The Certified Employee Benefit Specialist® Program

RPA1 Managing Retirement Plans Part 1

Study Materials Update—May 2023

This material is required reading for purposes of the CEBS program and the national exams for the RPA 1 course administered on or after October 15, 2023.

This update corrects earlier printings of the RPA 1 Study Guide, Second Edition in light of recent legislative changes. This update covers Modules 3, 4, 6, 7, 8, 9, 11 and 12 of the Study Guide (First Printing: December 2021 and Second Printing: April 2022).

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How to Use This Update

For the printed version of the Study Guide:

Keep this update with your study materials. It should be read in conjunction with the assigned reading for RPA 1.

For the digital Study Guide:

These updates will be reflected in the digital versions of the Study Guide.

Instructions

There are two types of updates:

1. Minor—Where changes are made to a small section of the text, changes are indicated in **bold.**
2. Major—Entire sections are provided as a replacement.

Study Guide Module 3

Pages 1 and 2, Professional Enrichment Resources: Remove the current pages 1 and 2 from your Study Guide and replace them with the new pages that follow. The replacement pages have an updated Professional Enrichment Resource link for the Canadian Benefits Guide 2022.

Module 3

Leveraging the Tax Regime in Plan Design

The development of employer-sponsored retirement plans in Canada has been significantly influenced by the favourable treatment accorded to such plans under federal income tax law.

Because of the advantages of providing for retirement through arrangements that qualify for tax assistance, requirements of the Income Tax Act (ITA) are a major consideration in the design of pension plans and other retirement income programs.

Registration under ITA is essential if the plan is to operate legally and provide favourable tax treatment; for pension plans, ITA registration is in turn dependent upon registration under the pension standards legislation discussed in Module 4.

Although the federal Department of Finance is responsible for federal tax policy and legislation, ITA is monitored by the Canada Revenue Agency (CRA).

Assigned Reading

Text
Chapter 8, Pages 217-249
(to end of paragraph carried forward from Page 248)

Reading A
Text Commentary, Study Guide Module 3, Pages 23-28

Professional Enrichment Resources

Canadian Benefits Guide 2022
Government-Sponsored Pension Plans, Aon,
https://insights-north-america.aon.com/ca-en/managing-healthcare-costs-human-resources/aon-canadian-benefits-guide-2022-report

Why Read This?
This industry guide offers another source of some of the information covered in the text. While providing somewhat less detail, it is written in a manner that describes main provisions of legislation affecting government and private benefit programs that impact plan sponsor and plan management activities. Note the link provided is current as of the Study Guide publication date. The report is typically updated annually.

Learning Outcomes

1. Describe the rationale for the income tax regime that governs registered pension and non-pension retirement plans in Canada.
2. Identify the focus of the Income Tax Act (ITA) rules as they apply to registered pension and non-pension registered retirement plans.
3. Describe the components that determine the ITA's comprehensive limit for retirement savings.
4. Outline the ITA registration rules and contribution limits applicable to registered pension plans.
5. Differentiate between ITA rules that affect various types of registered pension and non-pension registered retirement plans.
6. Describe the basic nature of individual pension plans (IPPs) and the ITA constraints imposed on these plans.

Study Guide Module 4

Go to Page 25, Text Commentary, Page 25, Exceptions to Locking-In (Unlocking), Text, Pages 265-268: Add the following paragraph before the first paragraph in this section:

Page 267, paragraph 4, sentence 1 of the Text lists provinces where an individual may be able to access funds in locked-in vehicles in situations involving financial hardship. Add Saskatchewan to the list.

Study Guide Module 6

Go to Page 8, Learning Outcome 2.2: Add the following to the end of bullet (j): for DB, target benefit and DC pension plans that do not offer employees investment choices.

Go to Page 26, Text Commentary, Investment Manager, Text, Page 145: Add the following to the existing Text Commentary regarding this section of the Text, as the initial paragraph:

The paragraph following the first bulleted list on this page refers to most jurisdictions' requirement for a statement of investment policies and procedures (SIPP). This statement is accurate in the context of DB pension plans. However most jurisdictions do not require SIPPs for DC pension plans that offer employees at least two investment choices. Additional information about these requirements is included in Module 8.

Study Guide Module 7

Go to Page 17, Learning Outcome 4.2: Change the bullet (a) to read as follows: Defined contribution (DC) pension plans

Go to Page 30, Text Commentary, Funding Methods, Text, Pages 169-171: Replace the final sentence on page 30 with the following:

Cost allocation and benefit allocation funding methods described in the Text are the primary methods used by actuaries, and they can be illustrated graphically by the chart below.

Go to Page 35, Text Commentary, Asset Valuation Methods, Text, Page 173-174: Bullet (a) under the final paragraph on this page, discussing part 3000 of the CIA Standards not applicable to three specific types of retirement plans, should be replaced by the following:

(a) DC pension plans, or the DC provisions under a hybrid or combination pension plan where the benefits under the DC provisions are independent of those under the DB provisions, and surplus under any DB provisions is not permitted to fund the benefits under the DC provisions.

Study Guide Module 8

Go to Page 7, Learning Outcome 1.2: In the table included with the response to this question, for Newfoundland and Labrador, replace "Yes" under the column "SIPP Required for Member-Directed DC Plan" with "No".

Go to Page 31, Text Commentary, SIPP Content, Text, Page 186: Add a final sentence as follows: Newfoundland and Labrador does not require a SIPP for a member-directed DC plan.

Study Guide Module 9

Pages 25 and 26, Text Commentary: Remove the current pages 25 and 26 from your Study Guide and replace them with the new pages that follow. The replacement pages have updated information about the number of MEPPs in Canada and funding requirements in Manitoba.

Reading

Text Commentary

A

The Text Commentary expands upon or provides current and relevant applications to the Text reading. It should be read in conjunction with the Text.

Introduction, Page 353

The text refers to the number of MEPPs in Canada at the end of 2018. For more current information the footnoted table can be accessed through this link: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110009801

Characteristics of a Multi-Employer Pension Plan, Text, Pages 355-357

Add the following **"Advantages/Disadvantages of MEPPs"** after the third bullet on page 357:

Advantages/Disadvantages of MEPPs

There are a number of advantages unique to MEPPs:

(a) Recognition of mobility of the workforce. MEPPs recognize and address the problem of the absence of a long-term employer-employee relationship, which is normally needed to qualify for pension benefits, by aggregating the pension credits earned during employment with various employers within the industry.

(b) Benefits of pooling. By participating in a MEPP, small employers obtain access to investment and consulting advice, which would be cost-prohibitive if they were to offer individual plans. For defined contribution (DC) MEPPs, the associated individual return and longevity risks are minimized through the pooling of assets, and members generally can expect to receive greater benefits than if they had been participating in equivalent-cost DC single employer pension plans (SEPPs).

(c) Administrative savings. Centralized administration increases benefits and/or reduces participating employer costs because it is shared across the entire group of participating employers.

(d) Contractual entrenchment of employers' obligation to contribute. Employers contributing pursuant to the terms of a collective agreement can be pursued by the union if there is a failure to make contributions or remit them on a timely basis. In addition, some boards of trustees insist on having participation agreements between the board and each participating employer to ensure that each employer is legally obligated and committed to contributing to the plan. Consequently, an employer cannot take this obligation lightly, nor avoid it simply because of financial difficulties.

(e) Ownership of funds. As a consequence of the collective agreement and/or trust agreement, there is less ambiguity with respect to who owns the MEPP funds. Furthermore, pension benefits are usually expressed as a fixed dollar amount or as an accumulation of contributions and, therefore, complications of ownership of a surplus do not often arise. Lastly, the trust agreement must also specify the conditions governing the funds when the plan is wound up or terminated.

MEPPs also have certain disadvantages, including:

(a) Recordkeeping. Because members of a MEPP tend to work with a number of participating employers over the course of their employment in a particular industry, the administrator must carefully track each member's service with an employer. Recordkeeping can become even more complicated if certain participating employers are habitually late in making contributions.

(b) Risk sharing as a result of joint governance. While it is true that under a MEPP, employees have a far greater role in the administration of benefits, they also share in the risks associated with a fund deficit.

(c) Implications of an unfunded liability or solvency deficiency. Some jurisdictions in Canada do not require that an unfunded liability or solvency deficiency in a MEPP be "topped up," and benefits—both for future service and, in many jurisdictions, benefits already earned—may be reduced.

(d) Incidence of fraud. Historically, it was relatively easy for criminally minded persons to become trustees. There have been incidents of fraud and personal enrichment involving MEPP funds, although the ability to engage in and the incidence of this type of activity have been greatly reduced over the past 25 years.

Manitoba, Text, Page 360

Delete the final paragraph of this section and replace with:

Changes were made to the PBA regulations in 2021 to provide for plan administrators to request designation as a specified multi-employer pension plan (SMEPP) if the plan qualifies as a SMEPP under the terms of the Income Tax Act.

Manitoba passed legislation in 2021 that brought their funding requirements for DB plans to be more in line with those of other provinces, including the continuation of certain solvency exemptions for MEPPs.

Study Guide Module 11

Pages 1 and 2, Assigned Reading, Text: Remove the current pages 1 and 2 from your Study Guide and replace them with the new pages that follow. The replacement pages have updated Assigned Reading information.

Pages 21 to 24, Text Commentary: Remove the current pages 21 to 24 from your Study Guide and replace them with the new pages that follow. The replacement pages have updated page references and content.

Pages 29, 30, 37 and 38, Benefits in Action #4—"What type of executive pension arrangement do we need to attract and retain senior-level talent?" has updated CRA income limits. Remove the current pages 29, 30, 37 and 38 from your Study Guide and replace them with the new pages that follow.

Module 11

Other Employer-Sponsored Plans

In addition to the employer-sponsored registered pension plans (RPPs) and other non-pension employer-sponsored plans covered in previous Modules, there are a number of other employer-sponsored programs that warrant coverage. These plans are designed to provide plan members with savings and investment opportunities for amounts mostly unrestricted by government regulations and contribution limits. Even though such programs have a limited number of members, they provide considerable retirement savings for some employees.

Supplementary retirement arrangements, employee's profit-sharing plans (EPSPs), group tax-free savings accounts (TFSAs), Pooled Registered Pension Plans (PRPPs) and Voluntary Retirement Savings Plans (VRSPs), employee savings plans and employee stock option plans are addressed.

Because these programs operate outside of pension standards legislation (and in some instances are not particularly seen as plans for retirement savings), their provisions vary widely among employers.

Assigned Reading

Text
Chapter 13 (excluding page 406 (after the end of the bullet) to Page 408 (up to bullet iv. Secular Trusts))

Chapter 14, Pages 411 to 412 (to Registered Retirement Savings Plans), Pages 420 to 421 (from Profit-Sharing Plans to Deferred Profit-Sharing Plans), Pages 424 (from Employee's Profit-Sharing Plans) to 437

Reading A
Text Commentary, Pages 21-26

Benefits in Action #4
"What type of executive pension arrangement do we need to attract and retain senior-level talent?" Study Guide Module 11, Pages 27-40

Reading

Text Commentary

A

Benefit Formula, Text, Page 400

The special SERP provisions identified in the Text are applicable to SERPs that operate on a defined benefit basis. SERPs that operate on a defined contribution basis could include an employer contribution schedule (for example, one that increases as the employee's service period increases) that is tailored to meet the needs of senior employees.

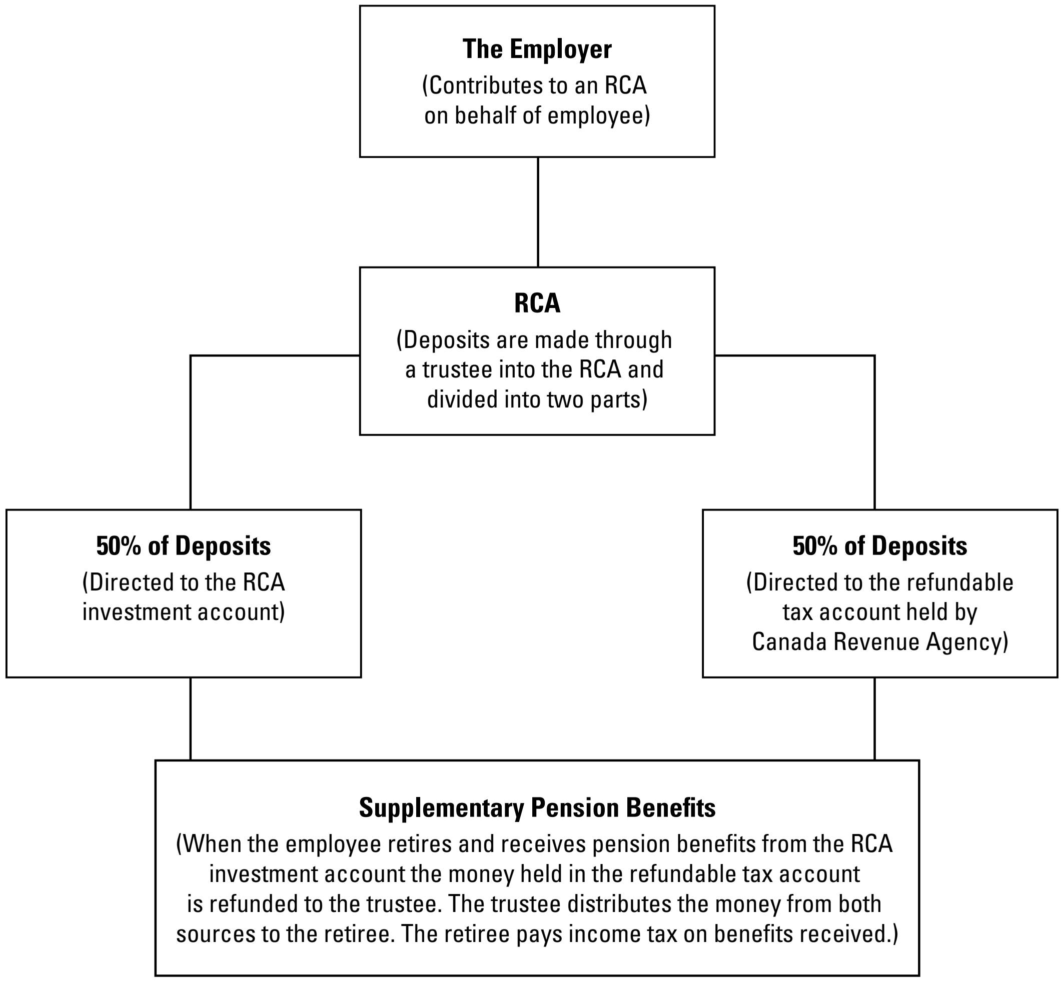
Canadian Securities Administration (CSA) Disclosure, Text, Page 397

Note that the title of this section should be Canadian Securities Administrators (CSA) Disclosure.

Retirement Compensation Arrangement, Text, Page 403

Exhibit 1 on the next page illustrates the flow of employer contributions and investment earnings in a funded RCA.

Exhibit I



Note that in a funded RCA, deposits to the RCA investment account are invested and income is earned. 50% of the earned investment income must be paid to CRA to hold in the refundable tax account. The refundable tax account earns no interest, but the funds would otherwise have been taxable if paid to the employee as salary or bonus.

Life Insurance Policies, Text, Pages 405-406

Testable content on this subject includes only the paragraph on page 405 and the bulleted list below that paragraph that finishes at the top of page 406.

Profit-Sharing With Deferred Benefits, Text, Pages 420-421

The Text refers to registered profit-sharing pension plans. These are simply another type of defined contribution registered pension plan and, as such, will not be discussed in this Module.

Employee's Profit-Sharing Plans, Text, Page 424

Eligibility

The employer sponsoring the plan establishes eligibility for participation and may, within the constraints of human rights legislation, designate any employee to be eligible for participation. Most often, participation in an employee's profit-sharing plan (EPSP) is granted to longer service employees as a reward for their service, and the vesting is structured as an incentive to continue service.

How Funds Are Held

An EPSP is an arrangement under which amounts are paid by the employer into individual accounts held for the benefit of participating employees. Amounts are paid to a trustee to be held in individual plan member accounts, invested for the benefit of the members until such time as the account is paid out upon the employee's death, retirement, disability or termination of employment.

Amounts allocated to each member's account will include both contributions received from the employer as well as profits and capital gains/losses of the trust.

Minimum Employer Contribution for "Out of Profits" Type EPSP

The minimum required contribution to an EPSP for which contributions are made "out of profits" is $100 per employee per year.

Timing of Employer Contributions

As with DPSPs, the employer contribution to an EPSP is deductible if made in the taxation year or within 120 days after the end of the taxation year.

Tax-Free Savings Accounts, Text, Pages 425-428

Pages 426 and 427 of the Text indicate that withdrawals from a TFSA do not affect "means-tested benefits." This wording should be changed to "income-tested benefits."

The table on Page 427 indicates that spousal contributions to a TFSA are not permitted. To clarify, only the account holder can make the contribution. However, funds can be provided to a spouse or common-law partner and to adult children over age 18 to invest in their own tax-free savings accounts (TFSAs). TFSA assets can generally be transferred to the TFSA of a spouse or common-law partner upon death.

Individual TFSA accounts can be opened with various financial institutions, including insurance companies, banks, trust companies and credit unions. The provider of the TFSA account takes care of registering the account with the Canada Revenue Agency (CRA).

Group TFSA

A group TFSA is a collection of individual TFSAs for which the routine administrative functions are centralized. The employer deducts contributions from the employees' incomes and contributes the amounts, usually monthly, to their individual TFSA accounts. Like a Group RRSP, the plan sponsor decides what investment options will be made available to plan members. Group TFSAs offering more than one investment option fall under the Guidelines for Capital Accumulation Plans (CAP Guidelines).

Employer-sponsored group TFSAs offer access to another tax-sheltered savings vehicle for retirement contributions that currently cannot be tax sheltered through registered plans where, typically, any excess now goes to taxable savings plans. In addition, they offer the opportunity to:

(a) Encourage further employee savings through supplemental contributions in a group program, allowing employees access to institutional money managers who may not sell in retail markets

"I figured as much." Chuck pushed Gloria's business card across the table. ***"Now, can we talk about the Abu Dhabi contract?"*** Blaise conceded, and the men moved comfortably into familiar terrain.

The next day, Gloria was ushered into the CJD boardroom by Blaise's assistant. She had done her homework, thoroughly researching CJD, and in the process had come across online articles of the crash that claimed Gordon Jones' life. She had a sense of why she was invited. One of her objectives for the meeting was to assess both partners' state of readiness to discuss supplemental retirement plans.

She reviewed the basic details she had been given regarding the CJD employee pension plan as she waited for her clients.

CJD DC Pension Plan and DPSP terms

- Employee chooses pension plan contribution rate, minimum 1% of earnings.
- Employer matches employee pension contributions at 100% up to 4% of earnings, and at 50% of employee pension contributions on amounts up to 7% of earnings. Maximum employer contribution is 5.5% of earnings.
- For "senior managers," the 100% match applies to all employee contributions up to a 7% maximum employer contribution.
- Employer contributes 2% of employees' earnings to the DPSP.
- Employees are enrolled in both plans from date of hire.
- Only full-time regular employees are eligible.

Blaise and Chuck entered the boardroom in a hurried state and introductions followed. Gloria sensed she needed to get right to the point. ***"Gentlemen, thank you for inviting me here today. As I understand it, the goal of our meeting is to provide you with an overview of supplementary retirement arrangements that would complement your current comp package and give you an advantage with your own succession planning."*** Gloria made direct eye contact with both men before proceeding. ***"Building a strong team and looking for ways to gain a competitive edge on talent can be challenging, especially when you have key staff thinking about retirement. I've looked at your current pension plan and DPSP and believe that I can help. Bonuses, shares, group benefits and retirement plans are typical components of an executive compensation package. It is important to tailor those components in a way that is attractive and as tax effective as possible for both employer and employee."***

Benefits in Action 4

"You have my attention, Ms. Estrada. We are looking to attract high-level talent, and in our specialized field, there aren't that many players on the market," Blaise affirmed.

"At least 50% of our employees earn over $100,000 per year. Our most talented employees can easily expect to earn more than $225,000 once they have five to ten years of experience." Chuck confirmed Gloria's assumption about company pay scales, and Gloria continued.

"Your existing retirement plan structure, using both a pension plan and a DPSP, provides a generous contribution schedule. However, there may be some unintended consequences for higher-earning employees that mean the plans aren't as well appreciated as you might expect. Federal tax policy places limits on pension and DPSP contributions. For employees earning under $100,000, this isn't generally an issue, but given your situation, it is a different story. If we do a quick calculation for an employee earning $225,000, I expect we'll find that those income tax limits are impairing your ability to offer retirement benefits to senior staff at the same level as more junior staff, despite your plan's enhanced contribution rates for senior managers. I have an example here that shows you how this can impact your employees." Gloria clicked on her tablet.

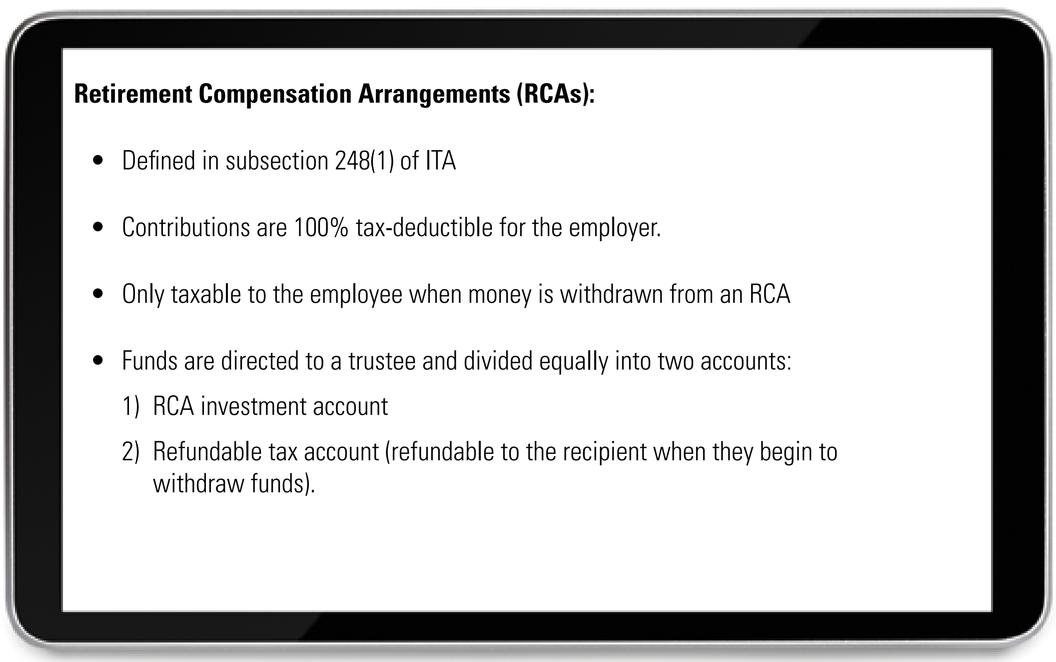
Consequences of CRA limits for higher-earning employees:

- Let's compare a nonsenior employee earning $75,000 with a senior employee earning $225,000. The current income tax limit on contributions is $31,560.
- Based on the plan design, the nonsenior employee gets 14.5% of earnings ($10,875) contributed to the retirement plans (pension and DPSP).
- The senior employee qualifies for 16% of earnings ($36,000), but this amount exceeds the income tax limit.
- As a result, the senior employee only gets $31,560, or 14% of earnings, put aside for retirement through the company plans; cannot receive a contribution to the DPSP; and has a $0 RRSP contribution limit.
- CRA limits increase each year but only by the increase in average industrial wages. For higher-earning employees, the "gap" between amounts determined by the plan rules and the CRA limits will be maintained or grow as compensation increases for senior employees.

"While you needn't answer these questions now, I've included them in the package of material in front of you. Earlier we looked at an example to show how your current generous retirement plan design disadvantages higher-earning employees, likely including potential successors to the two of you, simply as a result of the income tax limits. They are not able to benefit from your plan to the extent that other employees can. What is stopping them from looking for an employer that ensures that their more valuable employees are able to receive full value from a retirement plan that removes the arbitrary barrier imposed by income tax limits, without what they may perceive as pension discrimination?"

"I really never thought of it that way," Chuck reluctantly admitted. ***"Our employees are savvy, and they likely have seen or will see this barrier in our current pension plan."***

Gloria referred again to her tablet. ***"A Retirement Compensation Arrangement can address these constraints."***



Gloria added that an RCA can wrap around traditional pension plans and RRSPs. She highlighted key points. ***"As pertains to the refundable tax account, all the funds that are held here are refundable to the recipient of the RCA at the time they start withdrawing their money."*** Gloria disclosed that the money in this account is used as security for taxes that are deferred when funds are held in the RCA.

"Why is this such an important point?" Blaise scratched his forehead as he tried to piece together the answer that he considered might be more straightforward than he imagined.

"Your high-earning employees will likely have lower tax rates during their retirement when money is taken out of the RCA, and this allows for greater tax savings. If they had been paid in bonus or additional salary, the tax rate would have been much higher." Gloria pointed to the screen again and was about to walk them through an example when Chuck interrupted her.

"I'm losing focus," he admitted. ***"You have given us a lot to think about."***

"It is a lot to take in," Gloria agreed.

Gloria then summarized, ***"RCAs provide an orderly way for employers to help their key people fund their retirement beyond ITA contribution limits, all in a tax-effective manner. RCAs don't have contribution caps or caps on the payouts to participants. What's ideal—and I mentioned this earlier, but I feel it is important to restate—is that the assets are protected from creditors of the company because they are held in trust. An RCA isn't appropriate for all your employees, but it does provide a way to attract and retain key staff. It is an option worth further investigation. I've left you with all my contact information."*** Gloria started packing up her tablet and papers. ***"Please call me if you have any questions."***

Blaise stood and thanked her. ***"You've given us a lot of food for thought."*** He smiled and shook her hand.

Chuck nodded and uttered a reserved, ***"Thanks."*** Picking up his smartphone, he began texting as he walked out of the room.

"Please don't mind him," Blaise extended. ***"He is brilliant but has been told he lacks interpersonal skills. Between us, we cover the bases, and we work well as a team."***

Gloria smiled. Blaise walked Gloria to front reception. ***"I'll be in touch. We need a bit of time to let things percolate a bit. Chuck likes to do his own research once he gets a hold of a concept. It is his way,"*** Blaise admitted. ***"Thanks again."***

Study Guide Module 12

Pages 19, 20, 21, 22, 23, 24, 29, 30, 53, 54, 55 and 56, Capstone Case: Remove the current pages 19, 20, 21, 22, 23, 24, 29, 30, 53, 54, 55 and 56 from your Study Guide and replace them with the new pages that follow. The replacement pages have updated Appendix C to include a PfAD, a requirement added in BC.

"I brought a document with me called 'Preliminary Valuation Results for Internal Purposes.'" Toller explained he was using this document to understand VPO's pension plan funding situation for the existing DB arrangement. It was the basis for his list of questions. ***"I have a couple of clarification questions I'd like to get your input on,"*** Toller said.

Preliminary Valuation Results as of December 31, 2021 for Internal Purposes
Study Guide Module 12, Appendix C, pages 53 to 55
See Appendix C

Jane confirmed that he had brought along the ideal document for this discussion. ***"We'll be able to address a number of the questions on your list by referring to the document. Before we start discussing your questions and the document, let's cover a few key terms that apply to DB plans."*** Jane drew a diagram on the whiteboard and wrote out: "Advance funding, solvency funding, fully funded, overfunding and unfunded liability."

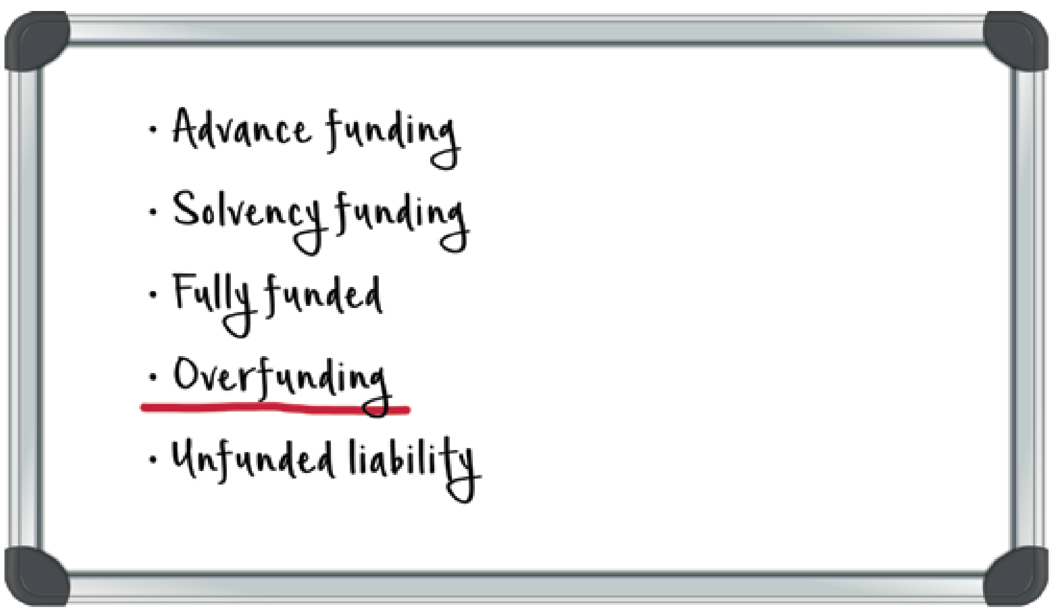
Jane told Toller, ***"Advance funding of a pension plan is required in order to obtain 'registered' status with the Canada Revenue Agency and to meet provincial pension standards requirements. Registration provides the tax advantages to both sponsoring employers and participating employees. Advance funding also gives the employer an orderly method of managing cash resources and keeps the contribution requirements from rising out of control as the plan matures or if the economic climate changes dramatically. British Columbia's pension legislation prescribes certain advance funding requirements including a provision for adverse deviation (PfAD) and an additional layer of funding called 'solvency funding' when the financial status of the plan is at certain levels. The objective of both of these is to provide additional security for plan members in the event that a pension plan is wound up."***

Jane explained that advance funding normally results in pension costs being allocated over the years that employees perform their services rather than when benefits are paid out.

"So if there isn't advance funding, the pension liability would show up in the employer's financial statements when employees retire, right?" Toller questioned.

"Yes, but some employers—like VPO—take the position that 'too much' advance funding of a pension plan isn't the right approach for them. Those employers sometimes express a preference to retain the assets in the business in anticipation of using them in other ways that can achieve a higher after-tax rate of return. They feel more confident that they can do better elsewhere than they would if they invested the funds inside a pension plan, with the result of an enhanced corporate balance sheet. This position can lead to a pension funding policy that meets only the very minimum amounts required by pension regulators."

Jane went back to the whiteboard, underlining the word "overfunding," and explained, ***"There is an ongoing debate over surplus ownership and surplus distribution in the event of pension plan wind-ups. It has caused some employers to follow a policy that requires only the minimum required level of funding, to reduce the possibility of an 'overfunded' position."***



Jane and Toller agreed—They were both certain that Ivan preferred the "minimum required" approach. As they sipped on coffee brought in from a local roaster, they discussed the fact that many Canadian employers had moved or were making plans to move from a defined benefit to a defined contribution plan.

"As is the scenario with VPO, defined benefits are often frozen, and new contributions are directed to a new section of the plan. Current employees get a combination retirement benefit, including their defined benefit entitlement for their membership up to the time of the change, plus a defined contribution benefit earned after the date of change. New employees get a retirement benefit based only on the defined contribution section of the pension plan," Jane explained.

Toller looked down at his list of questions. ***"You've given me a good base of information on plan funding. Let's take a look at my list so we can tie this theory back to our own situation. Can you explain the significance of the term 'going concern'? It appears throughout this document."***

Jane suggested, ***"Let's take another look at the first page of your preliminary valuation. A going concern valuation focuses on the ability of the plan to meet its long-term obligations on the assumption that it continues to operate for the foreseeable future."*** She tried to put it another way for Toller. ***"It attempts to show, at a particular point in time known as the valuation date, whether the funding of the plan is on course to provide all future benefits as they are expected to fall due. You can see from this document that VPO's plan is fully funded on a 'going concern' basis—Assets exceed liabilities by about $840,000."***

Appendix C | Preliminary Valuation Results as of December 31, 2021 for Internal Purposes

Preliminary Valuation Results as of December 31, 2021 for Internal Purposes

I. Going Concern Valuation – Defined Benefit

A. Going Concern Financial Position

	December 31, 2018	December 31, 2021
Actuarial Value of Assets		
- Market Value	$10,359,678	$9,066,712
- In-transit Contributions	0	0
Total	$10,359,678	$9,066,712
Liabilities		
- Active Members	$5,350,013	$4,446,742
- Transferred Members	$42,757	$44,936
- Deferred Vested Members	$245,292	$379,676
- Retired Members	$3,220,417	$2,960.570
Total	$8,858,479	$7,831,924
Provision for Adverse Deviation (PfAD) 5%	$ 442,924	$391,596
Going Concern Surplus/(Unfunded Liability)	$1,038,275	$843,192

B. Reconciliation of Going Concern Financial Position

Surplus/(Unfunded Liability) at December 31, 2018 w/PfAD	$1,038,275
Plus: PfAD held at December 31, 2018	$442,924
Surplus/(Unfunded Liability) at December 31, 2018 w/o PfAD	$1,501,199
Plus: Interest	146,001
Plus: Special Deficit Payments with interest	41,890
Expected Surplus/(Unfunded Liability) at December 31, 2021	$1,689,090
Plus: Asset experience (investment return greater than expected)	(447,407)
Less: Liability experience	(261,943)
Less: PfAD – 5% of liabilities	(391,596)
Plus: Change in actuarial basis	255,048
Surplus/(Unfunded Liability) at December 31, 2021	$843,192

C. Going Concern Current Service Cost (Expense Provision)

Company Current Service Cost (w/PfAD)	$40,000

"Now here's a critical point—Looking further into this document, you can see the results of the solvency valuation done at the same date. The solvency deficiency three years ago at the time of the previous valuation was $1.0 million. Updated information shows this deficiency has reduced to be $843,000 at the end of 2021." Jane pointed to section II of the preliminary valuation.

II. Solvency Valuation – Defined Benefit

A. Solvency Financial Position	December 31, 2018	December 31, 2021
Assets		
▪ Market Value	$10,359,678	$9,066,712
▪ In-transit Contributions	0	0
▪ Plan Termination Expense Allowance	(50,000)	(50,000)
Total Assets	$10,309,678	$9,016,712
Liabilities		
▪ Active Members	$7,192,227	$5,973,808
▪ Transferred Members	60,512	63,070
▪ Deferred Vested Members	357,974	523,793
▪ Retired Members	3,853,140	3,598,483
Total Liabilities	$11,463,863	$10,159,154
Solvency Excess/(Deficit)	$(1,154,185)	$(1,142,442)
Reduced Solvency Excess/(Deficit) at 85%[1]	$565,394	$381,421
Transfer Ratio	0.90	0.89

[1]Solvency assets minus 85% of solvency liabilities

"I see what you're saying." Toller pushed his chair back from the table. ***"What I don't get is the reason for these various types of valuations and how a plan's financial status can look so different between the two types."***

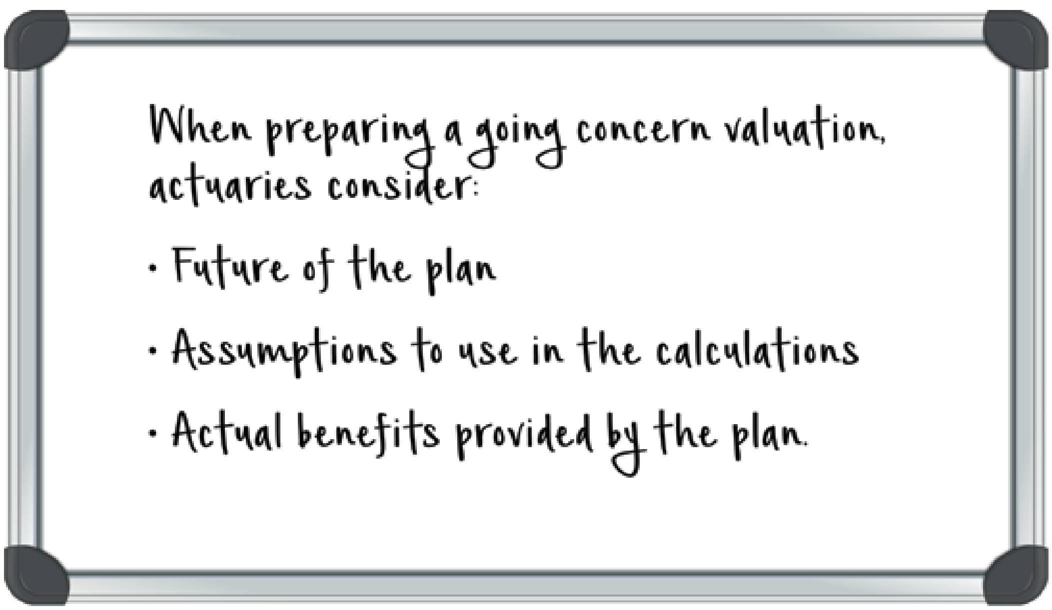
Jane approached the whiteboard. ***"Pension legislation has made things more complicated with all of their requirements for pension plans."*** She began writing as she spoke. ***"We talked about the 'going concern' valuation. Actuaries calculate liabilities for going concern valuations using certain economic assumptions, including a discount rate. Because the going concern valuation assumes the plan carries on indefinitely, the discount rate is chosen by the actuary based on a long-term estimate of the plan's investment returns.***

"At one time the going concern valuation was the only required valuation that regulators needed. Pension legislation now requires a second type of valuation known as a 'solvency valuation.' The purpose of a solvency valuation is to identify the relationship between plan assets and liabilities in the event that the pension plan terminated on the valuation date. It is not unusual for the funding status to vary between the going concern and solvency valuations."

Jane paused for a moment to think of the best way to describe the difference from the going concern valuation. ***"The basis used to calculate liabilities in a solvency valuation is prescribed by regulation, and the discount rate, a very key factor, is to be based on the level of current interest rates. At any time when the solvency discount rate is lower than the going concern discount rate, solvency liabilities tend to exceed those calculated on a going concern basis. As you know, interest rates have stayed very low in recent years. This has caused many pension plans to have solvency deficits and require additional funding as per solvency funding rules."***

"How do the Canadian Institute of Actuaries (CIA) Standards of Practice relate to these valuations?" Toller had seen the CIA referenced in a number of pension-related communications and wanted to have more context in terms of how it pertained to the work that the independent actuaries would be doing with their upcoming valuation of VPO's pension plan.

"We talked earlier today about the requirement for 'advance funding' of pension plans. Part of this requirement is that the levels of advance funding be determined by a professional actuary. The CIA is the national organization of the actuarial profession in Canada. As such, it sets standards for the professional activities undertaken by its members. This includes how actuaries perform valuations of defined benefit pension plans." Jane approached the whiteboard again and wrote out a list from memory.



"The CIA Standards of Practice inform actuaries about the methods and assumptions to be used in all types of pension plan valuations. Some of the specific considerations that actuaries take into account when preparing a going concern valuation include the future of the plan, assumptions to use in the calculations and the actual benefits being provided by the plan.

"Some of these considerations, particularly those applicable to solvency valuations, are prescribed by pension legislation. Actuaries are required to incorporate any prescribed methods and assumptions in their work on pension plans," Jane explained. She could see that Toller was a bit overwhelmed.

"Let's go back to the Preliminary Valuation Results and see what key assumptions VPO is using," suggested Jane.

Toller jumped in. ***"Yes, that makes perfect sense."***

Jane knew that there was a lot more to be discussed regarding the two types of valuations and their associated assumptions. She stopped this train of thought and made a mental note to save that conversation for their next meeting.

III. Key Assumptions

Going Concern Valuation	December 31, 2018	December 31, 2021
▪ Interest Rate	4.75% per annum	$5.00% per annum
▪ Mortality Table	Canadian Pensioner Mortality Private Table (generational)	Canadian Pensioner Mortality Private Table (generational)
▪ Retirement Age	Age 65	Age 65
▪ Administration Expenses	$40,000 provision included in the current service cost	$40,000 provision included in the current service cost
▪ Provision for Adverse Deviation (PfAD)	5% of Liabilities	5% of Liabilities

Solvency Valuation	December 31, 2018	December 31, 2021
▪ Interest Rates		
- Commuted Values	2.2% for 10 years and 3.5% thereafter for members less than age 55	3.2% for 10 years and 3.4% thereafter for members less than age 55
- Annuity Purchase	3.21% per annum for members age 55+	3.23% for members age 55)
▪ Mortality Table	Canadian Pensioner Mortality Private Table (generational)	Canadian Pensioner Mortality Private Table (generational)
▪ Retirement Age	Age at which benefits are most valuable	Age at which benefits are most valuable

"Jude told me that Ivan's approach was to pay only the minimum amount required under the BC pension legislation. That must have been a key contributing factor to the tiny reduction in the solvency deficit," Toller recalled.

Jane explained, ***"Yes, that's correct. You can see in Section B of the report that only about $42,000 was contributed in respect of the solvency deficit of $1.1 million. If VPO's funding policy had called for higher-than-minimum contribution levels, the growth of the solvency deficit would have been moderated. The purpose of a funding policy is to document the plan sponsor's objectives around the level and timing of the funding of pension benefits. In Ivan's case, I guess he met his goal by only contributing the minimum requirement. The result of this, though, seems to be that Ivan is uncomfortable with the need to make contributions at a higher level."***

"I guess there are two sides to every coin. Now I can see both the union and management perspectives." Toller admitted that as an employee, he would prefer a DB plan if he had the choice because he wouldn't have to worry about how his investments were performing. ***"But if I put myself in Ivan's shoes as the employer, I too would prefer a DC plan, because it would limit my financial risk to a specific contribution amount. I can budget for that expense."***

"If there has been a sale, there will be a legal agreement describing the terms of the deal. The very first thing to find out is the type of sale that has occurred—share sale or asset sale. Then the agreement will prescribe what happens with the pension plan, in terms of whether the buyer takes on the responsibility for the plan, only agrees to provide retirement benefits for service periods after the sale date or other conditions. You'll need to see that agreement. Most importantly, however, since the union seems to think that they are being kept in the dark, they should be reminded that labour legislation requires that their collective agreement must be honoured by the buyer. Also, if the sale entails any transfer of assets from pension plan to pension plan, VPO must secure prior approval from regulatory authorities. This process ensures the protection of pension and other benefits that the plan members and former members of the vendor's plan are entitled to receive." Jane slowly closed the lid of her laptop.

"So . . . members' pension benefits are still in place, and if there is to be a transfer to a plan set up by the new owner, nothing can be done without regulatory approval?" Toller was starting to feel some sense of relief.

"Yes, that's correct," Jane confirmed reassuringly. ***"I think your first step is to find out quickly if the company is in the process of being sold. If so, there will be lots of work for you to do relating to the terms of the purchase and sale agreement."*** Jane expressed her opinion that it is critical for Toller to have another meeting with Jude.

Using the whiteboard and the resources she had in the room, Jane walked Toller through the key matters relating to pension plan obligations for a purchase and sale agreement, including the valuation assumptions used when determining DB pension plan liabilities. ***"Something else you should be aware of is that the BC pension regulator has the authority to levy administrative penalties against companies that are not compliant with the Pension Benefits Standards Act,"*** added Jane.

What was slotted for a one-hour meeting resulted in two full hours of clarifying, educating and preparing Toller for his next meeting with Jude.

* * *

Meanwhile, back at the VPO headquarters, Jude was preparing for his meeting with Ivan. ***"Why can't he accept the situation?"*** Jude found it increasingly challenging to restrain his irritation with Ivan.

He entered Ivan's office with a relaxed look on his face. He approached the window where Ivan stood. Both men silently faced the city skyline. Jude struggled to keep his frustration from rising to the surface. Without making eye contact, Ivan spoke in a tone laced with irritation. ***"Explain to me why we weren't successful in selling the assets of VPO to Greenwald Industries?"***

"Quite simply, a defined benefit pension plan with significant unfunded liabilities and a vocal union." Jude crossed his arms and sighed. ***"What did you honestly think our chances were?"***

"But we seemed so close to securing a deal." Ivan pivoted and walked toward his desk. ***"I was counting on you to make this work."***

"Although Greenwald liked the nature of our business operations, once they dove deeper into the due diligence process and looked at our last solvency valuation, they refused to assume our pension plan liabilities. Why would they willingly take on an obligation close to a million dollars for something they didn't incur?" Jude restated the obvious.

"Was that our latest solvency deficiency?" Ivan questioned, even though he must have realized that there was no way he could fool Jude into believing he hadn't been informed of the numbers at the time of the last pension plan valuation.

Jude felt certain that the moment Ivan realized the deficit had doubled in less than three years, he had immediately lost all interest in VPO. ***"We did have the alternative of reducing our desired price to offset the obligation, but you gave me no flexibility in that area. But anyway, that may not have resulted in successful negotiations. Greenwald has never had a unionized workforce or sponsored a defined benefit pension plan for their employees. They were fine with taking on the DC part of the pension plan and a group RRSP for the salaried staff, but they didn't want to get involved in labour relations legislation and be so strictly dictated to about rights and obligations. Their corporate group has no existing expertise in managing those challenges. Overall, Greenwald wanted a quick and clean purchase."*** Jude's patience, now fully depleted, prevented him from maintaining a detached filter of objective indifference. ***"It didn't help that you refused to entertain any notion of funding the pension plan with more than the minimum required. Did you imagine interest rates would skyrocket or that several of our workers would die prematurely?"***

Preliminary Valuation Results as of December 31, 2021 for Internal Purposes

I. Going Concern Valuation – Defined Benefit

A. Going Concern Financial Position

	December 31, 2018	December 31, 2021
Actuarial Value of Assets		
- Market Value	$10,359,678	$9,066,712
- In-transit Contributions	0	0
Total	$10,359,678	$9,066,712
Liabilities		
- Active Members	$5,350,013	$4,446,742
- Transferred Members	$42,757	$44,936
- Deferred Vested Members	$245,292	$379,676
- Retired Members	$3,220,417	$2,960.570
Total	$8,858,479	$7,831,924
Provision for Adverse Deviation (PfAD) 5%	$ 442,924	$391,596
Going Concern Surplus/(Unfunded Liability)	$1,038,275	$843,192

B. Reconciliation of Going Concern Financial Position

Surplus/(Unfunded Liability) at December 31, 2018 w/PfAD	$1,038,275
Plus: PfAD held at December 31, 2018	$442,924
Surplus/(Unfunded Liability) at December 31, 2018 w/o PfAD	$1,501,199
Plus: Interest	146,001
Plus: Special Deficit Payments with interest	41,890
Expected Surplus/(Unfunded Liability) at December 31, 2021	$1,689,090
Plus: Asset experience (investment return greater than expected)	(447,407)
Less: Liability experience	(261,943)
Less: PfAD – 5% of liabilities	(391,596)
Plus: Change in actuarial basis	255,048
Surplus/(Unfunded Liability) at December 31, 2021	$843,192

C. Going Concern Current Service Cost (Expense Provision)

Company Current Service Cost (w/PfAD)	$40,000

II. Solvency Valuation – Defined Benefit

A. Solvency Financial Position	December 31, 2018	December 31, 2021
Assets		
▪ Market Value	$10,359,678	$9,066,712
▪ In-transit Contributions	0	0
▪ Plan Termination Expense Allowance	(50,000)	(50,000)
Total Assets	$10,309,678	$9,016,712
Liabilities		
▪ Active Members	$7,192,227	$5,973,808
▪ Transferred Members	60,512	63,070
▪ Deferred Vested Members	357,974	523,793
▪ Retired Members	3,853,140	3,598,483
Total Liabilities	$11,463,863	$10,159,154
Solvency Excess/(Deficit)	$(1,154,185)	$(1,142,442)
Reduced Solvency Excess/(Deficit) at 85%[1]	$565,394	$381,421
Transfer Ratio	0.90	0.89

[1]Solvency assets minus 85% of solvency liabilities

B. Special Payments to Amortize Solvency Deficit

There is no reduced solvency deficit as at December 31, 2021, therefore, no solvency special payments are required.

III. Key Assumptions

Going Concern Valuation	December 31, 2018	December 31, 2021
▪ Interest Rate	4.75% per annum	$5.00% per annum
▪ Mortality Table	Canadian Pensioner Mortality Private Table (generational)	Canadian Pensioner Mortality Private Table (generational)
▪ Retirement Age	Age 65	Age 65
▪ Administration Expenses	$40,000 provision included in the current service cost	$40,000 provision included in the current service cost
▪ Provision for Adverse Deviation (PfAD)	5% of Liabilities	5% of Liabilities

Solvency Valuation	December 31, 2018	December 31, 2021
▪ Interest Rates		
- Commuted Values	2.2% for 10 years and 3.5% thereafter for members less than age 55	3.2% for 10 years and 3.4% thereafter for members less than age 55
- Annuity Purchase	3.21% per annum for members age 55+	3.23% for members age 55)
▪ Mortality Table	Canadian Pensioner Mortality Private Table (generational)	Canadian Pensioner Mortality Private Table (generational)
▪ Retirement Age	Age at which benefits are most valuable	Age at which benefits are most valuable

IV. Membership Data

1. Active Members

Number	36
Average Credited Service	15.6 years
Average Annual Accrued Pension	$8,608

2. Transferred Members

Number	4
Average Credited Service	13.75 years
Average Annual Accrued Pension	$7,590

3. Deferred Vested Members

Number	18
Average Annual Pension	$1,589

4. Retired Members

Number	31
Average Annual Lifetime Pension	$11,004