should diversification be based upon allocating assets (Modern Portfolio Theory) or allocating risk (risk parity) or a combination of the two? After all, the classic 60/40 stock/bond portfolio can have as much as 90% of the risk attributed to the equity component (*On Balance*, aiCIO.com, April 2013). Perhaps a truly diversified portfolio would have a healthy dose of alternative investments.

Issues of similar complexity can be found in the glide paths of target-date funds. Comparisons of glide paths and performances of funds with the same target-date show a wide dispersion of both. This spectrum of returns and asset allocations at the same point in the glide paths' time frame makes one wonder if the construction of these “hot” QDIAs has any conceptual basis whatsoever.

Further, applying “investment best practices” and assuming the results will mirror long-term historical trends can have devastating effects on participants who are nearing retirement if the timing is wrong. Consider, for example, how the glide paths of 2015 and 2020 target date funds have been changing in the recent past and are continuing to change today. These funds likely have been decreasing (and continue to decrease) their allocations to equities over the last ten years (the S&P 500 had a near zero return between 2000 and 2009) despite the fact that the stock market has reversed its course (an almost 11% return between 2010 and 2012, Bloomberg and Northern Trust) and is doing well this year.

As these target date funds decrease their stock exposure, many are moving that money into bonds at the same time that a reading of the *Wall Street Journal* will tell you that a large number of investment gurus believe interest rates will be going up, bond values will be going down, and stocks will continue on their roll. The obvious question that arises is: Does a locked-in glide path, especially one that uses only index funds for its bond component, make sense? Or must the glide path remain fluid and reflect the current environment and the opportunity to recoup losses?

The point of this example is obvious: Assumptions should not be set in stone. The regulations must require them to be reexamined on an annual or biannual basis. Furthermore, the assumptions used in the projections—in particular, pre-and post-retirement investment growth rates and rates of inflation and salary increases—should coincide with those used in the plan’s target-date funds and managed account programs.

In addition, if the DOL promulgates safe harbor rates, these rates must also be reevaluated every year. The plan’s fiduciaries should also be required to document that they compared the assumptions the investment managers of their target-date funds and managed accounts are using to the ones arrived at by the DOL and reconcile the significant differences if any.

After all, overly aggressive investment growth rate assumptions will most likely lead participants down a “primrose path”. The DOL should not forget that 401(k) plans have “split personalities”. ERISA and the regulations consider them as defined contribution savings plans. From the vantage point of participants, especially with defined benefit plans going the way of the dinosaur, 401(k) plans are off-set defined benefit plans, and for a defined benefit plan, overly optimistic assumptions lead to underfunding. Unfortunately, 401(k) participants don’t enjoy the luxury of having the PBGC cushion their funding shortfalls.

I would like to make one last point. Selecting historical returns as proxies for future returns is anything but a no-brainer. The reason is obvious. The historical returns must have a good correlation to what will occur in the future, especially the next five to ten years in the case of participants who are nearing retirement. Long-term averages conceal the order of returns, and, because the portfolios receive regular cash inflows, the order of returns can significantly impact the size of terminal wealth—the participants’ nest eggs and the income streams they can generate (see Appendix D: Reverse Returns Study).

The following chart shows the annualized total returns by decades (Bloomberg and Northern Trust). As you can surmise, selecting which past decade will most likely reflect the current one is no easy task.

S&P Annualized Total Returns By Decade, Including 2010-12

Decade	Total Return (%)
1930’s	0.33
1940’s	9.5
1950’s	19.3
1960’s	7.8
1970’s	5.9
1980’s	17.5
1990’s	18.2
2000’s	-0.9
2010-2012	10.9

I hope my comments have been helpful. I encourage you to make providing participants gap analyses on an annual basis a 401(k) fiduciary must-do.

Sincerely,

Richard D. Glass, PhD, CEBS  
President  
Investment Horizons, Inc.

## Appendix A: Sample Retirement Readiness Assessment

# Company 401(k) Plan

## PUA Retirement Readiness Assessment: December 31, 2012

Group: All Employees

	Entire Group	Under 30	30 to 39	40 to 49	50 to 59	60 and Older
<b>Number of employees analyzed</b>	5,888	768	1,104	1,776	1,696	544
Participants*	3,504	400	816	976	1,024	288
Non-participants*	2,384	368	288	800	672	256
Participation rate	59.5%	52.1%	73.9%	55.0%	60.4%	52.9%
<b>Projected required nest-egg withdrawal, average</b>						
All employees*	\$35,086	\$59,843	\$52,134	\$35,944	\$20,055	\$9,602
Participants*	\$39,511	\$63,896	\$55,384	\$40,017	\$24,787	\$11,298
Non-participants*	\$28,584	\$55,437	\$42,925	\$30,974	\$12,844	\$7,694
<b>Participant contribution rate, average</b>						
Current	4.9%	5.4%	4.4%	4.9%	4.9%	6.2%
Suggested*	17.7%	6.0%	6.8%	12.8%	27.7%	45.5%
<b>Non-participant contribution rate, average</b>						
Current	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Suggested*	23.5%	4.7%	7.0%	15.6%	33.9%	66.7%
<b>Participant nest-egg at retirement, average</b>						
Projected (at current contribution)	\$688,345	\$1,738,824	\$984,596	\$582,176	\$285,294	\$182,828
Needed	\$816,077	\$1,295,433	\$1,121,961	\$823,940	\$531,426	\$269,081
<b>Non-participant nest-egg at retirement, average</b>						
Projected (at current contribution)	\$44,762	\$10,244	\$127,069	\$52,956	\$35,644	\$115
Needed	\$605,731	\$1,135,291	\$882,684	\$649,153	\$304,912	\$186,877
<b>Participant retirement income security, percentage of group</b>						
Projected to be on track	28.3%	76.0%	33.9%	25.0%	12.7%	12.8%
<b>Non-participant retirement income security, percentage of group</b>						
Projected to be on track	0.7%	0.0%	0.0%	0.0%	2.4%	0.0%
<b>Number of retirement years nest-egg projected to last at current contribution rate, average</b>						
Participants*	16	22	19	15	12	12
Non-participants*	2	1	3	2	3	2

\* See notes page (the last page).

### All projections are based on:

Retirement age: **65**

Annual salary increase: **3.0%**

Pre-retirement investment return: **8.0%**

Replacement ratio: **80%**

Post-retirement investment return: **6.0%**

Post-retirement inflation rate: **3.0%**

Post-retirement life expectancy: **25 years**

Employer matching schedule:

**50% on first 6% of pay contributed**

Plan imposed maximum

employee contribution: **none**

(Federal contribution limits are also applied.)

# Company 401(k) Plan Retirement Income Analysis

Group: All Employees

	Entire Group	Under 30	30 to 39	40 to 49	50 to 59	60 and Older
<b>Projected retirement income needed, average</b>						
All employees*	\$79,370	\$128,295	\$108,509	\$78,611	\$53,370	\$34,704
Participants*	\$86,063	\$133,875	\$113,453	\$84,804	\$60,081	\$38,701
Non-participants*	\$69,532	\$122,229	\$94,498	\$71,056	\$43,143	\$30,208
<b>Projected Social Security benefit, average</b>						
All employees*	\$37,221	\$62,196	\$49,699	\$35,176	\$25,670	\$19,328
Participants*	\$39,131	\$63,459	\$51,152	\$36,813	\$27,460	\$20,639
Non-participants*	\$34,413	\$60,824	\$45,582	\$33,178	\$22,941	\$17,854
<b>Projected pension benefit, average</b>						
All employees*	\$7,094	\$6,256	\$6,676	\$7,491	\$7,668	\$6,038
Participants*	\$7,436	\$6,520	\$6,918	\$7,973	\$7,843	\$6,912
Non-participants*	\$6,591	\$5,969	\$5,991	\$6,903	\$7,401	\$5,055
<b>Projected required nest-egg withdrawal, average</b>						
All employees*	\$35,086	\$59,843	\$52,134	\$35,944	\$20,055	\$9,602
Participants*	\$39,511	\$63,896	\$55,384	\$40,017	\$24,787	\$11,298
Non-participants*	\$28,584	\$55,437	\$42,925	\$30,974	\$12,844	\$7,694

## Analysis Notes:

\* Participants are defined as those people who are currently making contributions to the plan. Non-participants are defined as those who are not currently contributing.

\*\* The "suggested" contribution is not necessarily the contribution projected to be required to provide an adequate retirement income stream. The suggested contribution will never exceed federal contribution limits, even if the required contribution would. In addition, for participants, the suggested contribution is never lower than what the participant is currently contributing even if the required contribution is less. These two factors can combine to make the suggested contribution for non-participants in a given group be lower than the suggested contribution for participants in the same group even though the required contribution (which is not shown) would be higher for the non-participants than for the participants.

(Generally, more non-participants than participants have required contributions greater than the federal limits which drives the average suggested contribution for non-participants down relative to required contribution. At the same time, participants who are currently contributing more than required drive the average suggested contribution for participants up relative to the contribution required to provide an adequate retirement income stream.)

## All projections are based on:

Retirement age: **65**

Annual salary increase: **3.0%**

Pre-retirement investment return: **8.0%**

Replacement ratio: **80%**

Post-retirement investment return: **6.0%**

Post-retirement inflation rate: **3.0%**

Post-retirement life expectancy: **25 years**

Employer matching schedule:

**50% on first 6% of pay contributed**

Plan imposed maximum

employee contribution: **none**

(Federal contribution limits are also applied.)

## Appendix B: Sample Auto-enrollment Report

Jane,  
Congratulations on becoming a participant in the 401(k) plan. Automatic enrollment is just one of the steps we have taken to help you to get on the road to a financially secure retirement.



**This is a personalized report which:**

- explains why we automated both the enrollment and investment processes;
- encourages you to increase your contribution level to 6% so that you will “max-out” the company match;
- reminds you that achieving retirement security falls squarely on your shoulders and no one else’s.

**How does the autopilot program work?**

The company enrolled you into the 401(k) plan and deducted 3% from your paycheck. This money is then invested, along with the company match, in a target date fund (to be discussed shortly). With the first paycheck of each following year, your contribution will be automatically increased. (See ‘Auto Enrollment Basics’ table for details.)

At any time, you can reduce, increase, or stop contributions and/or assume responsibility for managing the money in your account. You can get a list of all the available investment options (as well as a detailed description of the plan) by going to the plan’s website [www.website.com](http://www.website.com) or by calling the call center at (1-800-xxx-xxxx).

**Why did the company start the autopilot program?**

Unfortunately, all too many of us spend more time each year planning a vacation than seriously planning for our retirement.

The reason for this is simple. We simply don’t appreciate that achieving a comfortable retirement:

- falls squarely on our shoulders and ours alone;
- requires much more money than we imagine;
- can’t be done with a “quick fix”.

Thus, the earlier we start saving for retirement and the more we save, the better off we are. That is why the company is helping you to jump start your retirement savings program.

**Auto Enrollment Basics**

Initial Salary	
Deferral to Plan .....	3%
Automatic Annual Increase in Deferral .....	1%, until 10% is reached
Default Fund .....	Target Date Fund XXXX
Company Match .....	50% on the first 6% of pay contributed
Discretionary Profit Sharing Contribution .....	5% of pay

**Vesting Schedule**

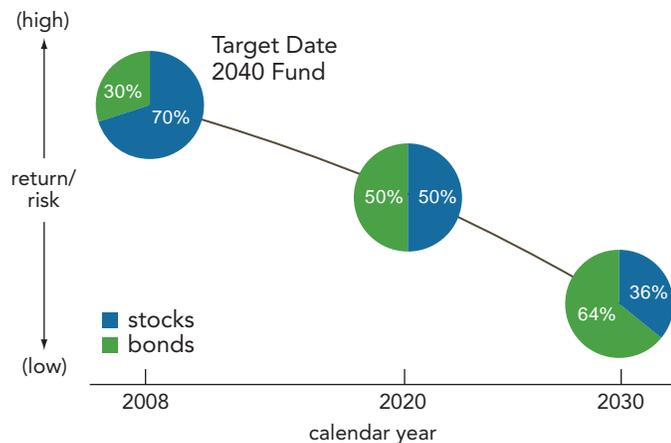
Years of Service	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.
Vested Percentage of Company Contributions	20%	40%	60%	80%	100%

## What are target date funds?

Research studies have found that many of us would appreciate having an investment professional manage our account. Target date funds provide such professional investment management, and, unless you tell us otherwise, all of your account will be invested in one well-diversified fund.

Investment professionals determine the fund's asset allocation (how it is split among various asset classes). These professionals will also change the allocation over time (see graph below). The closer you get to retirement, the more conservative the fund's allocation will become (that is, a smaller portion of your account will be invested in riskier assets such as stocks).

## Automatic Reallocation in a Target Date Fund



Automating the enrollment process, then, is just one of the ways the company is helping you to achieve a comfortable retirement.

## What are some of the other ways in which the company is helping me?

The other ways include the company's match, the profit sharing contribution, and the automatic annual increase in your contribution.

## How does the company's match work?

Each year the company declares the percent, if any, of your contribution that it will match. Currently the match is 50 cents for every dollar you contribute up to 6% of pay. You can think of it as your bonus for contributing to the plan.

Your contributions are 100% vested from day one. This means that if you leave the company for any reason, you can take 100% of your contributions with you. The match, however, is subject to a vesting schedule. The vesting schedule determines the percent of the cumulative matches you can take with you if you leave the company.

## What is the profit sharing contribution?

In addition to the match, the company may make a profit sharing contribution to your account. This is a "thank you" for your help in generating profits. The amount of this discretionary contribution is determined annually by the company.

## Why are you increasing my contributions by 1% each year?

The answer is simple. When you retire, your 401(k) account must be large enough so that withdrawals from it, along with your Social Security benefit and any other income you might have, will be able to provide you with an adequate inflation-adjusted income. As you can see from the charts on the opposite page, if you contribute just the default contribution rate, even when the match and profit sharing contribution are factored in, it is unlikely that you will be able to achieve your targeted lifetime income goals.

(If you have other sources of retirement income, we suggest that you work with an advisor to incorporate these sources of income into a more detailed analysis of your needs.)

The charts assume that the company maintains the match at the current level until you retire and that all the assumptions, including the projected Social Security benefits, work out. We all know that these are big, probably even unrealistic, assumptions. It is for these reasons that we are:

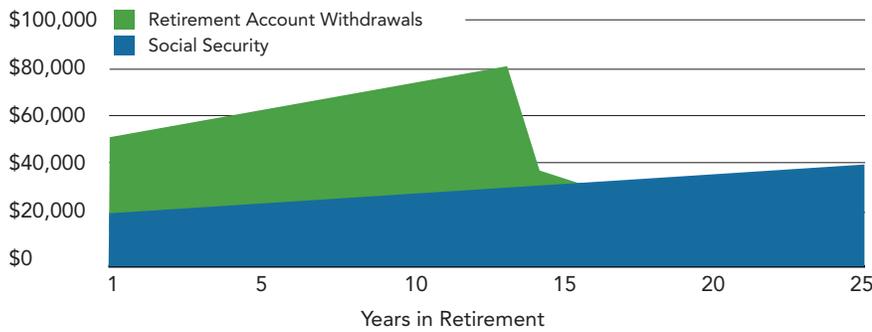
- automatically increasing everyone's contribution until they reach a rate of 10% of pay;
- showing you a suggested contribution rate (shown in the lower chart).

## Are you saying that if I can afford to stash more money away for my retirement, I should do it?

You "hit the nail on the head". That is exactly what we are saying. We also recommend that you periodically review where you are along the road to retirement. You might find that you have more or less money than you had anticipated or that your needs have changed or both.

**Projected retirement income making your current 3.0% contribution\***  
 (Projected account balance at retirement \$306,782)

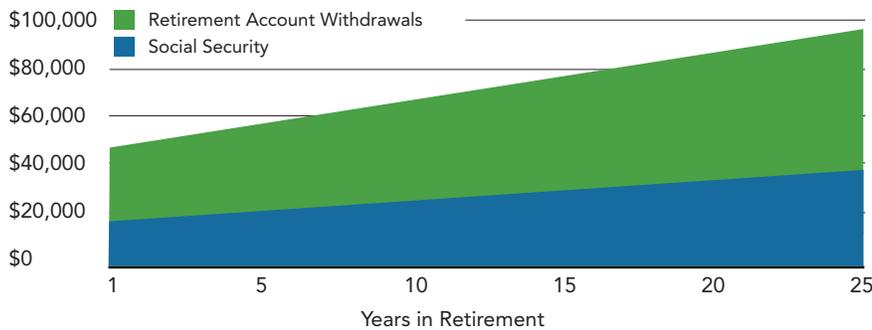
{MOCKUP}



Your contribution	3.0%
Your employer's contribution	1.5% **
<b>Total contribution</b>	<b>4.5%</b>

\*\* The employer contribution includes a profit sharing contribution at X.X%.

**Projected retirement income making the suggested 5.8% contribution\***  
 (Projected account balance at retirement \$459,337)



Your contribution	5.8%
Your employer's contribution	2.9% **
<b>Total contribution</b>	<b>8.7%</b>

\*\* The employer contribution includes a profit sharing contribution at X.X%.

\* Given the assumptions below, you are projected to need \$47,131 of income in your first year of retirement. Social Security is projected to cover \$24,141 of this amount. Thus, it is projected that you will need to withdraw \$22,990 from your nest-egg in your first year of retirement. In subsequent years, you will need to increase your withdrawals to keep up with inflation.

As the top chart shows, at your current contribution rate, your nest-egg is projected to be consumed after 16 years of retirement. If you increase your contribution to 6%, however, your nest-egg is projected to last for your entire life expectancy (as the bottom chart shows).

**Assumptions**

Current age	35	Social Security benefit at retirement	\$24,141	Pre-retirement investment return	8%
Current balance	\$10,000	Annual increase in Social Security benefit	2%	Post-retirement investment return	6%
Current salary	\$25,000	Post-retirement life expectancy	25 years	Employer match:	50% on the first 6% of pay contributed
Salary growth rate	3%	Inflation rate	3%		
Replacement ratio	80%				
Retirement age	65				

Jane Doe  
123 Main Street  
Anycity, ST 00000

**ABCO, Inc.**

## Appendix C: Sample Gap Analysis Report

John,

## Planning can prevent your retirement dreams from collapsing!



The press's coverage of the current economic crisis and the stock market's dismal performance over the last decade, including its effect on the retirement prospects of us baby boomers, makes our heads spin. The pundits are predicting that, for many of us, our retirement dreams simply won't come true.

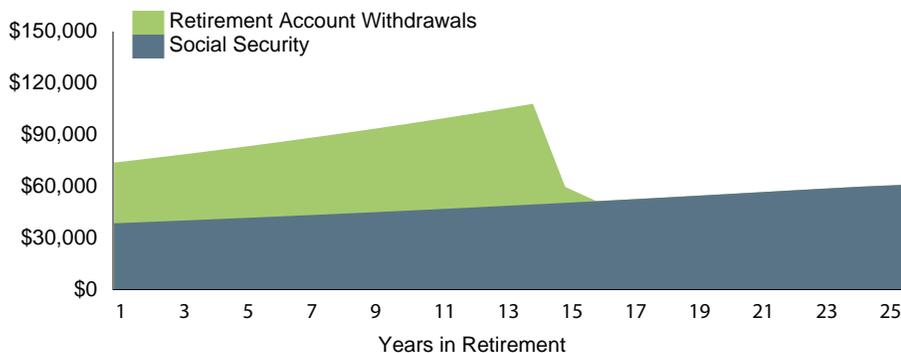
Research has found that most of us have neither calculated our likely retirement income needs nor what our 401(k)

contributions should be in order to achieve them. In short, we never evaluated what we would have to do to have a good chance of making our retirement dreams come true.

To help you size-up your situation, the Plan Administrator has prepared for you three personalized gap (shortfall) analyses. In creating them, he used what he considered to be reasonable assumptions, and these are shown after the third chart. Keep in mind that assumptions are just predictions. Only time will tell just how accurate (or inaccurate) they turn out to be.

### Projected retirement income making your current 7.0% contribution

Projected account balance at retirement: \$469,076



Your contribution	7.0%
Your employer's contribution	3.0%
<hr/>	
Total contribution	10.0%

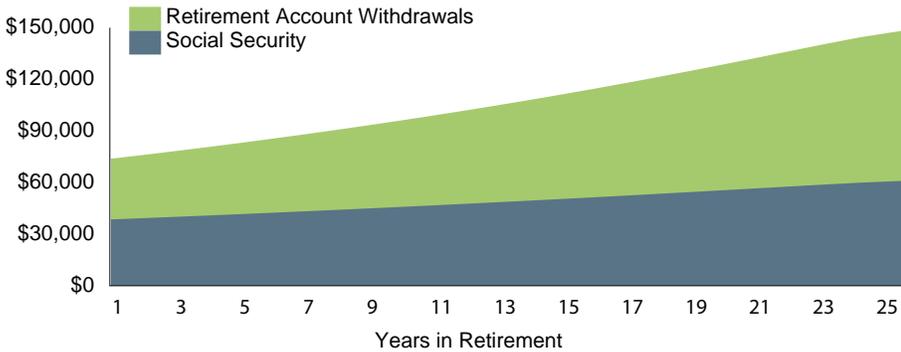
The first gap analysis (above) is based upon your current contribution rate (and the assumptions shown on page 3). It shows the number of years that withdrawals from your 401(k) account, combined with Social Security (based upon a single person), will provide you with an inflation-adjusted retirement income of 80% of your final pay (80% replacement ratio). Once the 401(k) account is depleted, your retirement income will be reduced to what you will receive from Social Security.

You are probably shocked by how quickly your 401(k) nest egg is projected to be used-up. You are also probably asking: Will I really need 80% of my final pay to live comfortably for the rest of my life? The candid answer is: No one really knows what you will need. If your mortgage is paid-off and you aren't sending kids to college, maybe you won't. If you are paying for nursing home care for parents and/or supporting children and grandchildren and/or stuck with huge medical bills, an 80% replacement ratio may not be enough.

You now probably want to know what contribution rate is suggested to provide an 80% replacement ratio if you have a long life, such as to age 90. This contribution rate is shown in the gap analysis chart below.

## Projected retirement income making the suggested 20% contribution

Projected account balance at retirement: \$790,845



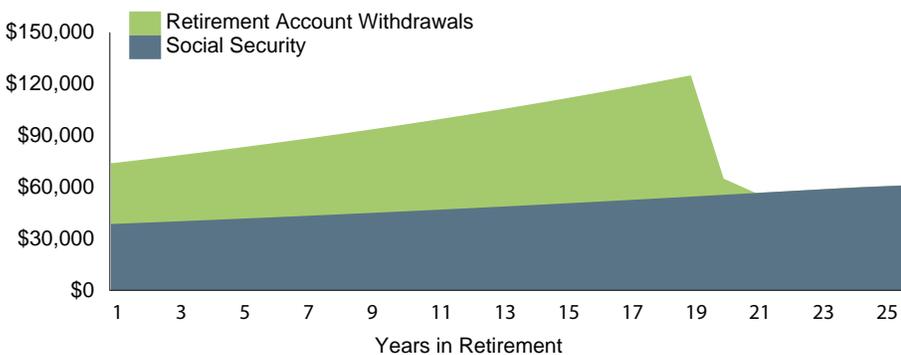
Your contribution	20.0%
Your employer's contribution	3.0%
<b>Total contribution</b>	<b>23.0%</b>

Admittedly, the suggested contribution rate is large—in fact, probably too large to be affordable. The Plan Administrator is showing you this rate so that you can make decisions based on a realistic picture of where you are on the road to retirement rather than blindly hoping for the best. (Remember, the calculations are based only on Social

Security and your 401(k) plan and don't reflect any of other sources of income, like IRAs, rental property, and retirement benefits from previous employers. If you will have other sources of retirement income, they will help close your gap. You must consider them in your decision making as well.)

## Projected retirement income if you increase your contribution to 13%

Projected account balance at retirement: \$617,585

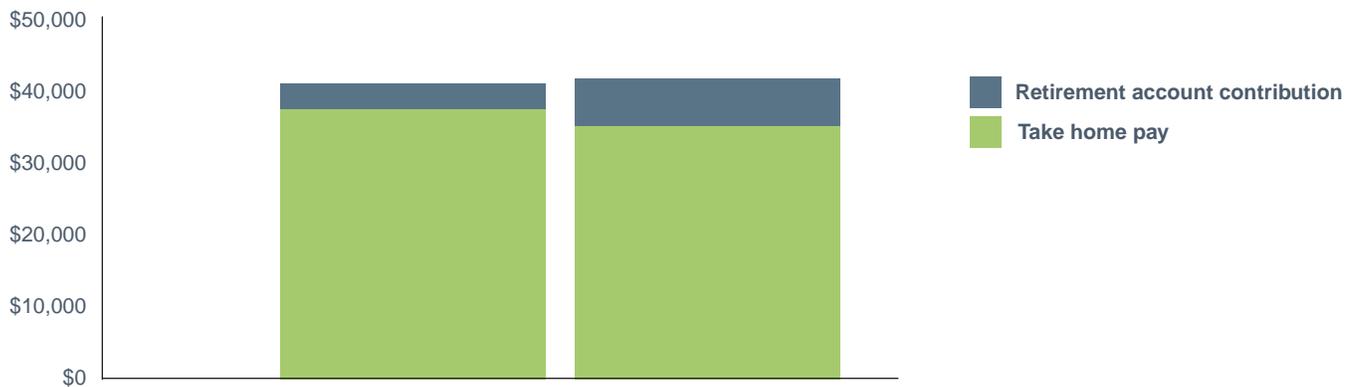


Your contribution	13.0%
Your employer's contribution	3.0%
<b>Total contribution</b>	<b>16.0%</b>

The third gap analysis (above) utilizes a contribution rate halfway between your current one and the suggested rate. The chart on the next page gives you an idea of how your take-home pay will be affected if you decide to increase your contribution from your current level to this rate.

We hope this report will give you a better perspective on how to approach retirement planning. We encourage you to take full advantage of the educational components of the Plan's website and explore the use of target-date funds or the managed account service.

## Take home pay and contribution at a 7% vs. 13% deferral rate\*



Deferral rate	7%	13%
Gross annual salary	\$50,000	\$50,000
Retirement contribution	\$3,500	\$6,500
Taxable income	\$46,500	\$43,500
Federal taxes*	\$9,294	\$8,544
Take home pay	\$37,206	\$34,956

\*This chart takes into account only Federal taxes and does not consider state or local taxes. Taxes are based on the IRS 2010 Tax Rates for a single filer plus 2010 OASDI and Medicare taxes. The 2010 standard deduction of \$5,700 and one exemption (\$3,650) have been applied in calculating the Federal taxes. Withdrawals made prior to age 59½ may be subject to a 10% Federal tax penalty and are subject to plan restrictions. Taxes are due upon withdrawal from a tax-deferred account.

## Act now! Increase your 401(k) contributions and get back on the road to a comfortable and financially secure retirement.

### Assumptions used in the charts in this report

Current age	45	Social Security benefit at retirement	\$36,912	Pre-retirement investment return	6%
Current balance	\$69,084	Annual increase in Social Security benefit	2%	Post-retirement investment return	5%
Current salary	\$50,000	Post-retirement life expectancy	25 years	Employer match	50% on the first 6% of pay
Salary growth rate	3%	Inflation rate	3%		
Replacement ratio	80%				
Retirement age	65				

Although this report is based on information about you provided by your plan, it is only preliminary in nature and should not be treated or interpreted as an exhaustive, comprehensive analysis of your total financial situation. In addition, all the assumptions used in this report are for illustrative purposes only and are not guaranteed. You should not consider them predictive of the future. It is up to you to periodically review where you are along the road to retirement. You might find that you have more or less money than you had anticipated.

John Doe  
123 Main Street  
Pittsburgh, PA 15200

It's easy to increase your deferrals or change your asset allocation.  
You can call the Plan Hotline at 1-800-000-000 or visit the plan's  
website at [www.planwebsite.com](http://www.planwebsite.com).

Department of Human Resources, ACME Company

## Appendix D: Reverse Returns Study

Scenario 1

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Year	Annual return	Growth of one-time investment of \$1,000	Growth of annual investment of \$1,000
1	5%	\$1,050	\$1,050
2	5%	\$1,103	\$2,153
3	5%	\$1,158	\$3,310
4	5%	\$1,216	\$4,526
5	5%	\$1,276	\$5,802
6	5%	\$1,340	\$7,142
7	5%	\$1,407	\$8,549
8	5%	\$1,477	\$10,027
9	5%	\$1,551	\$11,578
10	5%	\$1,629	\$13,207
11	5%	\$1,710	\$14,917
12	5%	\$1,796	\$16,713
13	5%	\$1,886	\$18,599
14	5%	\$1,980	\$20,579
15	5%	\$2,079	\$22,657
16	5%	\$2,183	\$24,840
17	5%	\$2,292	\$27,132
18	5%	\$2,407	\$29,539
19	5%	\$2,527	\$32,066
20	5%	\$2,653	\$34,719
	Final value	\$2,653	\$34,719
	Annualized compound return	5.0%	5.0%

Scenario 2

Scenario 3

Year	Annual return	Growth of one-time investment of \$1,000	Growth of annual investment of \$1,000
1	5%	\$1,050	\$1,050
2	5%	\$1,103	\$2,153
3	<b>-15%</b>	\$937	\$2,680
4	5%	\$984	\$3,864
5	5%	\$1,033	\$5,107
6	5%	\$1,085	\$6,412
7	5%	\$1,139	\$7,783
8	5%	\$1,196	\$9,222
9	5%	\$1,256	\$10,733
10	5%	\$1,319	\$12,320
11	5%	\$1,385	\$13,986
12	5%	\$1,454	\$15,735
13	5%	\$1,526	\$17,572
14	5%	\$1,603	\$19,500
15	5%	\$1,683	\$21,525
16	5%	\$1,767	\$23,651
17	5%	\$1,855	\$25,884
18	5%	\$1,948	\$28,228
19	5%	\$2,046	\$30,690
20	5%	\$2,148	\$33,274
	Final value	\$2,148	\$33,274
	Annualized compound return	3.9%	4.6%

Year	Annual return	Growth of one-time investment of \$1,000	Growth of annual investment of \$1,000
1	5%	\$1,050	\$1,050
2	5%	\$1,103	\$2,153
3	5%	\$1,158	\$3,310
4	5%	\$1,216	\$4,526
5	5%	\$1,276	\$5,802
6	5%	\$1,340	\$7,142
7	5%	\$1,407	\$8,549
8	5%	\$1,477	\$10,027
9	5%	\$1,551	\$11,578
10	5%	\$1,629	\$13,207
11	5%	\$1,710	\$14,917
12	5%	\$1,796	\$16,713
13	5%	\$1,886	\$18,599
14	5%	\$1,980	\$20,579
15	5%	\$2,079	\$22,657
16	5%	\$2,183	\$24,840
17	5%	\$2,292	\$27,132
18	<b>-15%</b>	\$1,948	\$23,913
19	5%	\$2,046	\$26,158
20	5%	\$2,148	\$28,516
	Final value	\$2,148	\$28,516
	Annualized compound return	3.9%	3.3%

Scenario 4

Scenario 5

Year	Annual return	Growth of	Growth of	Year	Annual return	Growth of	Growth of
		one-time investment of \$1,000	annual investment of \$1,000			one-time investment of \$1,000	annual investment of \$1,000
1	5%	\$1,050	\$1,050	1	5%	\$1,050	\$1,050
2	5%	\$1,103	\$2,153	2	5%	\$1,103	\$2,153
3	<b>15%</b>	\$1,268	\$3,625	3	5%	\$1,158	\$3,310
4	5%	\$1,331	\$4,857	4	5%	\$1,216	\$4,526
5	5%	\$1,398	\$6,149	5	5%	\$1,276	\$5,802
6	5%	\$1,468	\$7,507	6	5%	\$1,340	\$7,142
7	5%	\$1,541	\$8,932	7	5%	\$1,407	\$8,549
8	5%	\$1,618	\$10,429	8	5%	\$1,477	\$10,027
9	5%	\$1,699	\$12,000	9	5%	\$1,551	\$11,578
10	5%	\$1,784	\$13,650	10	5%	\$1,629	\$13,207
11	5%	\$1,873	\$15,383	11	5%	\$1,710	\$14,917
12	5%	\$1,967	\$17,202	12	5%	\$1,796	\$16,713
13	5%	\$2,065	\$19,112	13	5%	\$1,886	\$18,599
14	5%	\$2,168	\$21,118	14	5%	\$1,980	\$20,579
15	5%	\$2,277	\$23,224	15	5%	\$2,079	\$22,657
16	5%	\$2,391	\$25,435	16	5%	\$2,183	\$24,840
17	5%	\$2,510	\$27,757	17	5%	\$2,292	\$27,132
18	5%	\$2,636	\$30,194	18	<b>15%</b>	\$2,636	\$32,352
19	5%	\$2,768	\$32,754	19	5%	\$2,768	\$35,020
20	5%	\$2,906	\$35,442	20	5%	\$2,906	\$37,821
	Final value	\$2,906	\$35,442		Final value	\$2,906	\$37,821
	Annualized compound return	5.5%	5.2%		Annualized compound return	5.5%	5.7%

Scenario 6

Scenario 7

Year	Annual return	Growth of one-time investment of \$1,000	Growth of annual investment of \$1,000
1	5%	\$1,050	\$1,050
2	5%	\$1,103	\$2,153
3	<b>-15%</b>	\$937	\$2,680
4	5%	\$984	\$3,864
5	5%	\$1,033	\$5,107
6	5%	\$1,085	\$6,412
7	5%	\$1,139	\$7,783
8	5%	\$1,196	\$9,222
9	5%	\$1,256	\$10,733
10	5%	\$1,319	\$12,320
11	5%	\$1,385	\$13,986
12	5%	\$1,454	\$15,735
13	5%	\$1,526	\$17,572
14	5%	\$1,603	\$19,500
15	5%	\$1,683	\$21,525
16	5%	\$1,767	\$23,651
17	5%	\$1,855	\$25,884
18	<b>10%</b>	\$2,041	\$29,572
19	5%	\$2,143	\$32,101
20	5%	\$2,250	\$34,756
	Final value	\$2,250	\$34,756
	Annualized compound return	4.1%	5.0%

Year	Annual return	Growth of one-time investment of \$1,000	Growth of annual investment of \$1,000
1	5%	\$1,050	\$1,050
2	5%	\$1,103	\$2,153
3	<b>10%</b>	\$1,213	\$3,468
4	5%	\$1,273	\$4,691
5	5%	\$1,337	\$5,976
6	5%	\$1,404	\$7,324
7	5%	\$1,474	\$8,741
8	5%	\$1,548	\$10,228
9	5%	\$1,625	\$11,789
10	5%	\$1,706	\$13,429
11	5%	\$1,792	\$15,150
12	5%	\$1,881	\$16,958
13	5%	\$1,975	\$18,855
14	5%	\$2,074	\$20,848
15	5%	\$2,178	\$22,941
16	5%	\$2,287	\$25,138
17	5%	\$2,401	\$27,444
18	<b>-15%</b>	\$2,041	\$24,178
19	5%	\$2,143	\$26,437
20	5%	\$2,250	\$28,809
	Final value	\$2,250	\$28,809
	Annualized compound return	4.1%	3.4%