

MEMO

TO: Connecticut Retirement Security Board
DATE: October 2, 2015
FROM: Mercer
SUBJECT: Analysis Regarding Annuitization

Introduction

The Connecticut Retirement Security Board (CRSB) must assess the feasibility and desirability of providing annuity options as part of the Retirement Security Program (the Program). Specifically, the Legislation requires the CRSB to look at the following aspects:

“The provision of an annuitized benefit with options for conversion to lump sum payout upon retirement, spousal benefit, and pre-retirement death benefits, to enable a Program participant to bequeath assets to designated beneficiaries”.

This paper first discusses annuitization broadly, but concludes that while annuities should be part of retirement income strategies, they are not the “silver bullet”. Annuitization will not be the answer for many people. In particular annuitization, for the Program’s target population may not be feasible or considered attractive. . Hence, Mercer recommends reviewing the annuitization question as one component of a wider-ranging retirement income strategy, leaving the specific decisions around what types of annuities to the implementation phase. With the objective of designing a comprehensive retirement income strategy, the paper then considers how to:

- Develop a retirement income strategy, incorporating annuities as one option;
- Align legislative policy goals with potential actions; and
- Develop a retirement income strategy that considers the lifecycle stages, focusing on participants’ unique needs at different times: accumulation, pre-retirement, at-retirement and retired.

The annuitization question

Many policy makers and experts agree that annuitization can provide a useful and important income stream throughout retirement. For example, in the “OECD Roadmap for the Good Design of Defined Contribution Pension Programs” issued in June 2012, the OECD recommended that governments “...encourage annuitization as a protection against longevity risk”. While converting savings to annuities is in theory a means to protect against longevity risks, historical experience with annuitization shows that few retirees voluntarily elect to buy annuities. Less than 7% of retirees purchased annuities according to a GAO study in 2011. This finding is consistent with an earlier Health and Retirement Survey conducted in 2006, which found that less than 8% of retirees receive income from annuities (U.S. Government Accounting Office, 2011) (Paschenko, 2010).

The resistance to annuitization is referred to as the “annuitization puzzle” (Modigliani, 1986). Individuals should rationally see value in buying insurance against the potential to outlive their savings

(Yaari, 1965). Extensive research (Davidoff, Brown, & Diamond, December 2005) into rational motives for low actual demand for annuities identifies the following possible reasons:

- adverse selection – i.e., retirees and insurers have access to different information giving one an advantage over the other;
- bequest motives;
- indeterminate healthcare expenses;
- general uncertainties facing retirees;
- the annuity benefit associated with Social Security; and
- the ‘wealth effect’ – i.e., having accumulated possibly their largest level of savings, a participant struggles with the concept of transferring a big portion of the savings to an insurance company and seeing their “wealth” depleted.

The statute requires the CRSB to consider providing an annuity benefit, but experience and research suggest that such a benefit is not likely to be used, which will limit its effectiveness and may make offering an annuity more expensive.

A critical question in formulating a recommendation to the Legislature is the extent to which offering an annuity option helps achieve the Legislature’s goal of preventing poverty in retirement. Section 185 of the legislation sets one objective as “A reduced need for public assistance through a system of prefunded retirement income”. Batjelsmit, Rappaport and Foster wrote a report in January 2013 that broadly considers how savings levels and the methods for converting savings to retirement income impact on financial security throughout retirement (Batjelsmit, Rappaport, & Foster, 2013). This analysis clearly highlights scenarios in which retirees are likely to have increased demand for public assistance. Two of the relevant conclusions are:

1. “While it is much easier to plan for expected events, so-called “shock events” must be taken into consideration since they are more likely to derail an individual’s retirement plan, especially at lower income levels. For the median income individual, shocks are the biggest driver of asset depletion.”
2. “Annuitization decisions involve important trade-offs and annuitization is not automatically the best choice. It is not feasible for lower income individuals and those with low financial assets. It is most likely to benefit the middle and upper income retiree with more assets. However, retirees need to be able to respond to financial shocks in addition to ensuring they don’t outlive their income. Retirees should not focus on annuitization until they have an emergency fund.”

Putting these points into context for the CRSB, workers earning \$50,000 should expect to have approximately 50% of their post-retirement income generated from their federal Social Security benefit¹. In Connecticut, approximately 72% of the population without access to a retirement plan (“uncovered population”) earns \$50,000 or less². Given that these people are not covered by a retirement plan, many are likely to have low financial assets accumulated at retirement and will most likely rely primarily on Social Security. In this context, they are likely to be looking to their accumulated capital not only to provide an additional income source, but also to provide resources for

¹ \$80,000 is roughly the threshold at which an individual becomes less reliant on Social Security for income replacement.

² Data extrapolated from the 2010 U.S. Census for the State of Connecticut.

unexpected needs. Batjelsmit, Rappaport and Foster suggest that the majority of these retirees should not focus on annuitization until they have sufficient assets to provide an emergency fund to address potential shock events.

We see the implications of this research being reflected in the market. An annuity exchange provider has a financial interest to annuitize the highest proportion of a person's capital possible. However, even some annuity exchange providers do not act in line with their financial interest in practice. As a notable example, one of the major annuity exchange providers for institutionally priced annuities will not place more than half of an individual's capital into an annuity. This policy is an indicator that annuity providers also perceive significant risks when placing more than 50% of an individual's capital into an annuity. In the course of our regular research and consulting, Mercer has observed application of this "50% limit" by other providers as well.

In summary, although annuities clearly have a part to play in retirement income strategies, they are not the singular answer. Given the Program's target population, Mercer recommends reviewing annuitization as one component of a retirement income strategy. Given the complementary objective of providing a "reduced need for public assistance", a holistic retirement income strategy will be essential.

Potential recommendation to the Legislature regarding annuitization:

- Make annuitization one component of the retirement income strategy.
- Focus the retirement income strategy on the "reduced need for public assistance" objective as well as income in retirement.

Developing a holistic retirement income strategy

Key principles for strategy development

To assist our clients with navigating the challenges of developing a retirement income strategy, Mercer produced a point of view in 2013 that set out twelve principles that should guide developing a retirement income strategy and program. The Program is meant to be self-sustaining and covers private-sector workers, so we have adapted the principles to the CRSB's and the Legislature's goals. In the table and section below, we describe the principles and how they align to the Program. A comprehensive explanation of these principles is provided in Appendix A.

TABLE 1: RETIREMENT INCOME STRATEGY PRINCIPLES

MERCER'S RETIREMENT INCOME PRINCIPLES	COMMENTS FOR CRSB
1. Build a solid income floor	Explained in detail below
2. Design to the "U"	Explained in detail below.
3. Understand the participant demographic through segmentation	As noted above, a large portion of the target population will likely be lower paid and have limited assets; however, we expect that there will be diversity. As participation increases, different needs will emerge.

MERCER'S RETIREMENT INCOME PRINCIPLES	COMMENTS FOR CRSB
4. Offer a retirement income menu	A retirement income menu will enable a retiree to tailor a retirement income strategy to their circumstances.
5. Provide assistance	Retirement brings great uncertainty. The vast majority of retirees need assistance with structuring a personalized retirement income strategy.
6. Put all a participant's wealth to work	The strategy and planning process should consider the assets accumulated through the Program, as well as other assets (social security, home ownership, etc.).
7. Manage market and longevity risks	Clearly, market volatility and living a long time are issues for retirees. Mercer notes that within the Program the CRSB will most likely recommend not allowing investment choice during the accumulation phase. Our experience is that retirees are more likely to want some flexibility to manage their market (investment) risks in a way suited to their circumstances.
8. Avoid too-rapid income drawdown	If retirees draw their money too quickly they may run out and end up dependent on the State. Various forms of assistance and education can be used to help limit the chance of participants running out of money in retirement.
9. Leverage buying power	There would be a clear benefit if through this arrangement retirees can access institutional (lower) pricing for investments or other products (such as annuities)
10. Integrate workforce planning into the retirement income strategy	Not directly applicable to CRSB or the Retirement Security Program.
11. Manage through the life-cycle	Mercer's recommendation follows a life-cycle process at younger ages introducing a retirement income orientation, and then later focusing on assisting retirees to structure their own retirement income strategy.
12. Know your fiduciary position	The CRSB will need to aware of any fiduciary responsibilities and liabilities that could be incurred through offering retirement income options.

The concepts underlying the first two principles, “Build a solid income floor” and “design to the ‘U’” warrant detailed explanation, as they are critical components to developing a well-aligned retirement income strategy and these concepts may not be universally well understood.

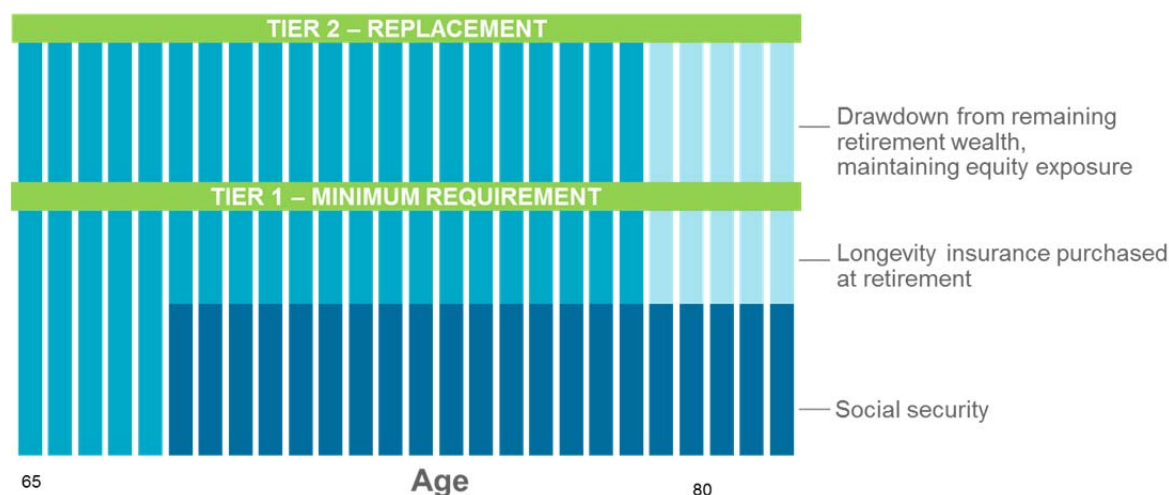
Build a solid income floor

Any post-retirement design exercise must focus on ensuring sufficient income for an individual and potentially his or her spouse. In our view, two useful definitions or tiers can be broadly used to define the level of the income floor.

Tier 1 – The minimum requirements: the level of income required to meet basic day-to-day living expenses (can also be referred to as Essential or Needs Income).

Tier 2 – Replacement: the level of income required to broadly preserve current living standards, recognizing that expenditures tend to vary in the post-retirement years. (can also be referred to as Discretionary or Wants Income)

ILLUSTRATION 1: BUILDING THE INCOME FLOOR



The picture above illustrates the idea of a minimum requirement and the more ideal level of replacement. A participant will take a series of decisions that will affect their income profile. For many participants, particularly the target population for the Program, the minimum requirements will be largely met by social security. In this example, the participant delays drawing social security until 70³. The participant also takes some risk (equity exposure) to help maintain the income replacement level. Notably, the participant risks equities underperforming or living too long, in which case their assets exhaust too early. In this case, longevity insurance is used to provide income.

Design to the U

Retirees tend to consume more in their early, active retirement years. Income needs level off as they enter a more passive life phase, only to increase again toward the end of life with additional medical and care expenses becoming increasingly important during this “frail” period. We describe these phases of retirement in Table 2 overleaf.

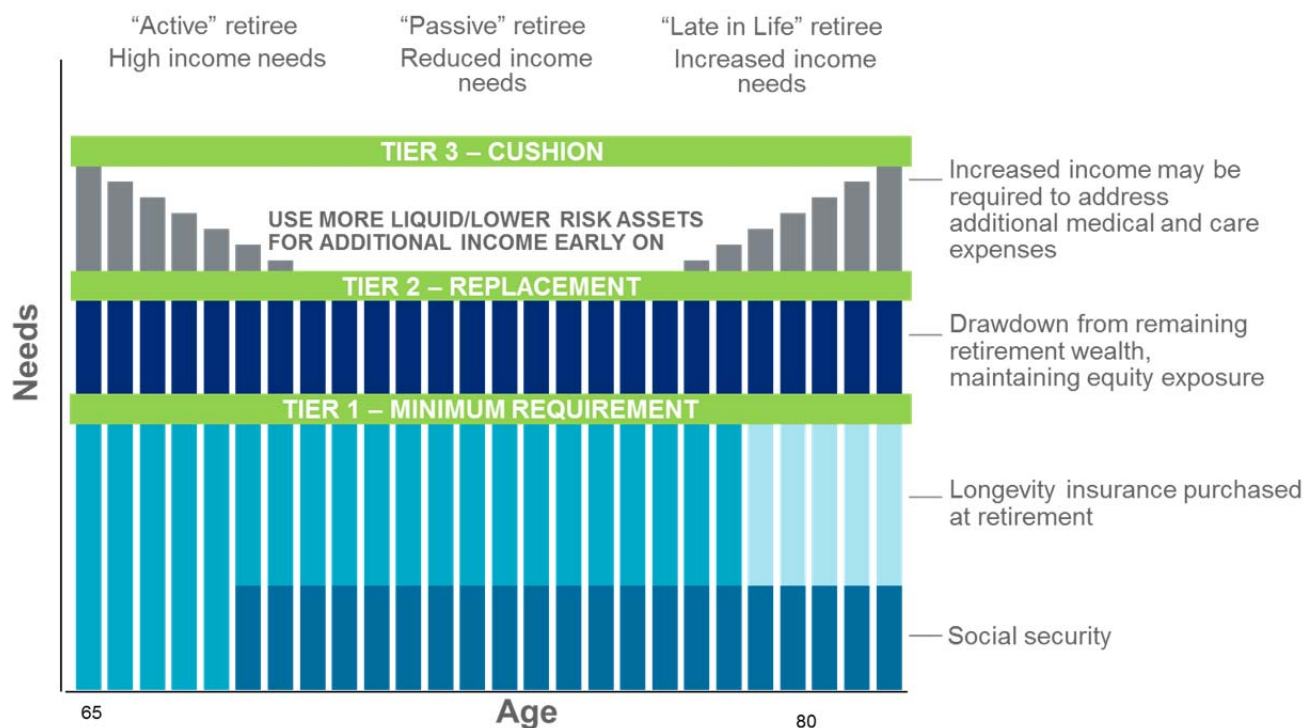
³ Several studies have shown that delaying social security until 70 is sensible for most people. We will discuss the concept of social security optimization and how that can greatly reduce the chance of income falling below the minimum level.

TABLE 2: RETIREMENT PHASES

“Active” retiree (~65-75)	“Passive” retiree (~75-85)	“Frail” retiree (~85+)
<ul style="list-style-type: none"> • Still physically active • Want to travel – holidays, see grandchildren • High (as possible) income needs 	<ul style="list-style-type: none"> • Less physically active but generally healthy • More likely to be “stay at home” • Income needs reduce 	<ul style="list-style-type: none"> • Less physically active, increased health issues • May need long-term care assistance • Increased income needs due to health and long-term care

Where possible, the post-retirement income options should accommodate these consumption patterns while maintaining the desired income floor. Some individuals will see most, if not all, of their nest egg consumed when they establish the income floor. Others will have additional assets that can generate a "U pattern" of consumption to meet their changing needs during the retirement years.

ILLUSTRATION 2: THE “U” COST CURVE OF RETIREMENT



Aligning legislative policy goals with potential actions

Section 185 sets out the legislative goals and objectives. Many of these issues should be discussed more completely with legal counsel; however, we have highlighted specific items that will likely frame what the Program ultimately can provide in terms of a retirement income strategy.

TABLE 3: LEGISLATIVE GOALS AND KEY CONSIDERATIONS

LEGISLATIVE GOALS AND OBJECTIVES	POTENTIAL IMPLICATIONS
<p>(1) An increase in access to and enrollment in quality retirement Programs <u>without incurring debts or liabilities to the state.</u></p> <p>(23) Ensuring that any contract entered into by or any obligation of the Program shall not constitute a debt or obligation of the state and the state shall have no obligation to any designated beneficiary or any other person on account of the Program and all amounts obligated to be paid pursuant to the Program shall be limited to amounts available for such obligation</p>	<p>In the event that a selected annuity provider defaults, the Program and the Governing and Managing Bodies could be deemed liable, and potentially the State. This issue should be referred to legal counsel for further investigation and an opinion.</p> <p>One option that the CRSB should consider with legal counsel is the participant converting their assets to an annuity outside of the Program.</p>
<p>(3) A minimal need for financial sophistication in Program participants.</p>	<p>To meet this objective, the Program will need some support in terms of education, guidance and potentially advice, particularly with regard to retirement income strategies.</p> <p>Although this point was not discussed with regard to the investment option(s), education and advice may become important where the asset allocation of the single investment option becomes sub-optimal for specific demographics, which can occur for a larger proportion of participants as people near retirement.</p>
<p>(7) Low administrative costs that shall be limited to an annual, predetermined percentage of the total Program balance.</p>	<p>Given the Program will be starting without an assured scale, keeping administrative costs down will be a challenge. As a result, the State and participants may benefit from keeping the design simple at the outset, adding additional complexities later. For example, given that annuity options built into accumulation strategies are still rare in the general market, the CRSB may recommend that the Legislature and Governing Body defer tackling this design feature until the Program has developed more significant scale.</p> <p>In addition, to maintain scale and achieve lower administrative costs, the Program should try to retain assets post-retirement as long as the participants' interests continue to be served.</p>

LEGISLATIVE GOALS AND OBJECTIVES	POTENTIAL IMPLICATIONS
(18) The dissemination of educational information concerning saving and planning for retirement to potential Program participants.	This goal reinforces the need for educational assistance and guidance to include retirement income strategies more broadly and not limit the options to annuities.

A Retirement Income Strategy through the lifecycle

Given the policy goals and considering retirement income strategies, the CRSB's recommendations should consider the population's diverse needs and ways the Program could meet retirees' and future retirees' requirements. The following table sets out different ways in which the Program can help participants improve the robustness of their retirement income strategy. This table also highlights where annuities can play a role.

TABLE 4: AGES, ACTIONS AND OPTIONS

Accumulating member (to ~55)	Pre-retiree (~55+)	At retiree (~65)	Retiree (65+)
General financial and retirement education	Retirement-focused education	At retirement assistance/advice: <ul style="list-style-type: none">Which retirement product?When to take social securityHow much do I draw?Which product do I draw from?How do I invest?Long term care	In retirement assistance/advice: <ul style="list-style-type: none">How much do I draw?Which product do I draw from?How do I invest?
Frame retirement benefit as income by showing projected income on benefit statements			
	Build lifetime income product into investment product (e.g. target date fund)		
	Managed accounts		
		Ability to make systematic withdrawals	
		Access to institutional products: <ul style="list-style-type: none">Retirement income menu, including an annuity exchange	
		Default retirement income option	
Consolidation			

In the following sections, we will take the Retirement Income Strategy through the lifecycle concept considering the four participant lifecycle groups. Our recommendations take into account the solutions and constraints that we see in the market, as well as the uniqueness of the Program's sponsorship structure.

Accumulating participants (to ~55)

For younger participants, the State's key priorities are:

- Ensuring participation
- Ensuring reasonable contributions are made
- Minimising leakage

Although these investors are still accumulating, potential interventions can affect their overall retirement outcomes. In a study done in 2011, AllianceBernstein found that 66%⁴ of active investors want a steady income stream; however, as shown in the GAO study, in practice far fewer people annuitize. One potential explanation is that the desire to annuitize is stronger at younger ages than at older ages. Schreiber and Weber reported that: "In a large online survey we find that people behave time inconsistent: older people have a stronger tendency to choose the lump sum than younger people when they are asked to predict today what to choose when they retire." (Schreiber & Weber, 2014)

One potential explanation is the "wealth effect" referenced earlier. At younger ages, participants have not accumulated wealth; hence annuities appear to be a logical choice. At older ages, once the person has accumulated wealth, the idea of transferring the savings to an annuity significantly depletes the wealth accumulated. The fact that younger participants may be more open to the concept of annuities provides an opportunity to introduce the annuitization idea to a group possibly more amenable to the concept.

In addition, a significant amount of research shows that framing a retirement program as a retirement income solution rather than a wealth accumulation solution can encourage annuitization. Research conducted by the TIAA-CREF Institute found "...that framing, i.e., how financial products are presented to consumers, can significantly affect respondents' preferences among competing products. Specifically, when products are presented in a frame that emphasizes consumption consequences, 72 percent of survey respondents prefer a life annuity to a savings account. In contrast, when the same products are presented using investment terminology, only 21 percent of respondents prefer the annuity." (Brown, Kling, Mullainathan, & Wrobel, 2009)

Anecdotally we have observed that when an organization such as TIAA-CREF discusses annuities more proactively with participants, there are far higher annuitization rates. We are aware of a Canadian DC Program that always provides projected lifetime income to its participants assuming an annuity conversion. Their annuitization rates are significantly higher than the 7% rate referenced earlier.

The Federal Department of Labor recently issued proposals for all DC plans to provide income projections to participants rather than just statements of a participant's existing asset value. While

⁴ AllianceBernstein Research Survey, March 2011. Seventh annual web-based survey was fielded in February 2011 using a qualified research panel. There were 1,000 respondents, meeting the following profile: age 18 or older, full-time employee, employer offers a defined contribution retirement program.

there are complications in making such projections, we believe providing retirement income projections as soon as possible to participants is one opportunity to introduce lifetime income perspectives to younger participants. Mercer recommends that the CRSB recommend the Legislature require the Program to provide these statements as part of the core program reporting.

Consolidation

Consolidation is one area where this Program can greatly assist participants. In 2008 testimony to the ERISA Council Neil Lloyd reported on challenges being faced by retirees in Australia⁵, which participants in the Program will also likely face. “One of the practical problems observed in Australia is that by the time people retire, they have built up retirement balances in many different pension Programs. It is very likely that if they have had seven different jobs by the time they retire, they will have seven different sources of retirement savings. Some major challenges result:

- How does one develop an investment strategy that adequately deals with seven different portfolios?
- Is receiving seven sources of income a desirable situation? It definitely complicates cheque book balancing; and
- Many members simply forget where their assets are, and many retirement assets are simply unclaimed.”

With reforms agreed in 2013, Australian regulators are trying to facilitate “auto-consolidation” to bring participants’ balances into one plan. We believe that there is a great opportunity to accept transfers into the Program. Bringing assets into the program could have a multitude of benefits:

- For the Program participants, having retirement assets in one place will make managing a retirement income strategy much more effective;
- All the assets will achieve the benefit of the Program’s lower fees;
- The Program will achieve economies of scale quicker, leading to reduced costs for all participants.

Several services exist for consolidating assets. The CRSB should consider recommending that such a service be made available to participants to make the task easier. In particular, if the Program could facilitate or subsidize the fees for this service, this service could ultimately benefit participants and the Program.

Proposed recommendation to the Legislature regarding accumulating participants (to ~55)

- While retirement income is not a priority for this participant group, this age demographic may be more open to the concept of annuitization and retirement income. The provision of income projections on statements, as opposed to only showing accumulated wealth on participant statements would, we believe, better frame the income decision later in life.
- Encourage participants to consolidate their retirement assets into this Program, consider facilitating a service that can assist participants in consolidating their retirement assets.

⁵ Neil Lloyd Testimony before the ERISA Advisory Council on Employee Welfare and Pension Benefit Plans Working Group on Spend Down of Defined Contribution Assets at Retirement. July 16, 2008.

Pre-retiree (~55+)

With retirement approaching, the pre-retiree is more likely to need retirement-focused education. Such education should introduce a variety of retirement income considerations, issues and strategies, including risks such as longevity risks. To put this challenge into perspective, the Society of Actuaries has listed key risks facing retirees, which are shown in Table 5 below.

TABLE 5: KEY RISKS FACING RETIREES

Longevity	Business Continuity	Lack of Available Facilities or Caregivers	Other Change in Marital Status
Inflation	Employment	Loss of Ability to Live Independently	Unforeseen Needs of Family Members
Interest Rates	Public Policy	Change in Housing Needs	Bad Advice, Fraud or Theft
Stock Market	Unexpected Health Care Needs & Costs	Death of a Spouse	Related Planning Issues

Source: Managing Post-Retirement Risks: A Guide to Retirement Programming.” Society of Actuaries. 2011.

While this list might be intimidating to many pre-retirees and retirees, it reflects the uncertainties that people actually experience. What the list also highlights is that these risks are not the same for everyone, which reinforces the need for retirement income strategies to be tailored to the individual. General retirement-focused education can greatly assist pre-retirees. Independent sources, Program representatives or potentially one of the Program’s service providers can provide this education.

The next option shown in Table 4 for this life stage is a managed account platform. Mercer does not recommend this option for a number of reasons. First, the target population is likely to have lower salaries and lower balances, rendering a managed account fee structure less attractive. In addition, managed account approaches are designed to operate with a range of investment choices. The CRSB has already decided to not offer investment choice, which makes a managed account redundant. We note, however, that some managed account providers assist participant at retirement. If in the future the Program decides to offer greater choice, then a managed account could have merits.

Pre-retirees can secure a lifetime income benefit prior to retirement, for example, by having a portion of the Program’s default investment strategy invested in a lifetime income strategy. E.g., a simple option would be to invest in deferred annuities rather than bonds. Initially, we do not recommend including lifetime income options prior to retirement for the following reasons:

- In almost all cases lifetime income options will expose the Program to additional counterparty risk that could contradict goals (1) and (23) as set out in Section 185.
- Lifetime income options are not commonly used as a component of the accumulation phase and hence, including lifetime income options could add additional complications and impact the vendor pricing at implementation.

- Lifetime income options in the accumulation phase typically create issues of portability for both the individual and the Program.
- Such options typically increase expenses. While the appropriateness of additional charges can be debated, the end result is that expenses increase, which may contradict goal (7) of Section 185.

As with participants accumulating assets, pre-retirees could benefit significantly from asset consolidation prior to implementing their retirement income strategy.

Recommendation to the Legislature regarding Pre-retirees (~55+)

- Continue framing the Program benefits as a lifetime income benefit by the inclusion of an income projection not just a wealth accumulation.
- Provide retirement focused education that highlights how a retirement income strategy should be tailored to an individual's circumstances, because there is not an ideal 'one size fits all' solution.
- Do not include a lifetime income solution or a managed account solution as an investment option (at this stage)
- Encourage participants to consolidate their retirement assets into this Program, consider facilitating a service that can assist participants in consolidating their retirement assets.

"At-retiree" (~65) and "Retiree" (65+)

The needs of "at-retirees" and retirees are relatively similar with one exception. At retirement, people have choices (options) that can greatly improve their subsequent financial position if managed optimally.

At-retirement optimization

Experience in bringing retirement income solutions to market has been that retiring participants ask broad and basic questions at retirement. For example, most participants ask:

- When should I take social security?
- If I delay social security, what do I do in the meantime?
- From which product/plan should I draw my retirement proceeds first? My 401K plan, my Roth IRA, etc...?
- How do I deal with the fact that Medicare only applies from 65 onwards?

Today, almost all at-retirement advice and solutions assist in answering these questions. Making the correct choices in response to these fundamental questions can add significant value to retiring participants, and the value of assistance with these choices is typically appreciated by participants. If the Program cannot address this need and provide such support, participants are more likely to move their assets to a party that can. While the person may still benefit from third-party advice at retirement, we believe that there are also negative consequences. In particular, the following three issues are likely to emerge:

- External arrangements are likely to have higher fee structures than those the Program might achieve.
- If retirees keep moving their assets away from the Program, then asset levels will grow more slowly and reduce the ability of the Program to achieve good economies of scale, and hence keep fees low for all participants.
- Not all financial advice providers are structured to provide high quality fiduciary advice to individuals. If an individual selects a low quality or conflicted provider, they may receive sub-optimal advice. Also, the “search costs” to identify a high quality provider will be significant and pose challenges for some participants.

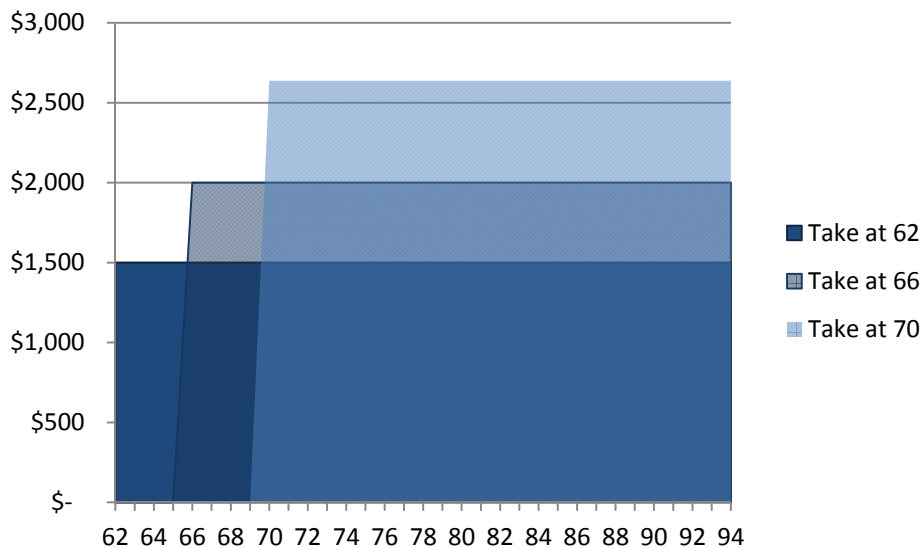
Considering the target population, a key way to achieve the objective of alleviating poverty in retirement is to assist retirees in optimizing when to take social security. Social security provides:

- 50% or more income for two-thirds of all retirees; and
- 90% or more of all retirement income for one-third of all retirees.

According to a study published by Mercer and the Stanford Center for Longevity, roughly half of Americans take social security at age 62; however delaying to age 70 can increase annual social security income by as much as 76%. (Cadenhead & Vernon, 2014). Shoven and Slavov reported the average couple leaves behind \$100,000 -130 000 in lifetime social security benefits (Shoven & Slavov, 2012).

A simple example in the Mercer and Stanford paper showed the impact of a person taking social security at age 62, 66 or 70.

CHART 1: IMPACT OF TAKING SOCIAL SECURITY



Shoven and Slavov conclude that life expectancy and extremely low interest rates mean that nearly everyone should delay receiving social security benefits. For many people in lower income brackets,

delaying to 70 is the value maximizing strategy. One additional benefit of delaying social security is that the individual will have a much higher fully indexed annuity for the balance of their life. Using the example above, the shift means the individual will draw \$2,640 as opposed \$1,500 had they taken social security at age 62. This annuity mitigates investment risks and provides protection against inflation and longevity risks. Potentially one of the most powerful aspects of a retirement income strategy for this target population will be assistance that enables retirees to optimize their social security claiming strategy.

Ability to make systematic withdrawals

In the 401k market we have seen some Plan sponsors insist that individuals withdraw or rollover all their assets on retirement. For this Program, we recommend that retirees be allowed to retain their assets in the Program during their retirement and that they be allowed to systematically draw income out of the Program. This feature will:

- Provide retirees with a cost effective vehicle to manage their retirement assets with much lower fees than they could obtain in the market and
- Assist in increasing assets under management in the Program, increasing economies of scale leading to lower fees for all participants.

We recommend that the CRSB consider ways to alert retirees to the possibility that their retirement assets can run out. In working with corporate pension plans, we have seen evidence of some retirees drawing too much annual income significantly increasing the likelihood of their assets exhausting. In one case we observed almost half of retirees were drawing over 10% per annum. To address this point, we have assisted at least one plan introduce retiree statements that provide disclosure along the lines of “at your current rate of withdrawal” we expect your assets to run out in X years”. A similar approach to monitoring withdrawal rates and notifications could assist retirees and mitigate the likelihood of negative publicity for the Program associated with participants running out of income.

Default retirement income option

Choosing a good default retirement income option is more difficult than selecting a default or single investment option. We believe almost all retirees should make an active decision in retirement; however, we accept that for some people a default will be useful in that it at least shows one possibility and makes it simpler for those who really do not want to make a decision. Our recommendation is that the default position is to pay out Required Minimum Distributions (RMD) as a systematic withdrawal in alignment with the current laws.

The advantage of this approach is that:

- The option is easy to reverse, as opposed to locking into a retirement product or annuity;
- The target date fund can be implemented reasonably consistently with this approach
- This option provides a very low income (nothing until 71) that hopefully will nudge a retiree into making an active decision
- The approach ensures legal compliance with RMD requirements.

Despite setting up a default option, we continue to recommend providing support that empowers retirees to make an active selection in retirement. Social security optimization at the least is very likely to improve retirement security and general retirement outcomes for the vast majority of retirees.

Should the participant want to take an action other than RMD withdrawal, then the Retirement Income Menu would be available.

Retirement Income Menu

By providing participants with a retirement income menu priced institutionally, participants would have the ability to tailor a retirement income strategy to their own circumstances. A challenge with the menu is the provision of education and guidance to assist retirees with developing their own strategy. For this reason we recommend that this menu remain relatively simple at the outset.

At inception we recommend that the menu contain two broad choices:

- Systematic withdrawals from the Program: in this case the assets remain invested in the Program and the retiree sets up a program of withdrawals⁶. As mentioned earlier the CRSB may wish to recommend monitoring withdrawals and adding guidance where withdrawals look likely to exhaust assets prematurely.
- The option to transfer all or a portion of the accumulated savings out of the Program to an annuity facilitated through an annuity exchange. While we do not believe annuities are the solution to everyone's retirement income needs, they have a unique role to play since they provide genuine longevity protection. For many retirees their only other source of longevity protection may be social security.

Facilitating annuity purchase through an exchange is a key consideration. Annuity exchanges are competitive bidding processes, which often result in a 5% - 10% improvement in income compared to retail annuity offerings. Exchanges can have a variety of approaches and attributes. Some exchanges provide information, education and tools to assist retirees and / or advisors. Some exchanges offer products, specifically immediate and deferred annuities (including longevity annuities). Other exchanges also provide competitive bidding over variable annuity contracts. Some exchanges restrict the annuity providers to insurance companies meeting specified criteria. In terms of fees, some exchanges charge a placement fee, some charge a fee on a per quote basis, some exchanges are built into the recordkeeping service, resulting in no explicit incremental cost to the Program (although there will be an implicit cost to either the Program or participants).

An alternative to a commercially provided annuity exchange could be "non-profit annuities". Essentially non-profit annuities are where an entity issues annuities but does not need to load for an insurer's profits. Consequently, the expectation is that the "non-profit" annuity price would be lower.

Critics of the "non-profit" annuity argue that:

- Large insurers can achieve economies of scale (relative to a small non-profit) and have access to more diverse forms of credit, which provides them with superior returns. As a result many would argue that annuity purchases from insurers are often fairly close to 100% of economic value (at least when valued on a risk-free basis).

⁶ If the Program retains many retiree assets we would expect that this group would be more likely to petition for greater investment flexibility. While investment choice may not be an immediate concern, it may be an issue that may need to be considered as the Program matures. The CRSB may want to consider this point in formulating recommendations on the investment options.

- Non-profit annuity writers may be discounting the annuity using their overall portfolio expected rate of return, i.e. assuming investment in some risky assets. This discount rate uses an interest rate higher than what an insurer would use in their portfolio, which is required by the reserving rules. Non-profits do not need to establish reserves nor do they have requirements around how the assets are invested – which exposes the non-profit annuity group or provider to longevity and investment risks. These risks are often pooled with other risk pools, e.g. defined benefit plans where risk-taking is already a key feature and there is a sponsor who will cover any deficits. It is not clear who would cover the risks with a non-profit annuity pool.

A non-profit annuity pool would require risk management of both mortality and longevity risks, which could create problems in achieving legislative goals and objectives (1) and (23). One option could be to find an existing non-profit annuity pool to join. Joining another pool would likely result in transferring assets outside of the Program, which could affect the Program's scale. Consequently, a non-profit annuity is likely to be more feasible when the Program has established scale and has sufficient retirees to provide a stable mortality risk pool.

As in the other phases, we recommend encouraging consolidation of retirement assets into the Program.

Proposed recommendation to the Legislature regarding “At-retirees” (~65) and “Retirees” (65+)

- Provide assistance that enables retirees to optimize their social security claiming strategy.
- Provide assistance and guidance to assist with answering the key questions participants face in retirement.
- Make the default retirement income option a Required Minimum Distribution.
- Make available a simplified retirement income menu comprising:
 - The ability to make systematic withdrawals; ideally with accompanying retiree statements
 - Access to an annuity exchange for retirees to purchase annuity contracts with all or a portion of their retirement capital
- Encourage participants to consolidate their retirement assets into this Program, consider facilitating a service that can assist participants in consolidating their retirement assets

Summary of proposed recommendations to the Legislature

Regarding annuitization

- Make annuitization one component of a retirement income strategy.
- Focus the retirement income strategy on the “reduced need for public assistance” objective as well as income in retirement.

Regarding participants

- Frame the Program benefits as a lifetime income benefit by the inclusion of an income projection not just a wealth accumulation.
- Provide retirement-focused education to pre-retirees that highlights how a retirement income strategy needs to be tailored to an individual's circumstances and that there is not an ideal ‘one size fits all “ solution
- Do not include a lifetime income solution or a managed account solutions as an investment option (at this stage) in the accumulation phase.
- Encourage participants to consolidate their retirement assets into this Program, consider facilitating a service that can assist participants in consolidating their retirement assets.
- Provide assistance that enables retirees to optimize their social security claiming strategy.
- Provide assistance and guidance on the many key questions that participants face in retirement.
- Make the default retirement income option a Required Minimum Distribution.
- Make available a simplified retirement income menu comprising:
 - The ability to make systematic withdrawals; ideally with accompanying retiree statements.
 - Access to an annuity exchange for retirees to purchase annuity contracts with all or a portion of their retirement capital.

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Appendix A: Mercer Retirement Income Principles

Mercer developed these Retirement Income Principles to guide the thought process needed to determine the preferred approach for a given employer. The first two principles are laid out in the memorandum. This appendix lays out the remaining principles. While the CRSB is not an employer, these principles may still be useful for reference in ensuring that the retirement income challenge is thoroughly considered. We have included the principles in their entirety for ease of readability.

Understand the workforce through segmentation

Segmentation allows a sponsor to better understand the behaviors of its participant population and their level of preparedness, enabling the sponsor to decide how best to design a retirement income strategy.

The workforce can be segmented into:

1. Underfunded
2. On track
3. Overfunded

And by how individuals want to manage their retirement planning:

4. Do it for me
5. Help me do it
6. I'll do it myself

In other situations, segmentation by factors such as age, income, occupation, and location may equally add value.

Offer a Retirement Income Menu

Drawing on the insights gained through the segmentation process, sponsors can develop a retirement income menu to ensure individuals can customize their retirement income approach to their own needs and circumstances.

Providers are beginning to introduce new solutions for managing retirement income. These new solutions/products afford sponsors the opportunity to construct a menu of retirement income options to offer their participants. In practice, sponsors may not be able to default their participants to the approach that they believe best, but framing the retirement income menu in the right way and prompting a good choice compensates for this shortcoming while addressing the need for broader choice to meet retirees' diverse needs. Sponsors uneasy about maintaining a comprehensive menu can start with a shorter list in a proof-of-concept type phase and build later as participants' preferences are better understood and further regulatory guidance becomes available.

Provide assistance

The provision of assistance makes a material difference to large segments of the population, and demand is usually highest among near and recent retirees. Assistance takes many forms, including retirement readiness seminars and planning tools, access to individual advisors, and guidance offered by financial institutions.

Put all wealth to work

Sponsors should avoid focusing narrowly on their own retirement Programs, particularly where mid- to late-career hires are significant, and instead look to capture rollover assets and incorporate external holdings in the planning process. They should find “industrial strength” advice solutions that capture and integrate this information to weave into an overall strategy.

Many participants have more wealth in home equity than in retirement savings, and this wealth can be deployed to produce retirement income. Although this wealth cannot be used with in-Program retirement income solutions, education offered by the sponsor can enable participants to make effective decisions with this and other forms of wealth.

It is important to note that another asset individuals hold is human capital, i.e., their ability to continue some form of work in their retirement. This can create an opportunity to optimize social security by deferring commencement of the benefit.

Manage market and longevity risks

The two largest challenges facing retirees, and the two where the sponsor can intervene most meaningfully, are market and longevity risks. Longevity risks manifest when retirees are least able to deal with them, during the “frail” period late in life. A well-designed retirement income strategy will better manage this through sensible choices, appropriate interventions, and advice at retirement. Similarly, a focus on building the income floor appropriately will limit downside risks. Approaches that gradually de-risk the elements of the retirement portfolio that are not required to build the floor can make a positive contribution to managing market risks and, indirectly, inflationary risks.

Leverage buying power

There is a significant difference in pricing between retail products and those available to sponsors through group purchase. Costs are often being charged against assets held, which can result in a direct reduction of retirement benefits. Sponsors are in a unique position to use their leverage to secure terms better than those available in the retail market. Leverage is not simply a question of price; sponsors who have studied their own participants’ positions will have a clear picture of their retirees’ needs and can align solutions closely with that view.

Integrate workforce planning into the retirement income strategy

The extension of many people’s working lifetime will prove absolutely necessary to secure their retirement. It is important that the chosen retirement income strategy reflects the sponsor’s view on the duration of the employment relationship. Some employers eager to engage with older customers or retain key technical expertise have introduced employment policies that accommodate part-time schedules and/or flexible working to manage the transition to retirement more gradually. A similar level of flexibility should be evident in the retirement income strategy.

Manage through the life-cycle

There is no clear point when participants can be classified as “near retirement”. Retirement readiness is a long-term challenge and saving is a lifetime habit. The best retirement income strategy will integrate and inform how a sponsor structures the accumulation phase. Although this can imply a planning horizon longer than some would deem strategically useful, a pragmatic and simple approach readily delivers most of the desired result.

Know your fiduciary position

For many, exploring the development of a retirement income strategy will constitute new territory that should not prove problematic from a fiduciary perspective. Since a retirement income strategy is not isolated from the broader governance and fiduciary structure under which a defined contribution program operates, engaging with the appropriate internal committees and external advice may be appropriate to ensure consistency and alignment.

Avoid too rapid drawdown

An increasingly common contributor to poor retirement outcomes is a tendency for retirees to draw down their assets too quickly. A retirement income strategy must address this, and sponsors will need to consider a number of interventions. These include choosing to provide education, offering a retirement income menu, and choosing the right default approach. Taking such a holistic approach will also differentiate a sponsor positively from those following standard solutions advocated by many market participants.

Appendix B: Description of annuity products

Longevity annuity

A solid income floor includes incorporating an insured element that protects against longevity risks, which can be accomplished through buying an annuity with a portion of the accumulated savings or through basic income insurance coverage for retirees living beyond a certain age, e.g., 85. If a participant dies prior to age 85, no benefits would be payable. The downside to this approach is that insurance has an associated cost and individuals are bad at forecasting needs beyond the first few years of retirement. Nonetheless this option should be made available to participants on a group purchase basis to leverage the Program's buying power.

Variable annuities

A variable annuity enables a participant to make a lump sum deposit into a variable annuity contract where the participant will have some discretion over how the invested money is allocated. The contract will provide a minimum guaranteed withdrawal benefit based upon investment performance and the ability to withdraw all or a portion of the contract's market value at any time, subject to a reduction in the ongoing monthly benefit. The variable annuity, while providing a lower monthly benefit than a fixed annuity, provides complete transparency with respect to investments and fees, provides for a possible increasing benefit over time given favorable investment performance, and provides for access to the market value of the participant's assets, if needed.

Fixed annuities

Fixed annuities provide for an irrevocable decision to invest all or a portion of their account balance in an annuity vehicle, providing for a stream of guaranteed monthly benefits for the remainder of the participant's life. The annuity provides a basis for converting a lump sum payment into a stream of monthly benefits. The amount of benefit would depend upon the annuity selected; the participant's age; the joint annuitant's age, if any; current interest rates; and any additional death benefits or inflation coverages that may be purchased. With a fixed annuity, there is no transparency with how the funds are invested or how fees are determined. In the absence of a death benefit, there is no surrender value or means of accessing the annuity's assets for unexpected cash needs.

APPENDIX C : Product Analysis

In the table below you can see how different products can be analyzed from a retiree perspective or from a fiduciary (Board) perspective. It is important to appreciate that the perspectives can be somewhat different and at times conflicting.

Retiree perspective		Fiduciary perspective
Initial income generation		Initial income generation
Protection from risk	Longevity risk	Transferability to another provider
	Inflation risk	In-Program or out of Program
	Insurer credit risk	Fiduciary/regulatory concerns
	Downside market risk	Insurer credit risk
	Annuity conversion rate risk	Fees
	Terms and conditions risk	Potential conflicts
Maximize returns		Other
Access to capital		

In reality the answers are rarely as simple as a “+” or a “-“, they tend to be “Yes, but” or “No, but”. In addition the products within each category are not homogeneous. This creates challenges both for the fiduciary and the retiree. Probably most compelling though is that there is never a product that “ticks all the boxes”. Ultimately, some trade-off needs to take place. In addition, where we have conducted detailed analysis we have tended to find that a combination of products typically provides the best solution, and the reality is that it is hard for an individual to develop an ideal combination strategy, hence the need for a menu of options plus assistance, guidance and maybe even advice.