

Public Service Pensions Plan

Report on the Actuarial Valuation for
Funding Purposes as at January 1, 2022

March 2023

Note to reader regarding actuarial valuations:

This valuation report may not be relied upon for any purpose other than those explicitly noted in the Introduction, nor may it be relied upon by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future. If maintained indefinitely, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date. The content of the report may not be modified, incorporated into or used in other material, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's permission. All parts of this report, including any documents incorporated by reference, are integral to understanding and explaining its contents; no part may be taken out of context, used, or relied upon without reference to the report as a whole.

To prepare the results in this report, actuarial assumptions are used to model a single scenario from a range of possibilities for each valuation basis. The results based on that single scenario are included in this report. However, the future is uncertain and the Plan's actual experience will differ from those assumptions; these differences may be significant or material. Different assumptions or scenarios within the range of possibilities may also be reasonable, and results based on those assumptions would be different. Furthermore, actuarial assumptions may be changed from one valuation to the next because of changes in regulatory and professional requirements, developments in case law, plan experience, changes in expectations about the future, and other factors.

We note that the results presented herein rely on many assumptions, all of which are subject to uncertainty, with a broad range of possible outcomes, and the results are sensitive to all the assumptions used in the valuation.

Should the Plan be wound up, the going concern funded status becomes irrelevant. This report does not include an estimate of the financial position of the plan assuming it was wound up on the valuation date. The financial position of the plan on a wind-up basis could differ very significantly from the going concern funded status disclosed in this report. Emerging experience will affect the wind-up financial position of the Plan assuming it is wound up in the future. In fact, even if the Plan were wound up on the valuation date, the financial position would continue to fluctuate until the benefits are fully settled.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security, and/or benefit-related issues should not be made solely on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic, and societal factors, including financial scenarios that assume future sustained investment losses.

Funding calculations reflect our understanding of the requirements of Public Service Pensions Act (2021 Revision), and related regulations that are effective as of the valuation date. Mercer is not a law firm, and the analysis presented in this report is not intended to be a legal opinion. You should consider securing the advice of legal counsel with respect to any legal matters related to this report.

Contents

1. Summary of results.....	1
2. Executive summary	2
3. Introduction.....	5
4. Valuation results	8
5. Contribution requirements	12
6. Prescribed legislative funding	13
7. Sustainability of pension plan	15
8. Actuarial opinion	17
Appendix A: Valuation results as at January 1, 2022 by sponsoring employer	18
Appendix B: Plan assets	21
Appendix C: Methods and assumptions – Going concern	26
Appendix D: Membership data	31
Appendix E: Principal provisions of the defined benefit part of the public service pension plan	39
Appendix F: Employer certification.....	42

Section 1

Summary of results

(C1 000's)	01.01.2022	01.01.2020
Ultimate discount rate	5.75%	6.25% ¹
Financial Status		
Market value of Defined Benefit (DB) assets	\$592,699	\$439,872
Market value of Defined Contribution (DC) assets	\$525,551	\$396,816
Net assets available for benefits	\$1,118,250	\$836,688
DB Liabilities	\$691,616	\$607,230
DC Account Balances	\$525,551	\$396,816
Deferred investment gain not reflected in DC accounts ²	\$31,901	\$28,914
Total DB and DC Liabilities	\$1,249,068	\$1,032,960
Surplus / (Deficiency)	(\$130,818)	(\$196,272)
Funded Ratio (DB Only, excluding deferred gains)	86%	72%
• DB Only, including deferred gains	82%	69%
Funded Ratio (DB and DC Combined)	90%	81%
Funding Requirements in the Year Following the Valuation		
Normal cost of benefits	\$8,011	\$8,033
Expense allowance	\$1,250	\$1,200
Employees' required DB contributions (6% of DB payroll)	(\$2,444)	(\$2,761)
Employer DB normal cost	\$6,817	\$6,472
Funding of deficiency over 20 years	\$10,840	\$17,116
Total employer DB contributions	\$17,657	\$23,588
Total DC contributions (employee + employer)	\$37,892	\$34,412
Total DC cost as a % of DC payroll	12.4%	12.4%

¹ 7.25% graded down to 6.25% over 3 years

² DC account balances are smoothed over a 3-year period. Since actual investment returns immediately prior to the valuation date have been very strong, some of the investment returns have not yet been reflected in the DC account balances. This reserve represents the expected increase in DC account balances due to investment gains that have not yet been recognized.

Section 2

Executive summary

At the request of the Public Service Pensions Board we have conducted an actuarial valuation of the Public Service Pensions Plan (the “Plan”), as at January 1, 2022, in accordance with the Public Service Pensions Act (2021 Revision) of the Cayman Islands, hereinafter referred to as the Public Service Pensions Act. We are pleased to present the results of the valuation.

The purposes of the valuation are to:

- Determine the funded status of the Plan as at January 1, 2022 on a going concern basis.
- Measure the ability of the fund to meet its liabilities for the following 40 years based on current contribution rates, in accordance with Section 12 of the Public Service Pensions Act.
 - If not so capable, determine the contribution rates that would be required to reinstate the capability.

Our valuation was based on:

- Asset information described in Appendix B;
- The methods and assumptions described in Appendix C;
- The membership data summarized in Appendix D;
- The plan provisions described in Appendix E.

As with any valuation that makes long-term assumptions about future demographic and economic conditions, there is considerable uncertainty. The actual financial position of the Plan will differ, perhaps considerably, from the projections shown in this report as actual experience emerges differently from our assumptions. See page i of this report for further details and for limitations on the use of this report.

The discount rate is one of the most significant assumptions underlying the valuation. As at January 1, 2022, the discount rate was reduced to 5.75% per annum, relative to the ultimate discount rate of 6.25% per annum at the previous valuation date of January 1, 2020.

The key results of our valuation are as follows:

- The Plan is in a deficit position as of January 1, 2022. Based on a discount rate of 5.75%, the Plan has a deficiency of \$131 million at January 1, 2022 and the funded ratio of the DB Part of the Plan is 86%, excluding deferred gains. The funded ratio of the DB Part of the Plan has increased by 14% since the previous valuation due mainly to higher than expected asset returns and the deficiency contributions made by the sponsoring employers, partially offset by the increase in liabilities resulting from the decrease in the valuation discount rate.

- The Board has previously established an objective of funding past service actuarial deficiencies over a 20-year period. In order to achieve this objective, and based on the assumptions and methods described in this report, the employer contributions to fund the deficiency revealed by the valuation could be reduced from \$17,116,000 to \$10,840,000 per annum. However, given the major downturn in investment performance in 2022, and the higher inflation being experienced, we would recommend maintaining the deficiency contributions at the level of \$17,116,000 per annum.
- On the foregoing basis, the employee and employer funding requirements of the Plan are as follows:

	Funding Requirements
DC Part of the Plan	
Employee contributions (% of DC payroll)	6.0%
Employer required contributions (% of DC payroll)	6.4%
DB Part of the Plan	
Employee contributions (% of DB payroll)	6.0%
Employer normal cost (% of DB payroll)	16.6%
Employer contributions to amortize deficiency	\$17,116,000

The estimated employer funding requirements for the three years following the valuation date, assuming pensionable earnings increase by 4% in 2022 and 3.5% in 2023 (and with the expense allowance increasing in line with inflation), are shown in the table below:

(\$000)	2022	2023	2024
Employer DB Contribution			
Normal cost	\$6,817	\$7,112	\$7,357
Amount to fund past service liability	\$17,116	\$17,116	\$17,116
Total employer DB contributions	\$23,933	\$24,228	\$24,473
Employer DC contributions	\$19,557	\$20,339	\$21,051
Total employer contributions (DB + DC)	\$43,490	\$44,567	\$45,524

A breakdown of the funding requirements by sponsoring employer is provided in Appendix A.

Some other critical conclusions from our valuation:

- If the sponsoring employers fund on the above basis, and if actual fund returns are at least equal to the valuation discount rate (5.75% per annum), the requirements of Section 12 of the Public Service Pensions Act will be met (in the absence of significant losses from other sources). If actual returns are lower than the discount rate, then contributions would need to increase, all else being equal.

- It is critical for the Plan to continue to be funded adequately, ideally at least in accordance with the recommendation contained in this report. A failure to adequately fund the Plan will result in a decline in the Fund asset base, which will in turn diminish the ability of investment returns to contribute towards the funding of the promised benefits.

See Sections 6 and 7 for further details.

The remainder of this report provides further details on the results of the valuation.

Note that the economic and demographic factors which affect the DB Part of the Plan can also affect retirement outcomes under the DC Part of the Plan. Given that the DC Part of the Plan has now been in place for almost 25 years, and will become the primary source of retirement income for new retirees, it would be prudent to assess the effectiveness of the plan design, and consider whether it is providing the desired retirement outcomes, at a reasonable level of cost and risk.

Section 3

Introduction

To the Public Service Pensions Board (the “Board”)

At the request of the Board, we have conducted an actuarial valuation of the Public Service Pensions Plan (the “Plan”), as at January 1, 2022, in accordance with the Public Service Pensions Act. We are pleased to present the results of the valuation.

Purpose

The purposes of this valuation are to:

- Determine the funded status of the Plan as at January 1, 2022 on a going concern basis.
- Measure ability of the fund to meet its liabilities for the following 40 years based on current contribution rates, in accordance with Section 12 of the Public Service Pensions Act;
 - If not so capable, determine the contribution rates that would be required to reinstate the capability.

The information contained in this report was prepared for the internal use of the Board and the sponsoring employers of the Plan for determining the funding requirements of the Plan. This report is not intended or suitable for any other purpose.

All amounts shown in this report are in Cayman Dollars.

Terms of Engagement

In accordance with our terms of engagement with the Board, our actuarial valuation of the Plan is based on the following material terms:

- It has been prepared in accordance with the Public Service Pensions Act
- It has been prepared assuming that the Plan will continue indefinitely. Accordingly, a winding-up (discontinuance) valuation should not be performed.
- It has been prepared using best estimate assumptions proposed by Mercer and approved by the Board, adjusted as follows based on instructions from the Board:
 - we reflected an additional allowance in our discount rate for active management investment outperformance of 0.5% per annum;
 - The inflation and pension increase assumptions for 2022 to 2024 reflect the outlook from the Government's Economics and Statistics Office (ESO);
 - The salary increase assumption for 2022 to 2024 reflects the outlook from the Portfolio of the Civil Service (PoCS) and the Finance Ministry.
- Results have been presented using a discount rate of 5.75% (which reflects the allowance for future active management outperformance).

- The employer funding requirements have been determined by reflecting the Board's decision to amortize past service actuarial deficiencies that arise over 20 years.

Events since the Last Valuation at January 1, 2020

The recommended rates of contribution contained in the January 1, 2020 valuation report became effective by Regulations on September 8, 2021, retroactive to January 1, 2020.

Pension Plan

There have been no special events since the last valuation date.

This valuation reflects the provisions of the Plan as at January 1, 2022. The Plan has not been amended such that the value of benefits are affected since the date of the previous valuation, and we are not aware of any pending definitive or virtually definitive amendments coming into effect during the period covered by this report. The Plan provisions are summarized in Appendix E.

Assumptions

We have used the same valuation assumptions and methods as were used for the previous valuation, except for the following:

	Current valuation	Previous valuation
Discount rate:	5.75%	7.25% for the first year, 6.75% for the second year, 6.25% thereafter
Administration expenses for the DB Part of the Plan:	\$1,250,000, increasing by inflation each year	\$1,200,000, increasing by 2.00% per year
Pensionable earnings increases:	4.00% in 2022, 3.50% in 2023, 3.00% in 2024 and 2.50% p.a. from 2025 onwards	2.50% for first 2 years; 3.00% thereafter
Inflation:	5.80% in 2022, 3.20% in 2023, 2.30% in 2024 and 2.00% p.a. from 2025 onwards	2.00%
Post-retirement pension increases:	5.64% in 2022, 3.20% in 2023, 2.30% in 2024 and 2.00% p.a. from 2025 onwards	2.00%
Mortality improvement rates	Fully generational using Scale MP-2021	Fully generational using Scale MP-2019

A summary of the valuation methods and assumptions is provided in Appendix C.

Subsequent Events

After checking with representatives of the Board, to the best of our knowledge, there have been no events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation as at January 1, 2022.

However, since the valuation date, there have been significant fluctuations in the financial markets including declines in equity values, higher fixed income yields and an increase in actual and expected short-term inflation, which may have led to a variation in the funded position of the Plan after the valuation date. Our baseline valuation reflects the financial position of the Plan as of this valuation date and does not take into account any subsequent experience after the valuation date.

Section 4

Valuation results

Financial status

This valuation compares the relationship between the value of Plan assets and the present value of expected future benefit cash flows in respect of accrued service, assuming the Plan will be maintained indefinitely.

The results of the current valuation, compared with those from the previous valuation, are summarized as follow:

(\$000)	01.01.2022	01.01.2020
Ultimate discount rate	5.75%	6.25%
Assets		
Market value of assets – DB	\$592,699	\$439,872
Market value of assets – DC	\$525,551	\$396,816
Net assets available for benefits	\$1,118,250	\$836,688
Funding target		
• Active members	\$248,926	\$232,074
• Pensioners and survivors	\$413,094	\$349,523
• Deferred pensioners	\$29,596	\$25,633
Total DB Liabilities	\$691,616	\$607,230
DC Account Balances	\$525,551	\$396,816
Deferred investment gain not reflected in DC accounts	\$31,901	\$28,914
Total liability (DB + DC)	\$1,249,068	\$1,032,960
Surplus / (Deficiency)	(\$130,818)	(\$196,272)
Total Funded Ratio (DB + DC)	90%	81%
DB Funded Ratio (excluding deferred gains)	86%	72%
• Including deferred gains	82%	69%

The funding target is based on best-estimate assumptions and does not include a provision for adverse deviations. The notional split of the funded position by sponsoring employer is shown in Appendix A.

Reconciliation of Financial Status (\$000)

The reconciliation of the funded position of the Plan from the prior valuation as at January 1, 2020 to January 1, 2022 is shown below.

Surplus / (Deficiency) as at previous valuation	(\$196,272)
Interest on funding surplus (deficiency) at 7.25% for first year and 6.75% for the second year	(\$28,439)
Employer's contributions to fund the deficiency	\$38,723
Expected surplus / (deficiency)	(\$185,988)
Net experience gains (losses)	
• Net investment return greater than previous valuation interest rate (adjusted for DC accounts deferred gains)	\$83,427
• Increases in pensionable earnings	\$12,738
• Indexation	(\$902)
• Mortality	\$1,873
• Retirement	\$3,051
• Termination	\$831
Total experience gains (losses)	\$101,018
Impact of changes in assumptions	
• Discount rate	(\$41,332)
• Future mortality improvement rates	\$2,198
• Inflation	(\$15,915)
Total assumption change impact	(\$55,049)
Net impact of other elements of gains and losses	\$9,201
Surplus / (Deficiency) as at current valuation	(\$130,818)

Normal cost

The normal cost is an estimate of the present value of the additional expected future benefit cash flows in respect of pensionable service that will accrue after the valuation date, assuming the Plan will be maintained indefinitely.

The normal cost during the year following the valuation date, compared with the corresponding value determined in the previous valuation, is as follows:

(\$000)	01.01.2022	01.01.2020
Discount rate (ultimate rate)	5.75%	6.25%
Defined Contribution (DC) Part of the Plan		
Employee contribution (% of DC payroll)	6.0%	6.0%
Employer required contributions (% of DC payroll)	6.4%	6.4%
Estimated employee DC contributions	\$18,335	\$16,651
Estimated employer DC contributions	\$19,557	\$17,761
Estimated total DC contributions	\$37,892	\$34,412
Defined Benefit (DB) Part of the Plan		
Normal cost of benefits	\$8,011	\$8,033
Expense allowance	\$1,250	\$1,200
Employee required DB contributions (6% of DB payroll)	(\$2,444)	(\$2,761)
Employer DB normal cost	\$6,817	\$6,472
Employer DB cost as a % of DB payroll	16.6%	14.3%

The key factors that have caused a change in the employer's normal cost for the DB Part of the Plan since the previous valuation are summarized in the following table:

Employer's DB normal cost as at previous valuation	14.3%
Demographic changes	0.9%
Changes in expense allowance	0.1%
Changes in assumptions	1.3%
Employer's DB normal cost as at current valuation	16.6%

Discount Rate Sensitivity

As mentioned earlier, the actuarial assumptions adopted for the valuation are used to model a single scenario from a range of possibilities. To illustrate the sensitivity of the valuation results to the discount rate, one of the most significant actuarial assumptions, the following table summarizes the effect on the going concern DB liabilities and normal cost shown in this report of using a discount rate that is 1% lower than that used in the valuation.

Scenario (\$000's)	Valuation Basis	Reduce Discount Rate by 1%
Total DB liabilities	\$691,616	\$788,493
Normal cost (DB Part of the Plan)		
• Normal cost of benefits	\$8,011	\$9,568
• Expense allowance	\$1,250	\$1,250
Employee required DB contributions (6% of DB payroll)	(\$2,444)	(\$2,444)
Employer DB normal cost	\$6,817	\$8,374
Employer DB cost as % of DB payroll	16.6%	20.4%

Section 5

Contribution requirements

The Board has established an objective that the Plan be fully funded in 20 years from the valuation date. In order to achieve this objective, and based on the assumptions and methods described in this report, the employer contributions to fund the deficiency revealed by the valuation could be reduced from \$17,116,000 to \$10,840,000 per annum. However, given the major downturn in investment performance in 2022, and the higher inflation being experienced, we would recommend maintaining the deficiency contributions at the level of \$17,116,000 per annum.

Given the foregoing recommendation, estimates of the contributions that would be required in the three years following the valuation, assuming salaries increased by 4% in 2022 and 3.5% in 2023, are shown in the table below:

(\$000)	2022	2023	2024
Defined Contribution (DC) Part of the Plan			
Employee contributions	\$18,335	\$19,068	\$19,736
Employer required contributions	\$19,557	\$20,339	\$21,051
Total employer and employee contributions	\$37,892	\$39,407	\$40,787
Defined Benefit (DB) Part of the Plan			
Employee contributions	\$2,444	\$2,542	\$2,631
Employer normal cost including expense allowance	\$6,817	\$7,112	\$7,357
Employer contributions to amortization past service liability over 20 years	\$17,116	\$17,116	\$17,116
Employer required contributions	\$23,933	\$24,228	\$24,473
Total employee and employer contributions	\$26,377	\$26,770	\$27,104
Total Plan (DB + DC)			
Total employee contributions	\$20,779	\$21,610	\$22,367
Total employer required contributions	\$43,490	\$44,567	\$45,524

The breakdown of the contribution requirements by sponsoring employer is shown in Appendix A. For each sponsoring employer, the cost as a percentage of payroll will be different than the overall cost due mainly to a substantial portion of the past service cost being attributable to the Cayman Islands Government (CIG).

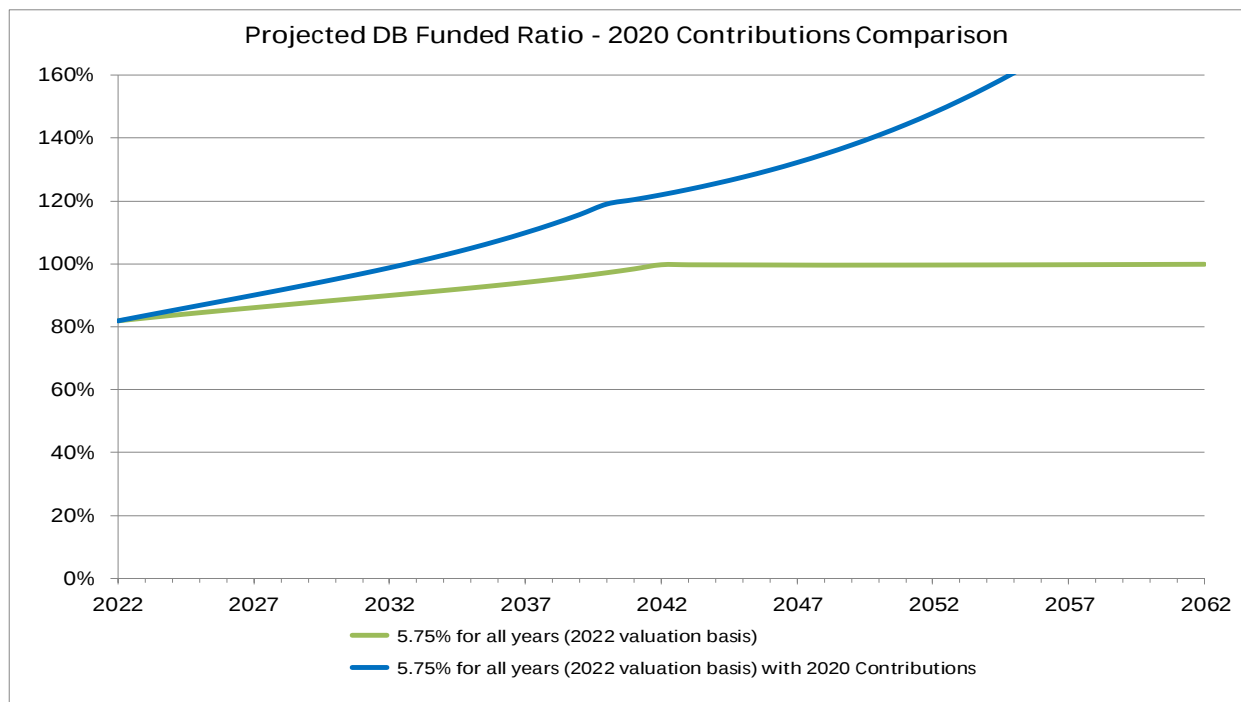
Section 6

Prescribed legislative funding

Section 12(1)(a) Test

Section 12(1)(a) of the Public Service Pensions Act requires a determination as to whether the Fund is “capable of meeting its liabilities for at least forty years at the rate or rates of contributions then in force”. The Board and its external legal counsel have advised that their interpretation is that the Section 12(1)(a) test is met if the Fund is capable paying benefits to DB members and DC members in the next 40 years without using assets in respect of DC members to pay DB benefits.

The Chart below illustrates that, given the baseline economic conditions and outlook as at the January 1, 2022 valuation date, and assuming that investment performance (in particular) and other experience would be in accordance with the January 1, 2022 valuation assumptions, the contribution recommendations in this report would satisfy the Section 12(1)(a) test.



The Chart reflects two scenarios for the contributions:

- Blue line – Contribution recommendations in this report; in particular, employer deficiency contributions are maintained at the level of \$17,116,000 per annum established in 2020
- Green line – Employer deficiency contributions are reduced to the level of \$10,840,000 per annum, as would be sufficient to fully fund the Plan in 20 years from the January 1, 2022 valuation date

Employee contributions are assumed to remain at the current level of 6% of pay, and employer normal costs are assumed to be in accordance with the contribution recommendations in this report, for both scenarios.

Scenarios in which the funded ratio of the DB Part of the Plan remains at or above 100% at least until 2062 (40 years after the valuation date) are considered to have met the Section 12(1)(a) test. It can be seen that the test would be satisfied under both scenarios, given the baseline economic conditions and outlook as at the January 1, 2022 valuation date, and the Plan funding with deficiency contributions from 2020 may even appear excessive. However, in the next section, we illustrate the impact of the major downturn in investment performance in 2022, and the updated economic conditions and outlook, which substantiates our recommendation to maintain deficiency contributions at the 2020 level.

In any event, it should be noted that actual experience will differ, potentially significantly, from the underlying assumptions, which will produce outcomes which may differ significantly from any projections. Furthermore, the funding requirements will be re-evaluated in periodic future valuations, and the contributions to the Plan would be expected to be adjusted accordingly. Consequently, the results of any projections should be interpreted with caution.

Section 7

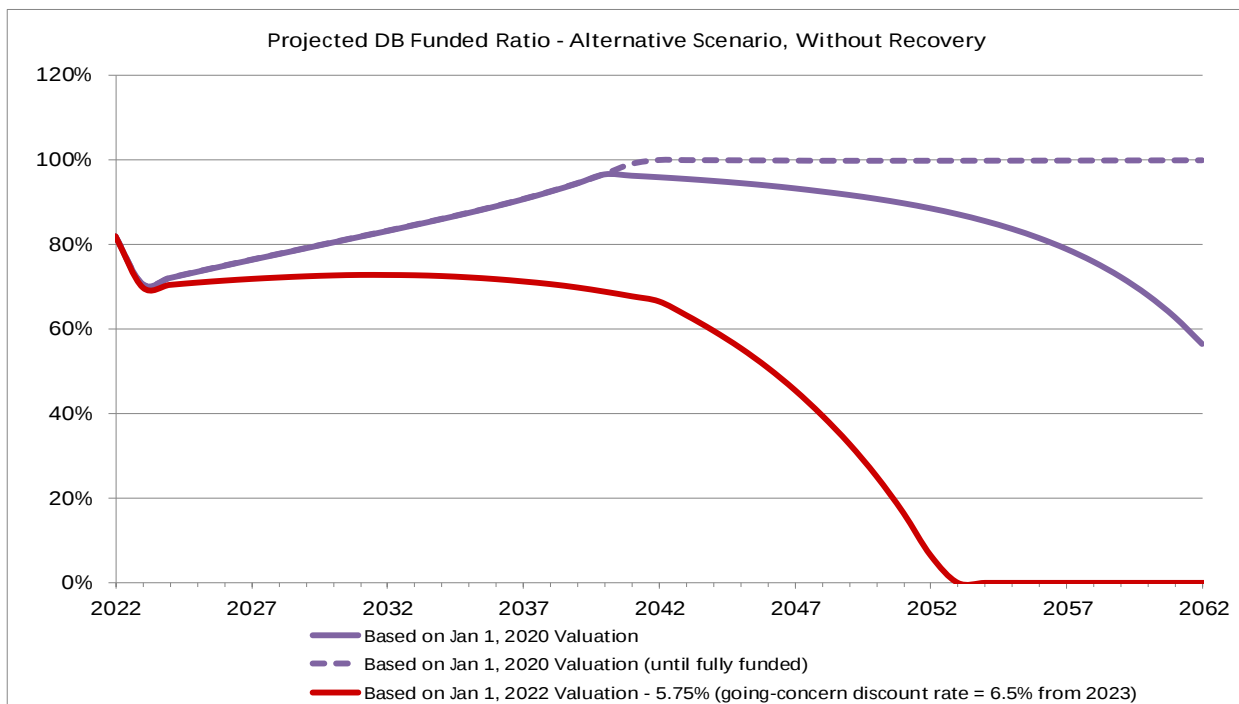
Sustainability of pension plan

To have a sustainable pension system, contributions and investment income must be able to fund benefit payments and expenses. For some periods historically, contribution levels to the Plan have been low relative to the cost of benefits that have been promised. This has placed pressure on the investments to generate sufficient returns to make up the difference.

Although the investment performance over the inter-valuation period has been very favourable, 2022 witnessed a major downturn, compounded by significant increases in actual and expected short-term inflation.

The Chart below reflects an updated economic position and outlook as follows:

- Investment returns of negative 25% are assumed for 2022, based on the Q3 2022 year-to-date investment performance – this is more of a shock scenario and is not intended to simulate actual 2022 investment performance
- Given September 30, 2022 market conditions and investment outlook, the going concern discount rate for 2023 and beyond is increased to 6.50%, or 75 basis points higher than the 5.75% discount rate as at January 1, 2022
- Investment performance for 2023 and beyond is assumed to be in line with the higher 6.50% discount rate, and other experience is assumed to be in accordance with the January 1, 2022 valuation assumptions



The Chart reflects three scenarios for the contributions:

- Red line – Employer deficiency contributions are reduced to the level of \$10,840,000 per annum
- Solid purple line – Employer deficiency contributions are maintained at the level of \$17,116,000 per annum established in 2020, and maintained for another 18 years from January 1, 2022
- Dotted purple line – Employer deficiency contributions are maintained at the level of \$17,116,000 per annum established in 2020, and maintained until the Plan becomes fully funded, which works out to approximately 20 years from January 1, 2022

Employee contributions are assumed to remain at the current level of 6% of pay, and employer normal costs are assumed to be in accordance with the contribution recommendations in this report, for all scenarios.

It can be seen that the Plan funding with reduced deficiency contributions from 2022 seems dire, whereas maintaining deficiency contributions from 2020 produces a more sustainable funded position for the Plan under these adverse conditions. As noted previously, this substantiates our recommendation to maintain deficiency contributions at the 2020 level.

Again, it should be noted that actual experience will differ, potentially significantly, from the underlying assumptions, which will produce outcomes which may differ significantly from any projections. Furthermore, the funding requirements will be re-evaluated in periodic future valuations, and the contributions to the Plan would be expected to be adjusted accordingly. Consequently, the results of any projections should be interpreted with caution.

As noted previously, the economic and demographic factors which affect the DB Part of the Plan can also affect retirement outcomes under the DC Part of the Plan. Given that the DC Part of the Plan has now been in place for almost 25 years, and will become the primary source of retirement income for new retirees, it would be prudent to assess the effectiveness of the plan design, and consider whether it is providing the desired retirement outcomes, at a reasonable level of cost and risk.

Section 8

Actuarial opinion

In our opinion, for the purposes of the valuations,

- The membership data on which the valuation is based are sufficient and reliable.
- The assumptions are appropriate.
- The methods employed in the valuation are appropriate.

This report has been prepared in accordance with our Terms of Engagement, and with our understanding of Caribbean Actuarial Association Standards of Practice – APS1 (Pension Schemes – Actuarial Valuation Reports), except that a winding-up (discontinuance) valuation has not been performed, given our Terms of Engagement.

Preliminary results of this valuation were presented to the PSPB in December 2022. Notwithstanding that this report has been finalized beyond the one-year period after the effective date of the valuation as indicated under APS1, no adverse impact would be anticipated in terms of the ability of the fund to meet its long-term liabilities.

Except as noted herein, this report has been prepared, and our opinions given, in accordance with accepted actuarial practice.



Geoffrey Melbourne

Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

March 23, 2023

Date



Christy Kam

Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

March 23, 2023

Date

Appendix A

Valuation results as at January 1, 2022 by sponsoring employer

Actuarial Position of the Defined Benefit Part

Discount rate	5.75%		
DB Part of the Plan	CIG	Statutory Authorities	Total
Summary of Membership Data			
• Number of actives	499	130	629
• Number of pensioners	2,343	0	2,343
• Number of deferred	250	67	317
Market Value of Assets (\$000)	533,764	58,935	592,699
Accrued Liability (\$000)			
• Active members	208,743	40,183	248,926
• Pensioners and survivors	413,094	0	413,094
• Deferred pensioners	20,812	8,784	29,596
Total DB Liabilities (excluding deferred gains)	642,649	48,967	691,616
Deferred investment gain not reflected in DC accounts	31,901	0	31,901
Total Liabilities	674,550	48,967	723,517
Surplus / (Deficiency)	(140,786)	9,968	(130,818)
DB Funded Ratio (excluding deferred gains)	83%	120%	86%
• Including deferred gains	79%	120%	82%

Actuarial Position of the DB Plan as at January 1, 2022 Results

Split by Sponsoring Employer (\$000)

At retirement from a Statutory Authority, the obligation and an actuarial equivalent amount of assets is transferred to CIG. Those authorities with negative assets shown below still owe an amount to the Plan in respect of the retirees' liabilities that have been transferred to CIG.

Sponsoring Employer	Allocated Funds	Deferred investment gain not reflected in DC accounts	DB Liabilities (excluding deferred gains)	Surplus/ (Deficiency)	DB Funded Ratio (including deferred gains)
Cayman Islands Airports Authority	6,610		9,379	(2,769)	70%
Civil Aviation Authority	5,609		3,658	1,951	153%
University College of Cayman Islands	(1,729)		60	(1,789)	N/A
CAYS Foundation	97		19	78	511%
CINICO	250		145	105	172%
Health Services Authority	15,259		14,794	465	103%
National Housing Development Trust	146		0	146	N/A
Utility Regulation and Competition Office	570		210	360	271%
Cayman Islands Monetary Authority	15,344		8,378	6,966	183%
Public Service Pensions Board	2,419		1,469	950	165%
National Roads Authority	5,905		4,252	1,653	139%
Maritime Authority of Cayman Islands	4,762		2,638	2,124	181%
Cayman Turtle Conservation and Education Centre LTD.	1,969		1,280	689	154%
Water Authority	1,724		2,685	(961)	64%
CIG	533,764	31,901	642,649	(140,786)	79%
Total	592,699	31,901	691,616	(130,818)	82%

Contribution Requirements as at January 1, 2022 – DB

Results by Sponsoring Employer (\$000 where applicable) – Discount rate of 5.75%

Sponsoring Employer	Total Annual Pensionable Pay	Surplus/ (Deficiency)	Normal Cost of Benefits	Normal Cost as % of Pay ¹	Deficiency Amortization Payments ²	Expenses	Total Cost
Cayman Islands Airports Authority	1,181	(2,769)	216	18.3%	229	0	445
Civil Aviation Authority	337	1,951	61	18.1%	N/A	0	61
University College of Cayman Islands	0	(1,789)	0	N/A	148	0	148
CAYS Foundation	0	78	0	N/A	N/A	0	0
CINICO	0	105	0	N/A	N/A	0	0
Health Services Authority	3,419	465	670	19.6%	N/A	0	670
National Housing Development Trust	0	146	0	N/A	N/A	0	0
Utility Regulation and Competition Office	264	360	43	16.3%	N/A	0	43
Cayman Islands Monetary Authority	1,356	6,966	273	20.1%	N/A	0	273
Public Service Pensions Board	194	950	43	22.2%	N/A	0	43
National Roads Authority	1,119	1,653	210	18.8%	N/A	0	210
Maritime Authority of Cayman Islands	1,019	2,124	209	20.5%	N/A	0	209
Cayman Turtle Conservation and Education Centre LTD.	165	689	35	21.2%	N/A	0	35
Water Authority	196	(961)	40	20.4%	80	0	120
CIG	31,727	(140,786)	6,211	19.6%	16,659	1,250	24,120
Plan*	40,977	(130,818)	8,011	19.5%	17,116	1,250	26,377

¹ Includes employee contributions of 6% of pay

² Amortization payments have been attributed for only sponsoring employers with a deemed deficiency – for employers other than CIG, this reflects 20-year amortization using 5.75% valuation discount rate – for CIG, this reflects the balance such that the total amortization equals the amount of \$17,116,000 recommended in this report

Appendix B

Plan assets

The assets of the Defined Benefit Part and the Defined Contribution Part of the Plan are commingled and held as a part of the Public Service Pension Fund (“the Fund”) and managed by the PSPB. The assets of two other pension plans, the Parliamentary Pensions Plan and the Judicial Pension Plan, are pooled together to constitute the Fund.

The assets are notionally allocated to each of the three participating pension plans through an internal accounting mechanism that tracks, for each accounting period, actual cash flows and allocates investment income and expenses in proportion to the opening value of assets allocated. Similar internal accounting is used for developing each sponsoring employer’s share of the Fund.

The valuations are based on the asset information provided to us by PSPB. The Fund assets are held in trust by CIBC Mellon. We have relied on the data provided to us by PSPB without further audit. Customarily, this information would not be verified by a plan’s actuary. To the extent that the data provided changes, the results herein may also change.

Reconciliation of Market Value of Fund

The pension fund transactions since the last valuation are summarized in the following table:

	2020	2021
January 1	\$858,485,208	\$997,630,385
PLUS		
Member contributions	\$19,255,261	\$20,442,856
Employer contributions	\$39,730,622	\$48,097,069
Investment earnings	\$134,368,682	\$130,936,264
	\$193,354,565	\$199,476,189
LESS		
Benefits paid	\$40,279,920	\$38,388,104
Administration and investment fees	\$13,929,468	\$14,721,636
	\$54,209,388	\$53,109,740
December 31 (excluding in-transits)	\$997,630,385	\$1,143,996,834
Gross rate of return ¹	15.61%	13.02%
Rate of return net of expenses ²	13.88%	11.48%

¹ Assuming mid-period cash flows

² Assuming mid-period cash flows

The market value of assets shown in the above table is adjusted to reflect in-transit amounts as follows:

	Current Valuation	Previous Valuation
Market value of invested assets	\$1,143,996,834	\$853,603,395
In-transit amounts		
• Members' contributions	\$0	\$0
• Employer's contributions	\$0	\$4,881,813
• Expenses	(\$0)	(\$0)
• Benefit payments	(\$0)	(\$0)
Market value of assets adjusted for in-transit amounts	\$1,143,996,834	\$858,485,208

The notional asset value allocated to the Plan as at December 31, 2021 was \$1,118,249,831. The table below shows the reconciliation of the market value of invested assets allocated to the Plan. In determining the notional assets allocated to the Plan as at December 31, 2021, we started with the asset value disclosed in the prior valuation report as at January 1, 2020 and adjusted for the Plan's cash flows and allocated investment income based on the investment returns earned by the Fund over the two-year period.

	2020	2021
January 1	\$836,687,245	\$973,438,233
PLUS		
Member contributions	\$18,830,826	\$20,080,808
Employer contributions	\$38,036,372	\$46,114,098
Investment earnings	\$131,039,346	\$127,883,050
	\$187,906,544	\$194,077,956
LESS		
Benefits paid	\$37,579,774	\$34,901,716
Administration and investment fees	\$13,575,782	\$14,364,642
	\$51,155,556	\$49,266,358
December 31	\$973,438,233	\$1,118,249,831
Gross rate of return ¹	15.61%	13.02%
Rate of return net of expenses ²	13.88%	11.48%

¹ Assuming mid-period cash flows

² Assuming mid-period cash flows

The market value of assets shown in the above table is adjusted to reflect in-transit amounts as follows:

	Current Valuation	Previous Valuation
Market value of invested assets	\$1,118,249,831	\$831,445,599
Funds reallocated from Parliamentary Plan	\$0	\$359,833
In-transit amounts		
• Members' contributions	\$0	\$0
• Employer's contributions	\$0	\$4,881,813*
• Expenses	(\$0)	(\$0)
• Benefit payments	(\$0)	(\$0)
Market value of assets adjusted for in-transit amounts	\$1,118,249,831	\$836,687,245

* We understand that the amount was remitted on December 31, 2019, but credited to the fund in January 2020

The DC asset value at each year-end is equal to the accumulated account balance with interest at each year end in respect of the DC members. The DC asset value of the Plan as at January 1, 2022 is determined to be \$525,551,000 based on the DC account balances provided by PSPB.

The DB asset value of the Plan as at January 1, 2022 is \$592,699,000.

Investment Policy

The PSPB has adopted a statement of investment policy and procedures. This policy is intended to provide guidelines for the managers as to the level of risk that is consistent with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The PSPB is solely responsible for selecting the plan's investment policies, asset allocations, and individual investments. The fund has adopted an investment model favouring growth over yield, which imposes a high degree of equity market risk, with which we understand that the PSPB is comfortable. Mercer is unable to opine on the appropriateness of the investment policy.

The investment policy was updated August 15, 2019. The target asset mix and the actual asset mix at the valuation date are provided for information purposes:

	Investment policy			Actual asset mix as at January 1, 2022
	Minimum	Target	Maximum	
Global Equities	55%	80%	85%	82%
Global Fixed Income	15%	20%	45%	17%
Cash and cash equivalents	0%	0%	10%	1%
	100%			100%

Appendix C

Methods and assumptions – Going concern

Valuation of Assets

For this valuation, we have used the market value of assets.

Going Concern Funding Target

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going concern valuation, we have continued to use the projected unit credit actuarial cost method. Under this method, we determine the present value of benefit cash flows expected to be paid in respect of service accrued prior to the valuation date, based on projected final average earnings. This is referred to as the funding target.

The funding excess or funding shortfall, as the case may be, is the difference between the market value of assets (smoothing is not currently employed) and the funding target. A funding excess on a market value basis indicates that the current market value of assets and expected investment earnings are expected to be sufficient to meet the cash flows in respect of benefits accrued to the valuation date as well as expected expenses – assuming the plan is maintained indefinitely. A funding shortfall on a market value basis indicates the opposite – that the current market value of the assets is not expected to be sufficient to meet the plan's cash flow requirements in respect of accrued benefits, absent additional contributions.

The actuarial cost method used for the purposes of this valuation produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial cost method provides an effective funding target for a plan that is maintained indefinitely.

Normal cost

The normal cost is the present value of projected benefits to be paid under the plan with respect to service expected to accrue during the period until the next valuation.

The employer's normal cost is the total normal cost reduced by the members' required contributions. The employer's normal cost has been expressed as a percentage of the members' pensionable earnings to provide an automatic adjustment in the event of fluctuations in membership and/or pensionable earnings.

Under the projected unit credit actuarial cost method, the normal cost for an individual member will increase each year as the member approaches retirement. However, the normal cost of the entire group, expressed as a percentage of the members' pensionable earnings, can be expected to remain stable as long as the average age of the group remains constant.

Actuarial Assumptions – Going Concern Basis

The present value of future benefit payment cash flows is based on economic and demographic assumptions. At each valuation, we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them, if necessary. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations.

The table below shows the various assumptions used in the current valuation in comparison with those used in the previous valuation.

Assumption	Current valuation	Previous valuation
Discount rate:	5.75%	7.25% for the first year, 6.75% for the second year, 6.25% thereafter
Explicit expenses in respect of the DB Part of the Plan:	\$1,250,000, increasing by inflation per year	\$1,200,000, increasing by 2.00% per year
Inflation:	5.80% in 2022, 3.20% in 2023, 2.30% in 2024 and 2.00% p.a. from 2025 onwards	2.00%
Pensionable earnings increases:	4.00% in 2022, 3.50% in 2023, 3.00% in 2024 and 2.50% p.a. from 2025 onwards	2.50% for first two years; 3.00% thereafter
Post-retirement pension increases:	5.64% in 2022, 3.20% in 2023, 2.30% in 2024 and 2.00% p.a. from 2025 onwards	2.00%
Retirement rates:	Age-related table	Age-related table
Termination rates:	Age-related table	Age-related table
Election for 25% commutation of pension:	100% election	100% election
Mortality rates:	100% of the rates of the RP-2014 Mortality Table	100% of the rates of the RP-2014 Mortality Table
Mortality improvements:	Fully generational using Scale MP-2021	Fully generational using Scale MP-2019
Disability rates:	None	None
Eligible spouse at retirement:	80%	80%
Spousal age difference:	Male 3 years older	Male 3 years older
Dependent children:	Pre Ret: Male 65% Female 20% Post Ret: Male 5% Female 0%	Pre Ret: Male 65% Female 20% Post Ret: Male 5% Female 0%
DC Annuity Conversions:	Assumed to be cost neutral; liabilities recognized once members retires	Assumed to be cost neutral; liabilities recognized once members retires
Cost of DC death benefit	0.4% of DC payroll	0.4% of DC payroll

The assumptions are best-estimates and do not include a margin for adverse deviations.

Age Related Tables

Sample rates from the age related tables are summarized in the following table:

Age	Termination – Male	Termination – Female	Retirement
20	7.50%	12.50%	0.00%
25	5.00%	12.50%	0.00%
30	3.50%	7.50%	0.00%
35	2.50%	4.50%	0.00%
40	1.50%	2.50%	0.00%
45	0.50%	0.50%	0.00%
50	0.00%	0.00%	0.00%
55 to 59	0.00%	0.00%	8.00%
60 to 64	0.00%	0.00%	15.00%
65	0.00%	0.00%	100.00%

Pensionable Earnings

The benefits ultimately paid will depend on each member's final earnings. To calculate the pension benefits payable upon retirement, death, or termination of employment, we have taken monthly earnings and assumed that such pensionable earnings will increase at the assumed rate.

Rationale for Assumptions

A rationale for each of the assumptions used in the current valuation is provided below.

Discount Rate

We have discounted the expected benefit payment cash flows using the expected investment return on the market value of the fund. Other bases for discounting the expected benefit payment cash flows may be appropriate, particularly for purposes other than those specifically identified in this valuation report.

The discount rate is comprised of the following:

- Estimated returns for each major asset class consistent with market conditions on the valuation date and the target asset mix specified in the Plan's investment policy
- 50 basis point net allowance for added value from active management, reflecting gross added value of 110 basis points, offset by 60 basis points of incremental fees
- Implicit provision for investment expenses determined as the average rate of investment expenses paid from the fund over the last 4 years

The discount rate was developed as follows:

Assumed investment return	5.35%
Investment expense	(0.70%)
Added value from manager selection	0.60%
Margin for adverse deviation	0.00%
Net discount rate (assuming added value from manager selection equal to incremental cost of active management over passive management)	5.25%
Additional allowance for added value from manager selection	0.50%
Net discount rate	5.75%

Expenses

\$1,250,000 - Represents portion of overall fund non-investment expenses (determined over 4-year period, and excluding implementation costs for new administration system) allocated to the DB Part of the Plan, pro-rated having regard to active member headcount.

Inflation

This assumption is based on the outlook from the Government's Economics and Statistics Office for 2022 to 2024, and US inflation target and market expectation of long-term inflation implied by the yield captured in U.S. Treasury prices at the valuation date.

Pensionable Earnings

For the 2022 to 2024 period, this assumption reflects the outlook from the Portfolio of the Civil Service (PoCS) and the Finance Ministry. Over the longer term, this assumption reflects the underlying inflation assumption plus the Board's best estimate assumption of general salary growth, merit and promotional increases of 0.5% per annum.

Post-Retirement Pension Increases

The assumption is based on the Plan formula and inflation assumption above.

Retirement Rates

The plan experience study conducted in 2017 based on 2011 to 2016 data, was updated in 2020. This was to take into account the observable experience in the last 3 years following the change in the normal retirement age from 60 to 65.

Termination Rates

The assumption is based on a table that is consistent with our experience with similar plans and employee groups. Recent experience has been consistent with the assumptions.

Mortality Rates

The assumption for the mortality rates is based on the U.S. 2014 Retirement Plans' Mortality Table (RP- 2014).

There is broad consensus amongst longevity experts that mortality improvement will continue in the future. For the current valuation, the future mortality improvement scale has been updated to Scale MP-2021 from MP-2019, as the best estimate assumption for use in valuing retirement liabilities. The long-term implications of the pandemic on mortality rates is unclear as at the date of this report. Credible plan specific experience and relevant broader observed mortality trends after the report date will be reflected in future valuations.

Disability Rates

Use of a different assumption would not have a material impact on the valuation.

Spousal Statistics

The assumption is based on an industry standard for non-retired members. Actual status/age used for retirees.

Appendix D

Membership data

Analysis of Membership Data

The actuarial valuation is based on membership data as at January 1, 2022, provided by PSPB.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, credited service, contributions accumulated with interest, and pensions to retirees and other members entitled to a deferred pension. Contributions, lump sum payments, and pensions to retirees were compared with corresponding amounts reported in financial statements. PSPB was queried in order to resolve inconsistent data elements. The PSPB provided confirmation that the final data, incorporating query responses, was appropriate for the purpose of the valuations.

If the data supplied are not sufficient and reliable for its intended purpose, the results of our calculation may differ significantly from the results that would be obtained with such data. Although Mercer has reviewed the suitability of the data for its intended use in accordance with accepted actuarial practice in Canada, Mercer has not verified or audited any of the data or information provided.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

	01.01.2022	01.01.2020
Active Members - DB		
Number	629	707
Total annual payroll (\$000)	\$40,977	\$45,115
Average years of pensionable service	27.73	26.55
Average age	52.10	50.38
Active Members – DC		
Number	5,590	6,196
Total annual payroll (\$000)	\$305,579 ¹	\$277,520
Total account balance (\$000)	\$447,642	\$358,519
Average age	42.85	43.72
Deferred Pensioners – DB		
Number	317	434
Total annual deferred pension (\$000)	\$2,604	\$2,753

¹ Active members' DC annual payroll for 2022 was estimated based on a gross-up and projection of the 2021 employer DC contributions.

	01.01.2022	01.01.2020
Average age	50.75	49.09
Deferred Pensioners – DC		
Number	2,917	1,564
Total account balance (\$000)	\$77,909	\$38,297
Average age	42.85	44.09
Pensioners and Survivors		
Number	2,343	2,155
Total annual pension (\$000)	\$28,365	\$25,983
Average age	66.73	66.00

The membership movement for all categories of membership since the previous actuarial valuation is as follows:

	Active DB	Active DC	Deferred DB	Deferred DC	Retirees	Beneficiaries	Total
Jan. 1, 2020	707	6,196	434	1,564	1,890	265	11,056
New Entrants		1,629					1,629
Rehires	1	49	(1)	(45)	(4)		0
Terminations							
Cashed/Transferred	(4)	(188)	(108)	(80)			(380)
Deferred Pension	(22)	(1,657)	22	1,657			0
Deaths	(7)	(10)	(4)	(1)	(70)	(18)	(110)
Benefit Expired						(17)	(17)
New Beneficiaries						48	48
Retirements	(46)	(140)	(24)	(8)	218		37
Retirements – DC Cash-out					(7)		(7)
Data Corrections		(289)	(2)	(170)	40	(2)	(423)
Jan. 1, 2022	629	5,590	317	2,917	2,067	276	11,796

The distribution of the active members of the DB Part of the Plan by age and pensionable service as at 01.01.2022 is summarized as follows:

Age	Years of Pensionable Service						Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 +
35 to 39							
40 to 44				13	59	6	78
45 to 49			1	8	83	51	26
50 to 54			1	6	43	49	86
55 to 59			1	1	24	23	71
60 to 64				1	20	21	35
Total			3	29	229	150	218

The distribution of the deferred members of the DB Part of the Plan by age as at the valuation date is summarized as follows:

Deferred Pensioners		
Age	Number	Average Pension
30 – 34	0	\$0
35 – 39	3	\$1,827
40 – 44	67	\$4,653
45 – 49	102	\$6,894
50 – 54	71	\$10,750
55 – 59	43	\$10,939
60 – 64	21	\$13,267
65 and over	10	\$7,144
Total	317	\$8,215

The distribution of the pensioners and survivors by age as at the valuation date is summarized as follows:

Pensioners and Survivors		
Age	Number	Average Pension
Under 20	22	\$6,756
20 – 24	5	\$3,439
25 – 29		
30 – 34	2	\$6,825
35 – 39	7	\$3,097
40 – 44	26	\$4,774
45 – 49	44	\$6,482
50 – 54	123	\$9,943
55 – 59	235	\$12,019
60 – 64	339	\$14,758
65 – 69	706	\$11,500
70 – 74	431	\$12,697
75 – 79	228	\$12,888
80 – 84	91	\$11,118
85 – 89	57	\$13,433
90 – 94	20	\$15,449
95 and over	7	\$12,493
Total	2,343	\$12,106

Active DB Participant Data by Sponsoring Employer

Active Participants				
Sponsoring Employer	Count	Total Annual Payroll (\$000)	Average Age	Average Service
Cayman Islands Airports Authority	18	1,181	52.21	27.81
Civil Aviation Authority	3	337	46.71	26.23
University College of Cayman Islands				
CAYS Foundation				
CINICO				
Cayman Islands Development Bank				
Health Services Authority	57	3,419	52.43	26.68
National Housing Development Trust				
Utility Regulation and Competition Office	3	264	43.07	20.83
Cayman Islands Monetary Authority	11	1,356	49.82	25.27
Public Service Pensions Board	1	*	57.41	36.50
National Roads Authority	20	1,119	50.77	29.36
Maritime Authority of Cayman Islands	9	1,019	52.41	28.30
Cayman Turtle Conservation and Education Centre LTD.	5	165	55.02	24.81
Water Authority	3	196	51.73	27.34
CIG	499	31,727	52.21	27.89
Total	629	\$40,977	52.10	27.73

*Data not disclosed to preserve privacy

Note: Of the 629 active members above, 152 (145 unique members) have service with multiple sponsoring employers. See Transferred Participants on next page for breakdown of service with other employers.

Transferred Participants				
Sponsoring Employer	Count	Total Annual Payroll (\$000)	Average Age	Average Service
Cayman Islands Airports Authority	11	827	48.40	29.01
Civil Aviation Authority	1	*	44.42	22.18
University College of Cayman Islands				
CAYS Foundation				
CINICO				
Cayman Islands Development Bank				
Health Services Authority	19	1,187	50.66	24.08
National Housing Development Trust				
Utility Regulation and Competition Office				
Cayman Islands Monetary Authority	2	242	46.79	20.47
Public Service Pensions Board	4	447	48.18	26.09
National Roads Authority				
Maritime Authority of Cayman Islands	1	*	50.52	14.45
Cayman Turtle Conservation and Education Centre LTD.	2	153	48.26	29.02
Water Authority	3	140	54.17	20.53
CIG	109	7,678	51.97	27.26
Total	152	\$10,856	51.32	26.64

*Data not disclosed to preserve privacy

Note: The above table consists of 145 unique members, but since several of these members have service periods with more than 2 employers they are counted more than once.

Active DC Participant Data by Sponsoring Employer

Participating Employers	Count	Salary (\$000)	Total Account Balance (\$000)	Age
Cayman Islands Airports Authority	172	8,160	13,344	42.36
Queen Elizabeth II Botanic Park	12	556	358	47.70
Civil Aviation Authority	7	632	1,149	45.63
CAYS Foundation	44	2,037	2,871	45.01
CINICO	2	151	318	60.40
Cayman Islands Development Bank	14	1,038	1,860	50.53
Health Services Authority	941	59,075	78,171	44.06
Cayman Islands Monetary Authority	192	15,807	15,334	41.80
Utility Regulation and Competition Office	19	1,417	1,837	47.67
Public Service Pensions Board	20	1,621	3,506	47.59
Pedro St. James	11	315	132	49.73
National Roads Authority	85	2,181	5,940	48.05
Cayman Islands Stock Exchange	8	1,013	504	47.51
Maritime Authority	5	433	915	45.78
Tourism Attraction Board	5	277	229	45.38
Cayman Turtle Centre	79	3,453	4,676	43.05
CIG	3,974	207,413	316,498	42.36
Total	5,590	\$305,579	\$447,642	42.85

*Data not disclosed to preserve privacy

Deferred DB participant data by sponsoring employer

Sponsoring Employer at Termination	Number	Annual Deferred Pension
Cayman Islands Airports Authority	5	123,861
Civil Aviation Authority	3	167,926
University College of Cayman Islands	1	*
CAYS Foundation	1	*
CINICO	1	*
Cayman Islands Development Bank		
Health Services Authority	19	177,795
National Housing Development Trust		
Utility Regulation and Competition Office		
Cayman Islands Monetary Authority	15	236,015
Public Service Pensions Board		
National Roads Authority	7	84,442
Maritime Authority of Cayman Islands		
Cayman Turtle Conservation and Education Centre LTD.	4	31,218
Water Authority	11	97,225
CIG	250	1,645,272
Total	317	\$2,604,024

*Data not disclosed to preserve privacy

Appendix E

Principal provisions of the defined benefit part of the public service pension plan

Eligibility:	Public service employees are immediately eligible for participation in the Plan – DB Part of the Plan is closed.
Pensionable Service:	Continuous service from date of hire.
Pensionable Earnings:	Pensionable Earnings include monthly basic salary, acting allowances, and duty allowances.
	The retirement pension computation is generally based on the monthly Pensionable Earnings at the time of retirement, unless there are transfers from one office to another, in which case the computation may be based on one-third of the aggregate pensionable earnings during the final three years.
Employee Contributions:	6% of Pensionable Earnings.
Eligibility for Retirement Pension:	Generally, on or after attaining age 50 and completing 10 years of service. There are special cases under which these conditions may be relaxed.
Retirement benefits:	
a. Pension at Retirement	A monthly pension equal to $\frac{1}{720}$ times the number of completed months of pensionable service times the final month's Pensionable Earnings. For officers first appointed to a pensionable office prior to July 10, 1980, the monthly pension is computed as $\frac{1}{600}$ times the number of completed months of pensionable service times the final month's Pensionable Earnings. The pension cannot exceed two-thirds of the highest Pensionable Earnings received during the officer's service.

b. Commutation	Up to $\frac{1}{4}$ of the retirement pension can be commuted for a lump sum. The pension to lump sum conversions will be determined by the plan's actuarial factors.
c. Pension Increases	Pensions in payment may be increased, once a year. The Pensions Law calls for these pension increases to match annual cost-of-living increases up to 5% and on a sliding scale thereafter.
d. Early Retirement	Early retirement reduction factors apply to retirement pensions prior to completion of age 55 and 10 years of service. For deferred vested participants, early retirement reduction factors apply for pension commencement prior to age 60. Police officers are allowed to retire with full benefits after completing 21 years of service.
Benefits on Death After Retirement or While Eligible to Retire:	A spouse's pension equal to 50% of the pensioner's benefit, payable until remarriage. A dependent children's pension payable up to age 18 or age 23 (if full-time education) equal to 50% of the pension received by the participant, divided by the number of dependent children. These amounts are doubled if there is no spouse.
Benefits on Disablement:	A pension based on accrued normal retirement pension is payable upon receipt of medical evidence of permanent disability and incapacity to perform duties. In addition, a pension is payable to an officer who is permanently injured in discharge of duty and who is not entitled to compensation under any Workmen's Compensation Law. The amount of the pension depends on the extent of disablement.

**Benefits on Death in
Service:**

A spouse's pension equal to 50% of the member's pension accrued as of the date of death, based on pay and service at the date of death. An additional equivalent amount is divided equally among any children under the age of 18 or 23 (if in full-time education).

In addition, there will be paid an amount equal to the excess, if any, of the greater of:

a lump sum equal to 12 month' Pensionable Earnings
the participant's contribution account balance

over the actuarially equivalent present value of the pension benefits payable to the beneficiaries.

An additional pension is paid to the beneficiaries of participants killed as a result of injuries received while in the actual discharge of duty.

Termination Benefits:

An employee who terminates his employment can expect to receive a pension commencing at age 60, based on benefits accrued at the time of termination or alternatively to receive the participant contribution account balance. The pension has the same features of commutation, post-retirement death benefit, and post-retirement pension increases as for active employees eligible for retirement benefits.

Other Benefits (Not Valued):

Supplementary pensions on abolition of office and re-organization.

Appendix F

Employer certification

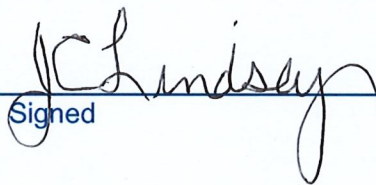
With respect to the Report on the Actuarial Valuation for Funding Purposes as at January 1, 2022 of the Public Service Pensions Plan, I hereby certify that, to the best of my knowledge and belief:

- The valuation reflects the terms of the Board's engagement with the actuary described in section 3 of this report.
- A copy of the official plan documents and of all amendments made up to January 1, 2022 was provided to the actuary and is reflected appropriately in the summary of plan provisions contained herein.
- The asset information summarized in Appendix B is reflective of the Plan's assets.
- The membership data provided to the actuary included a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to January 1, 2022 and are appropriate for purposes of the valuation.
- All events subsequent to January 1, 2022 that may have an impact on the Plan have been communicated to the actuary.

March 14, 2023

Date

Signed



Jewel Evans Lindsey

Name



Mercer (Canada) Limited

120 Bremner Boulevard, Suite 800

Toronto, ON M5J 0A8

+1 416 868 2000

www.mercer.ca

Copyright © 2023 Mercer (Canada) Limited. All rights reserved.