Executive Summary of Results and Conclusions

- The prior SOA/SCL report showed that DC plan sponsors can help retirees generate lifetime retirement income by offering low-cost solutions.

- A definition of "optimal" is really an expression of the priorities of various retirement planning goals. Different definitions of "optimal" produce different solutions that can be considered optimal.

- The analyses in this report focus on the tradeoff between maximizing lifetime retirement income and providing access to wealth. Other goals may also be important and can influence the decision to select a particular retirement income solution, such as:
  - The expected pattern of changes in retirement income – over time, can it be expected to increase or decrease, or keep up with inflation?
  - The expected volatility in retirement income in response to capital market fluctuations.
  - The chance of retirement incomes falling to inadequate levels.

This report shows analyses that address these considerations as well.

Executive Summary of Results and Conclusions (continued)

- When selecting RIGs to generate retirement income from savings, retirees face a tradeoff between two goals:
  1. Maximizing expected lifetime income, and
  2. Access to savings during retirement.

- RIGs that pool longevity risk (annuities) provide higher expected lifetime retirement income than investing approaches that self-fund longevity risk.
  - Dedicating more savings to annuities increases expected lifetime retirement income and guarantees that retirees cannot outlive their income, but reduces accessible wealth and potential inheritances throughout retirement.

- RIGs that invest savings provide access to unused savings throughout retirement, whereas annuities generally do not provide such access.
  - Dedicating more savings to investing solutions increases accessible wealth and potential inheritances, but decreases expected lifetime retirement income. Note, however, that there will be little or no inheritances if retirees outlive their savings.

Executive Summary of Results and Conclusions (continued)

- Many retirees may not need to utilize the extremes of exclusive retirement income solutions.
  - Retirees may not need to annuitize all of their retirement savings, since Social Security already provides a source of guaranteed lifetime retirement income, using longevity pooling.
  - On the other hand, retirees may not need to have access to all of their wealth throughout retirement. If wealth is accessed and spent, it is no longer generating retirement income.

- An effective compromise may be retirement income solutions that dedicate a portion of savings to annuities and remaining assets to investing solutions to realize the advantages of each approach.
  - The existence of guaranteed lifetime income from Social Security and a portion of savings dedicated to an annuity can enable remaining assets to be invested 100% in equities, if retirees could tolerate the volatility in income from invested assets.

Executive Summary of Results and Conclusions (continued)

- With a systematic withdrawal plan that calculates retirement withdrawals as a fixed percent of remaining savings (endowment method), higher percentages produce higher initial retirement income, but they use up savings faster and produce steeper declines in expected future retirement income, compared to using lower percentages (an example of pay me now or pay me later).

- Some retirees may value higher income in the initial years of their retirement, consuming savings at a faster rate. Others may prefer to consume savings at a slower rate, with the goal of holding some savings in reserve for needs in the later years of retirement, such as for long-term care expenses.

- A systematic withdrawal based on the IRS required minimum distribution (RMD) produces more level patterns of real retirement income (adjusted for inflation) compared to endowment strategies that use a fixed percent of remaining savings.

Executive Summary of Results and Conclusions (continued)

- The analyses in this report can be used to quantify the impact of deploying alternative retirement income strategies that meet different goals.

- Retirees who want a guaranteed lifetime income from an insurance company can choose between a traditional single premium immediate annuity (SPIA), with no access to savings and no potential for growth due to capital market performance, or a GLWB annuity with access to savings and potential for growth. The "price" for the GLWB features is reduced expected annual average retirement income, and these analyses can be used to estimate this "price."

- Similarly, a systematic withdrawal plan (SWP) also provides access to savings with the potential for growth in income due to capital market performance. Again, the "price" for these advantages compared to a traditional SPIA is reduced expected annual average retirement income, and these analyses can be used to estimate this "price." Also consider that SWPs do not guarantee income for the life of a retiree.

Executive Summary of Results and Conclusions (continued)

- A retiree who uses a SWP, either as a stand-alone strategy or as part of a parital annuitization strategy, can increase the expected average amount of retirement income by increasing the allocation of assets to equities. However this will increase the expected year-to-year volatility in retirement income. By showing expected annual retirement incomes for various asset allocations under SWPs and partial annuitization strategies, these analyses help quantify the "price" to be paid for reducing expected volatility in retirement income.

- Traditional annuities produce higher *expected* average retirement income (median result of stochastic forecast) than SWP strategies, due to longevity pooling. SWP strategies produce higher expected incomes under *favorable* investment scenarios, confirming a result from the prior SOA/SCL report.

- Projected retirement incomes are increased significantly – by 25% to 34% or more -- by delaying retirement from age 65 to 70.