

Anguilla Social Security Board

12th Actuarial Review of the Social Security Fund as of December 31, 2020

November 12, 2021

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Abbreviations and Acronyms

ASSB Anguilla Social Security Board

GDP Gross Domestic Product
GoA Government of Anguilla

ECCB Eastern Caribbean Central Bank

IW Insurable Wages (sometimes "Insurable Earnings" used)

ILO International Labour Office
IPS Investment Policy Statement

ISSA International Social Security Association

LTB Long-term Benefits

SS Social Security

SSF Social Security Fund
SSB Social Security Board

SSDF Social Security Development Fund

OECD Organisation for Economic Co-operation & Development

OECS Organisation for Eastern Caribbean States

STB Short-term Benefits
TFR Total Fertility Rate

UEB Unemployment Benefit



Introduction

Anguilla Social Security began operations on January 1, 1982, and covers all employed and self-employed persons for two types of social security benefits – short-term benefits and long-term benefits or pensions. The system is financed by contributions which are levied on employment earnings up to a wage ceiling and are paid by employers, employees and self-employed persons. Surplus funds that are not yet needed to pay benefits are invested locally, regionally and internationally in various types of securities and properties.

This is the report of the 12th Actuarial Review of the Social Security Fund and it is being prepared as of December 31, 2020, one year after the previous Actuarial Review. This report is being prepared for the Board.

Financial statements for 2019 and 2020 are unaudited.

The main purpose of periodic actuarial reviews is to determine if the social security system in Anguilla operates on sound financial and actuarial bases and if it provides adequate and affordable levels of income protection. Where considered necessary, recommendations aimed at ensuring that these objectives can be achieved for current and future generations are made.

For this actuarial review, 60-year demographic and financial projections have been performed. It should be noted that these projections are dependent on the underlying data, methodology and assumptions concerning uncertain future events and that the outcomes and eventual experience will most likely differ, possibly materially, from that indicated in the projections. Therefore, in accordance with Section 16 of the Social Security Act, 1980, the next actuarial review of the Social Security Fund is due as at December 31, 2023.

We wish to thank Mr. Timothy Hodge, Director, Mrs. Maglan Lewis, Deputy Director, Ms. Dorice Fleming, Financial Controller, Ms. Rosanna Brown, Public Relations & Marketing Officer, Kenvis Gumbs, IT Officer, and all other members of the Social Security staff who provided data and otherwise assisted with this review.

All dollar amounts in this report are quoted in Eastern Caribbean (EC) dollars.

November 12, 2021



Executive Summary

Social Security makes promises to former and current workers that extend beyond sixty years. It is therefore important that it is well designed, well governed and properly administered. Periodic actuarial reviews provide a comprehensive assessment of the current and projected state of the Social Security Fund. They also provide policy recommendations for changes designed to ensure that a suitable balance between benefit adequacy and financial sustainability is achieved for both current and future periods. This is the report of the 12th Actuarial Review of the Social Security Fund (SSF) and has been conducted as of December 31st 2020.

Experience During the Review Period

While the COVID-19 pandemic had far-reaching human, social and economic impacts, the effect on Social Security Fund finances was limited primarily to contribution income falling by 23% over the amount collected in 2019. This compares favourably with the estimated 32% reduction in nominal GDP. To provide income support to the hundreds of persons who became unemployed in 2020, \$5.2 million was paid in temporary unemployment benefit payments. Additional amounts were paid by the Government. Other relevant experience during 2018 to 2020 includes:

- Fund expenditure exceeded contribution income for the first time in 2019, 37 years after inception.
- While the gap between contributions and expenditure was even greater in 2020, the Fund experienced a net surplus as a portion of investment income was used to help meet expenditure.
- The number of SSB contributors exceeded 8,000 in 2018 and 2019.
- The average yield on reserves over the last three years was 3.4%.
- Administrative costs accounted for 27% of contribution income over the three years.
- Total SSF reserves available for future benefits at the end of 2020 were \$360 million.

Amendments to Social Security regulations and the Labour (Relations) Act provided for benefit increases in 2018 and the introduction of a Paternity benefit.

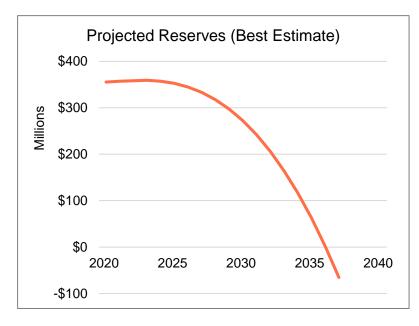
Main Findings & Projection Results

This report's assessment of SSB policy and design indicators suggests that current contribution and benefit provisions provide a good level of benefit adequacy and income protection to most workers and pensioners. Although not required, the periodic adjustment of pension amounts has been effective in replacing most of the price inflation felt by pensioners. Even though the wage ceiling has not been increased since 2008 only around 11% of insureds earn more than \$7,000 per month. While no official estimates are available, participation rates among self-employed persons and informal sector workers is felt to be low.



Over 60% of the Fund's investments is in the form of a loan to the Government of Anguilla which is being repaid through 2041. While other investments are well diversified, the overall rates of return have been low. Administrative costs are very high.

60-year projections of SSB income, expenditure and reserves, under three distinct population and economic growth scenarios, are presented in this report. Possible impacts of the pandemic have been considered in the outlook for Anguilla and the selection of assumptions for the projections. As shown in the chart below, reserves are projected to be depleted in 2037 under the *Best Estimate* scenario if the contribution rate is not increased and benefit reforms not made.



When reserves are exhausted, there will only be two possible sources of additional income to meet benefit payments:-

- (a) higher contributions, and
- (b) special transfers from government.

At the current stage of Fund finances, higher investment returns will have little material impact on overall reserves.

Projections were also made under two different sets of assumptions – one optimistic and one pessimistic. Following are key results, expressed in ranges, for the three projection sets:

- 1. Total expenditure will exceed contribution income in all years.
- 2. Total expenditure could first exceed total income in 2021 if the economic recovery is subdued, but by 2025 if the rebound to pre-COVID levels occurs more quickly.
- 3. The Fund will be depleted between 2035 and 2038.
- 4. The pay-as-you-go rate in 2037, around the time the Fund is projected to be depleted, will be between 21% and 25%.
- 5. The average long-term cost of benefits over the next 60 years, often referred to as the general average premium, is between 22% and 28%.

These results show that the Fund is not financially sustainable over the medium and long-terms at current benefit provisions and contribution rate.

Reforms that reduce promised benefits are possible. Anguilla is one of only two OECS territories that has not yet made significant reforms to its social security system aimed at enhancing long-term sustainability. While the Anguilla SSF is currently better funded than most in the OECS, the projection of surpluses soon becoming deficits, and reserves being used to fund benefits, has already occurred in other territories. As shown in this report, reforms to the Age pension, similar to those made by others, would result in a material change in future outlook without greatly affecting current and soon-to-be pensioners. Similar reforms should therefore be considered and implemented soon.



Recommendations

As Fund depletion looms, mitigating measures are required. Ideally, the burden felt by these measures should be shared by all, including those who are already in receipt of a pension. Therefore, given that inflation in recent years has been low, and the last pension increase was in 2018, no increases to pensions in payment are recommended at this time.

To ensure that measures aimed at extending the life of the Fund are well thought through, the Board should immediately prepare a Funding Policy and a Benefits Policy. At a high level, these policies will provide explicit documentation of what the SSB seeks to accomplish, what circumstances it wishes to avoid, and where objectives conflict, what takes priority. Specifically,

- The Benefits Policy should include the purpose and goals of each benefit and justification for its eligibility rules and amounts paid.
- The Funding Policy should include the minimum number of years that reserves should remain positive along with how much, and when, the contribution rate should be increased to achieve that stated goal.

The Board should also update and enhance its Risk Policy and Investment Policy.

Critical to ensuring sustainability for at least the next 25 to 30 years are a contribution rate increase and reforms to Age pension. Specific recommendations for these are:

- 1. While keeping the maximum 60% benefit rate after 40 years, revise the schedule of pension replacement rates from 30% to 20% after 10 years of contributions plus 1.3% instead of 1.0% for each year after the first 10.
- 2. Average wages over at least 5 years instead of the current 3 years.
- 3. Gradually increase the contribution rate to 12% by 4 annual adjustments of ½% each starting in 2023.

Other recommendations made in this report are:

- 4. Introduce a permanent unemployment benefit with a contribution rate of 1%.
- 5. Confirm the gaps that exists between ILO-recommended employment injury benefits and current SSB benefits and determine whether additional coverage is needed.
- 6. Implement flexible ways for self-employed persons to pay contributions without forms and without specific monthly amounts.
- 7. Improve contribution compliance through effective linkages with government departments that issue permits to businesses and self-employed persons.
- 8. Reduce administrative costs to no more than 20% of contribution income in 5 years and 15% of contribution income in 10 years.
- 9. Perform a comprehensive review of ASSIDCO to determine whether similar objectives can be achieved through direct investments by the Social Security Fund.
- 10. Share openly with the public this report, recent audited financial statements, and any plans to ensure long-term sustainability of the Social Security Fund. All reports should be placed on the SSB website.



Implementing the above recommendations will not be easy to make or for stakeholders to accept. It is therefore recommended that extensive consultations be held with stakeholders.

If major reforms are not made soon, the Social Security Fund could enter a crisis state in the next ten years where draconian measures will be required. Even if all of the recommendations made above are fully accepted and implemented by January 2023, additional contribution rate increases will be required to ensure the continued payment of benefits without government support. Policymakers should therefore not depend on "hoped-for" results but instead adopt rational responses for the specific challenges that lie ahead.

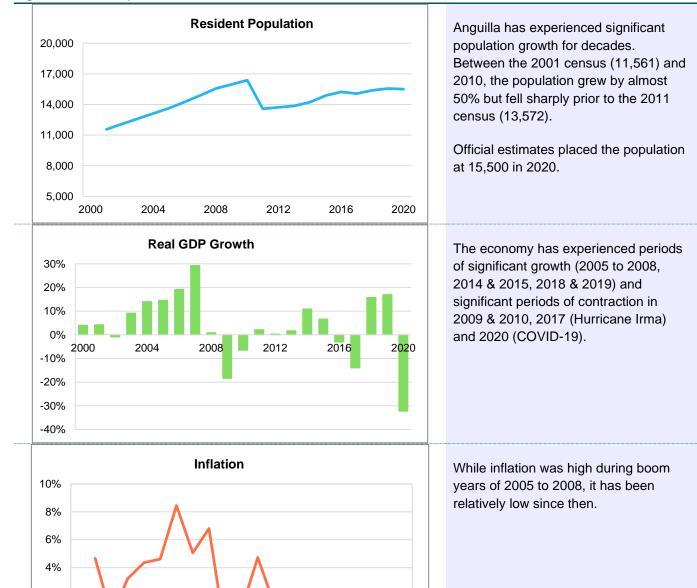


Chapter 1 Historical Experience

Social security systems do not operate in a vacuum but instead are intrinsically linked to population changes and economic fortunes. Through the use of charts this Chapter illustrates the evolution of Anguilla's population, economy and Social Security Fund demographic and financial factors.

Population & Economy 1.1

Population, GDP Growth & Inflation, 2000 to 2020 Figure 1.1.





2000

2004

2008

2012

2016

2020

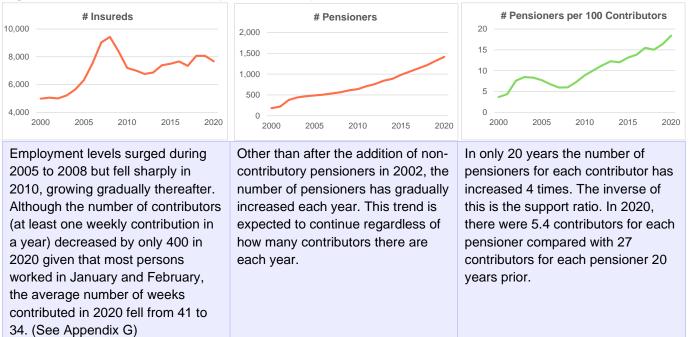
2%

-2%

1.2 Social Security Fund Experience

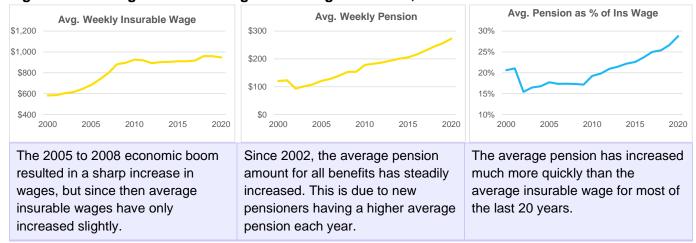
The following charts show the number of persons contributing and drawing pensions each year.

Figure 1.2. Insured Persons (Contributors) & Pensioners, 2000 to 2020



The following charts show the average insurable wages and pension amounts for those contributing and drawing pensions, respectively.

Figure 1.3. Average Insurable Wages & Average Pensions, 2000 to 2020

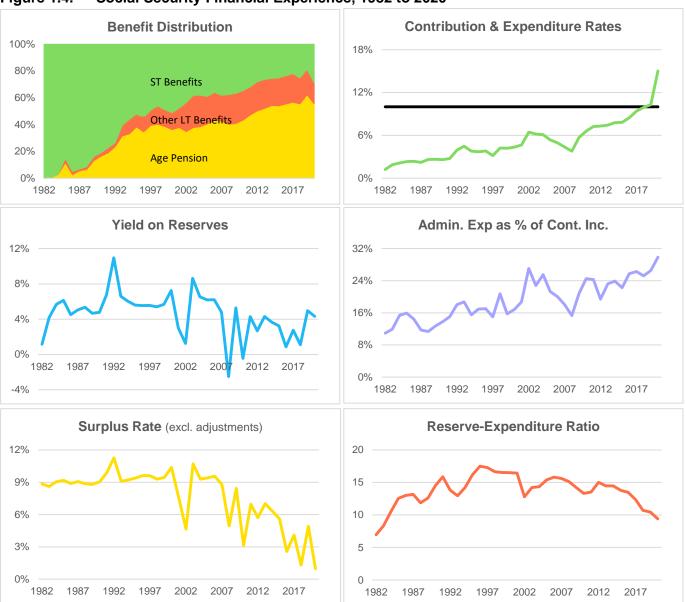


For the Social Security Fund, the COVID-19 impact was limited primarily to contribution income with fewer contributors, a reduction in the average number of weeks of contributions made and a slight reduction in average insurable wages during weeks worked. See Appendix G for further details on the impact of COVID-19 on workers.

The following six charts provide a near-complete picture of SSF experience since inception.



Figure 1.4. Social Security Financial Experience, 1982 to 2020



Once persons had enough contributions to qualify for a pension, the proportion of STB's quickly declined (top left chart) and total expenditure as a percentage of insurable wages gradually increased (top right chart). This is the typical evolution of a partially funded social security system and in 2019 total expenditure exceeded contribution income for the first time. In 2020, STB's accounted for only 20% of benefits while Age pension accounted for just over 50% of benefit expenditure.

The Fund has experienced a surplus each year since inception. However, these surpluses have been volatile and trending downwards since 2002. (lower left chart). The surplus ratio represents net cash flows relative to total insurable wages. While benefits increasing faster than contributions accounts for part of the reduction in annual surpluses, lower yields on investments (middle left chart) and growing administrative costs (middle right chart), have put downward pressure on the size of each year's surplus. The other consequence of expenditure growing faster that income from contributions and investments is expenditure growing faster than reserves leading to a declining reserve-expenditure ratio (lower right chart).



Following are values for several key indicators as of 2010, 2015 and 2020, along with a brief analysis of the changes that have occurred.

 Table 1.1.
 Social Security Performance Indicators

		2010	2015	2020	Comments
1.	Contribution Rate (net for benefits)	10.0%	10.0%	10.0%	Since 1986 when the SSDF was established, 9.625% available for benefits
2.	Expenditure Rate	6.6%	7.8%	15.0%	Increasing as expected
3.	Benefits as % of GDP	1.3%	1.7%	4.1%	Increasing as expected
4.	Reserve-Expenditure Ratio	13.3	13.8	9.4	Decreasing as expected
5.	3-year average nominal yield on reserves	0.7%	3.7%	3.4%	Consistently below market
6.	Administrative Expenses (3- yr average) as: • % of Contributions • % of Conts. + Benefits • % of Insurable Wages	20.2% 15.7% 2.0%	23.1% 15.6% 2.3%	27.2% 14.6% 2.7%	Increasing over time; all three metrics very high
7.	# of Contributors Per Pensioner paid in the year	11.2	7.6	5.4	Gradually declining as expected
8.	Avg. Pension as % of Avg. Insurable Wage	19.2%	22.6%	28.8%	Gradually increasing as expected

Due to reduced employment and total wages in 2020, some 2020 indicators are higher than would be expected during a year of "normal" employment. The general trends, however, for all indicators are consistent with prevailing economic conditions and expectations for an aging social security system.



Chapter 2 Recent Social Security Experience

2.1 Amendments to Act & Regulations

Following is a list of amendments made to Regulations between 2017 and 2020.

2017

 Temporary unemployment assistance benefits introduced to provide income support to those unemployed following the passage of Hurricane Irma.

2018

- Maternity grant increased to \$1,350 and payable for each birth.
- Funeral Grant increases: \$6,000 if older than age 2, \$1,000 if less than age 2.
- Disability awarded even if not permanently disabled and all Disability pensioners made subject to periodic review.
- Age and Disability pensions awarded prior to 2015 received a \$20 per week increase.
- Survivors' spouse, children/parents and orphans pensions increased by \$15, \$5, \$10 per week, respectively.
- Minimum pensions for Survivors spouses, children/ parents and orphans increased to \$125, \$45, and \$90 per week, respectively.
- Possible for an insured person to qualify for both an Age/Invalidity pension together with a Survivors pension.
- Non-Contributory pension not paid if the person worked and contributed.

2019

- Maximum duration for Maternity benefit increased from 13 to 14 weeks
- Paternity benefit introduced through the Labour (Relations) Act which introduced paternity leave.

2020

 Temporary unemployment assistance benefits introduced to provide assistance to those unemployed due to the impact of COVID-19.



2.2 Fund Financial Experience

The COVID-19 pandemic had a significant impact on the Anguilla economy in 2020. For the SSF, the main effects were a reduction in contribution income and an unexpected \$5.2 million in Unemployment benefit payments. Following are summary income and expenditure amounts for 2018 to 2020. A more detailed version of Social Security Fund finances for these years may be found in Appendix D.

Table 2.1. Summary of SSF Finances, 2018 – 2020 (millions of \$'s)

	<u> </u>	•	<u>, </u>
	2018	2019	2020
Income			
Contributions	31.7	32.9	25.3
Investment	5.8	17.2	14.4
Impairment Recoveries/(Provisions)	(2.2)	(0.4)	(0.0)
Other	0.2	0.5	0.1
Total	35.6	50.1	39.8
Expenditure			
Benefits	22.0	23.9	30.3
Administrative	8.0	8.8	7.4
Other	0.0	0.2	0.2
SS Development Fund	1.5	1.0	0.4
Total	31.4	33.9	38.3
Excess of Income over Expenditure	4.2	16.3	1.5

Totals may be off due to rounding

2.3 Benefit Branches & Other Reserves

While the summary of SSF finances presented in the previous section shows total income and expenditure, internal accounting procedures separate finances into two branches representing the two major types of social security benefits – long-term or pensions and short-term benefits. Each benefit is allocated to one of the two branches and each benefit branch is allocated a certain percentage of contribution income, investment income and administrative costs. Since the benefit types have different characteristics and financing mechanisms, the separation allows for better monitoring of experience. The existence of branches does not, however, affect the overall financing or sustainability of the Fund.

For the Short-term benefit branch, a pay-as-you-go method of financing is used. Under this method current contributions are expected to closely match current benefits with only a small reserve. Therefore, the contribution allocation to this branch should approximate expected expenditure and reserve levels should be small, relative to annual expenditure.

Also segregated within the SSF is the Social Security Development Fund (SSDF) which was established in 1986 as a vehicle to fund socially desirable projects that would benefit the citizens of Anguilla through



sports development, education, health services, environmental protection, economic development and community revitalization.

Shown in the following table are the contributions allocated to the two benefit branches and SSDF along with average expenditure (expressed as a percentage of insurable wages) in 2018 to 2020 and reserves at the end of 2020.

Table 2.2. Summary Branch Experience (% of Insurable Earnings)

Benefit Branch	Contributions Allocated	Average Expenditure 2018 - 2020	Reserve Dec. 2020 (millions)
Short-term	1.500%	2.18%^	(\$5.9)
Long-term	8.125%	6.53%	\$360.3
Social Security Development Fund	0.375%	0.31%	\$1.1
Total	10.000%	9.02%	\$355.4

[^] Higher in 2020 due to Unemployment benefit. Average in 2018 to 2019 was 1.56%.

Long-term benefits, meantime, are partially pre-funded with the portion of the contribution rate not allocated to Short-term benefits and the SSDF. It should be noted that the existence of branches does not affect the overall financing or sustainability of the full Social Security Fund. Financial experience of each branch and detailed benefit experience for 2018 to 2020 may be found in Appendix E.

Social Security Fund finances also include three other reserves as described in Table 2.3 below.

Table 2.3. Non-Benefit Reserves

Reserve	Description	Dec. 2020 (in millions)
Social Security Development Fund Reserve	Since its creation in 1994, \$250,000 has been transferred from the SSDF to create a reserve for future projects should the statutory funding for the SSDF be eliminated.	\$3.1
Equity Investment Reserve	Unrealized gains and losses on equities	(\$1.9)
Premises Revaluation Reserve	Cumulative gains and losses on revaluation of land and buildings.	\$4.5

For the analysis and projections of this actuarial review, the SSDF Fund (\$1.1 million) is excluded since these funds are not considered available for payment of future benefits. The SSDF reserve is however included since it is possible for these funds to be transferred to a benefit branch. The other two reserves are required by accounting standards. Total reserves as of December 2020 considered available for meeting future benefit and administrative expenditure is therefore \$360.0 million.



2.4 Investments

At the end of 2020, Social Security Fund (gross) investments stood at \$335.2 million. The relationship between investments and reserves measures how efficiently available funds are invested. At the end of 2020, 93% of reserves were classified as investments.

During the review period, the average yield on reserves was 3.4%. With inflation averaging 0.1% per annum, the average real rate of return on reserves was 3.30%.

The following table provides a summary of the Social Security Fund investment mix of December 2020. The equity investment in the Board's subsidiary is excluded on consolidation of the accounts. Also excluded is the \$9.8 million invested in British American as this investment has been fully provided for.

Table 2.4. Summary Investments, Dec. 2020 (millions of \$'s)

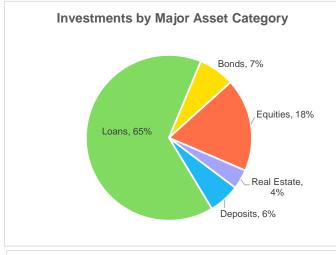
Investment Category	\$'s	%
Certificates of Deposit	19.7	5.9%
Bonds	22.9	6.8%
Loans	214.9	64.1%
Equities	58.9	17.6%
Real Estate	18.9	5.6%
Total	335.2	100.0%

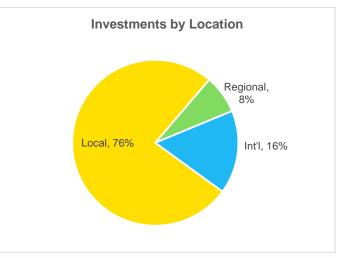
Notes: Totals may be off due to rounding

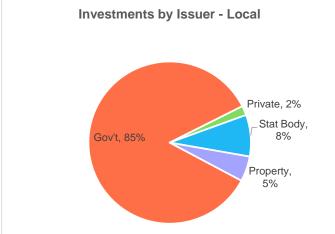
Diversification is a critical component in the investment of social security funds. How well investments are diversified can be assessed using four criteria:- across various asset classes, across maturity dates, across different locations and by issuer of the underlying securities. The following charts illustrate the diversification of SSF investments as of December 2020.

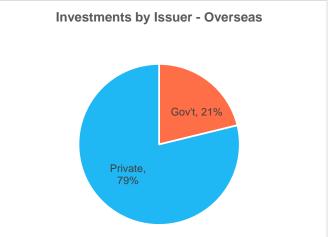


Figure 2.1. Investments, December 2020









A summary of the asset mix, with specific emphasis on diversity, shows that:

- By asset class:- almost two-thirds in loans to GoA yielding 3% per annum. Repayment of the loan will occur between 2021 and 2041.
- By location:- room for placing more overseas given the limited opportunities locally and need for non-public sector investments.
- By issuer:- inadequately diversified with 97% of local investments backed by GoA and public sector entities.
- By maturity:- liquidity is not yet of major concern for the SSF but other than international equities and local deposits, other assets are not very liquid.

SSF investments are guided by an Investment Policy Statement (IPS) which was last approved in 2014. This Policy sets out investment objectives and guidelines for the Fund and defines the management structure and monitoring procedures for both internal and external investment management. It does not, however, include a desired asset allocation policy for the Fund.



Chapter 3 Assessment of Performance & System Design

National social security systems must balance benefit adequacy with affordability and long-term sustainability. There is an obvious trade-off between these concepts:- higher benefits provide larger incomes to beneficiaries, but cost more. On the other hand, inadequate pensions result in pressures to increase benefits or add new ones. This Chapter contains a review of current design parameters and examines how well key policy objectives are being met.

3.1 Meeting Policy Objectives

The Anguilla Social Security system is mandatory for all employed and self-employed persons. It has a defined benefit structure where the rules governing eligibility and the amounts payable are defined in statute. The SSB is expected to be perpetual. Together, the rules and the amounts at which key parameters are set determine benefit adequacy. How well certain rules are enforced, and how well the system is managed, also impact how well policy objectives are met.

Following is a brief assessment of four of the SSB's primary objectives:- coverage, pension adequacy, financial stability and administrative efficiency.

- Coverage, which looks at how well workers of all sectors are covered for income security in old age;
- Pension adequacy, which relates to the ability of pensions to provide a decent standard of living;
- Financial sustainability, which ultimately relates to the affordability of the system to future contributors; and
- Administrative efficiency, which relate to keeping operating and management costs low while delivering quality service.

To determine how well these objectives are now being met, and how likely they are to be met in the future, an analysis of current contribution and benefit provisions, key rates and parameters as well as actual performance indicators have been reviewed. While some mention is made of Short-term benefits, this analysis focuses primarily on pensions which accounts for around 86% of SSF benefit expenditure.

3.1.1 Coverage

With SSB participation mandatory for all employed persons and self-employed persons, coverage concerns relate to actual participation rates by formal and informal sector workers and the proportion of elderly residents receiving an SSB pension. The following five metrics provide a fairly good analysis of current coverage levels:



Table 3.1. Assessment of Current Coverage Levels

Metric	Result	Comment
(1) % of employed workers contributing to the SSB	Not available	Results from labour force survey not yet available
(2) % of contributors that have their wages fully covered by the SSB. (Ceiling at \$7,000 per month since 2008)	88% to 90%	With only just over 10% not fully covered, the current wage ceiling is still considered to be at an adequate level even though SSB is gradually losing relevance to higher paid individuals.
(3) % of the elderly resident population who receive an SSB pension (assumes 5% of pensioners live outside of Anguilla)	70%	In line with level expected after nearly 40 years.
(4) % of deaths resulting in funeral grants (2018 - 2020)	80%	With only 26 weekly contributions required for a Funeral grant, having as many as 20% of deaths not qualifying suggests some lifelong coverage gaps.
(5) % of births resulting in maternity grants (2018 to 2020)	107%	More maternity grants than births suggests that some births that lead to a Maternity grant occur outside of Anguilla.

3.1.2 Adequacy

Benefit adequacy can be broken down into two components:

- Current adequacy: Are pensions adequate today?
- Future adequacy: Under current provisions, will the pension be adequate in the future?

Current Adequacy

The minimum contributory pension is currently \$715 per month, approximately 17% of average insurable wages. Cumulative price inflation since then has been low. No change in minimum pension rates is recommended.

For pensioners receiving more than the minimum, their pension replacement rates are initially between 30% and 60% of their final average insurable wage, lower for the small percentage of very highly paid persons. This replacement level is considered adequate.

Future Adequacy

A worker who has steady earnings below the wage ceiling and contributes to SS for a full career, sustaining him/herself predominantly from his employment earnings, can expect a pension of close to 60% of pre-retirement earnings. By ILO and other international standards this is adequate and thus meets any reasonable test of benefit adequacy for a social security pension. The challenge quite often, especially for the self-employed, is that many workers do not have steady wages and do not consistently work and contribute for 40 years.

The ceiling has been fixed at \$7,000 since 2008 and at its current level, just under 90% of workers are fully covered. Given that neither wage ceiling nor pension adjustments are automatic there is some



uncertainty re future benefit adequacy. While no ceiling adjustment for an extended period has an effect on the ultimate pension replacement rate of higher income workers, not increasing pensions periodically will result in a gradual decline in the purchasing power of these pensions.

When compared with targeted replacement rates for mandatory social security pensions in OECD countries, the Anguilla SSB provides relatively high replacement rates. The significant difference between pensions in old age in Anguilla compared with OECD countries is the additional pensions that most in OECD countries can look forward to – state means-tested pensions to those at the lower end of the income scale and private pensions (employment linked or personal) for others. Given the low level of pension participation and personal long-term savings by workers, the higher replacement rate targets in Anguilla are reasonable.

Social security pensions are not intended to provide all of the income required to support oneself in old age. Based on the above, current contribution and benefit provisions provide pensions in old-age that meet reasonable tests of future benefit adequacy.

When non-pension benefits are considered, the various short-term benefits provide almost full income protection for all contingencies that could lead to involuntary loss of employment income. The benefits not currently provided are an explicit set of employment injury benefits and a permanent benefit that covers loss of income due to involuntary unemployment. Temporary unemployment benefit programmes were however, implemented in 2017/18 and in 2020/21.

3.1.3 Financial Sustainability

Assessing the sustainability of a national pension system is complicated. Given the perpetual nature of these systems, some of the rules that apply to private pension systems are not appropriate. Therefore, whether current reserves plus future contributions at the current contribution rate are sufficient to meet future expenditure should not be used to determine long-term sustainability. Instead, assessing sustainability involves looking at the cost of the system now and in the future, and considering whether or not employers and workers in the future will be able to afford the cost. A definition of financial sustainability that has become widely used in social security discussions is whether the pension system is able to meet the needs of current generations without compromising the needs of future generations.

By design, the SSF is partially funded and the current contribution rate and accumulated reserves are expected to be adequate to meet all obligations for approximately 15 to 20 more years. However, with contributions alone currently not sufficient to meet expenditure, increasing portions of investment income will be needed to pay benefits and then eventually investments will have to be liquidated. This is a natural progression for partially funded national pension systems.

It is not possible to determine today the highest contribution rate that workers and employers will be able to afford, or willing to pay, twenty to thirty years from now. With reserves not growing as fast as they have in previous years, and reduced rates of return on investments in this new low interest rate environment, contributions will have to account for the greater portion of future Fund income.

Based on regional and international comparisons the SSB provides a relatively generous benefits package for a moderate contribution rate and thus its financial sustainability will come into question. The key challenge for current and future Boards and governments regarding financial sustainability is



determining when will be the right time to increase the contribution rate and/or reduce benefit promises. No significant reforms to contributions or benefits aimed at enhancing sustainability have been made since inception.

3.1.4 Administrative Efficiency

An average of 27% of contribution income, 14.6% of contributions plus benefits, or 2.7% of insurable wages, was spent on operating expenses over the period 2018 to 2020. This is very high. Administering a social security fund in a small island state in a traditional manner will be costly. Therefore, non-traditional approaches to performing tasks and providing required services should be considered.

3.2 Comparisons with Other OECS Countries

Even within the OECS, it is difficult to compare social security schemes given the special peculiarities of each country's system, history and economy. For example, the age of the scheme affects its current financial state as does the level of the initial contribution rate and reforms made since inception. The following table highlights the similarities and differences of the Anguilla SSB with other national insurance and social security schemes in the OECS in several key areas.

Table 3.2. Anguilla SSB Compared With Other NI & SS Systems in the OECS

Contribution rate	At 10%, Anguilla is lower than Antigua-Barbuda (14%), Grenada and St. Kitts-Nevis (11%) but the same as St. Lucia and St. Vincent & the Grenadines. Only Montserrat (9%) has a lower contribution rate. (In Barbados, the comparative contribution rate is 18¼% with an additional 2% for unemployment and severance benefits.)
Wage ceiling	Anguilla (\$7,000 pm) has the highest wage ceiling with St. Kitts-Nevis next at \$6,500 pm.
Benefits package	Anguilla does not specifically offer Employment Injury benefits that others do and is the only one that offers a Paternity benefit. Minor differences only for other benefits.
Pensionable Age	Grenada (60), St. Kitts-Nevis (62) and Anguilla (65) remain unchanged since inception. Antigua-Barbuda, Dominica and St. Vincent are gradually increasing to 65. St. Lucia and Montserrat are already at 65.
Pension Accrual rates	Other than Antigua-Barbuda (50%), all others have a maximum pension rate of 60% of average insurable wages. Other than St. Kitts-Nevis with 35 years, it takes approximately 40 years of contributions to attain the 60% rate in other territories.
Minimum Pension	Anguilla has the highest rate at \$165 per week.
Adjustment of wage ceilings and pensions:	Ad hoc increases in all countries. Although not in OECS, The Bahamas, Barbados and the BVI now have automatic adjustments to both.



Chapter 4 Best-Estimate Projections

Many demographic and economic factors, such as changes in the size and age structure of the population, economic growth, employment and wage levels and inflation, influence Social Security Fund finances. Therefore, to best assess the Fund's long-term costs and sustainability, projections of Anguilla's total population and the economy are required. For this review 60-year projections have been performed.

In developing the assumptions used for the projections, historical trends and reasonable future expectations, as well as the interrelationships between the various assumptions, have been taken into account. Core projections have been performed using assumptions that reflect best estimates. The demographic and financial projection results based on this assumption set are referred to throughout this report as "Best Estimate."

4.1 Population Projections

Anguilla has experienced net in-migration for decades with levels fluctuating as the demand for labour is driven mainly by foreign investments. Fertility rates have been well below replacement rate during the past 20 years. It is expected that life expectancy continues to increase.

Projection Assumptions

Projections of Anguilla's population begin with the results of the 2011 census and in each projection year thereafter, fertility, mortality and migration assumptions are applied. Fertility rates are used to estimate the number of births each year while mortality rates determine how many, and at what ages, people are expected to die. Net migration represents the difference between the number of persons who permanently enter and leave Anguilla and is the most volatile of the three factors. The 2011 population census placed Anguilla's population at 13,572.

The total fertility rate (TFR) represents the average number of live births per female of childbearing age in a particular year. If there is no migration, a TFR of 2.1 is required for each generation to replace itself. Anguilla's TFR was estimated at less than 1.4 over the period 2010 to 2020. For these projections it is assumed that TFR's in Anguilla will be constant at 1.4 given that some Anguillan residents give birth outside Anguilla.

The United Nations Latin America life table and the number of deaths in the past few years suggest life expectancy at birth in 2020 of around 74 for males and 80 for females. Improvements in life expectancy are assumed to occur in accordance with UN estimates.



The third factor that affects population size is migration. This is the most volatile and most difficult to measure. Population estimates prepared by the Anguilla Statistics Department suggest that between 2011 and 2020 net in-migration averaged around 140 per annum. For this report, net inward migration is assumed to remain positive throughout the projection period.

Given the impact of COVID-19 and the uncertainty surrounding the next few years, economic growth assumptions for 2021 to 2022 are taken from ECCB estimates. For the medium and longer terms, the economic assumptions used assume stable and positive economic growth and labour productivity in all years. Although simplistic, they approximate usual economic cycles and volatility that encompass periods of expansion and recession. They also account for projected changes in the population and labour force that will provide the capacity for additional output through more workers and increased productivity (real wages).

The following table indicates the principal demographic and economic best-estimate assumptions for this and the previous Review. Further details may be found in Appendix B.

Table 4.1. Principal Demographic & Economic Assumptions

Total Fertility Rate		1.4 in all years
Mortality Improvements^		Slow
Net In-Migration Per Annum		+140 from 2011 to 2021 decreasing to 60 in 2026, constant thereafter
Real GDP Growth Rates Short-term 2026 to 2036		2%, 12%, 5%, 5%, 3% (2021 to 2025) 2.0% declining to 1.25%
	After 2036	1.25%
Real Increase in Wages		1.0%
Inflation (all years)		2.0%

[^] UN mortality improvement rates

4.1.1 Projection Results

The two charts in Figure 3.1 illustrate Anguilla's population from 1871 to 2011 and the projected population under the assumptions presented above. From the 2011 Census population of 13,572 and the estimated mid-2020 population of 15,500, Anguilla's population is projected to continue increasing but at a slower rate for the next 35 to 40 years and then to slowly decrease.



1871 to 2011 2011 to 2081 20.000 20.000 Age 65+ 16,000 16,000 12.000 12,000 Age 16-64 8,000 8.000 4,000 4.000 Age 0-15 2041 2051 2061 1946 1960 1974 1984 1992 2001 2011 2011 2021 2031 2071 2081 1871 1881 1891 1901

Figure 4.1. Historical & Projected Anguilla Populations

Numerical details of these projections may be found in Appendix C.

It should be noted that the projections presented in this report have been prepared for the sole purpose of determining the implications for SSF finances.

For the SSF, while projected future population size is important, the age distribution is more critical, as pensions to the elderly represent the bulk of expenditure and contributions will be paid by those of working-age. As shown above, while the number of children is projected to decrease over time, the elderly population is expected to increase significantly.

4.2 Social Security Fund Projections

Best Estimate Social Security Fund demographic and financial projections have been modeled using the best-estimate population results, best estimate SS-specific assumptions and the contribution and benefit provisions that were in place on January 1, 2021.

4.2.1 Assumptions

Key Social Security assumptions are shown below.

Table 4.2. Social Security Best Estimate Assumptions

Contribution Rate	10.0%
Insurable Wage Ceiling	Increased to \$7,500 per month in 2024 then increasing by the change in average wages thereafter
Short-term Benefits Expenditure	1.70% of insurable wages
Contributions to SS Development Fund	3.75% of contributions
Pension Increases	5% in 2024, 1.5% per annum thereafter
Yield on Reserves	3.5% in all years
Administrative Expenses	Decreasing from 3.0% to 2.5% of insurable wages over 10 years



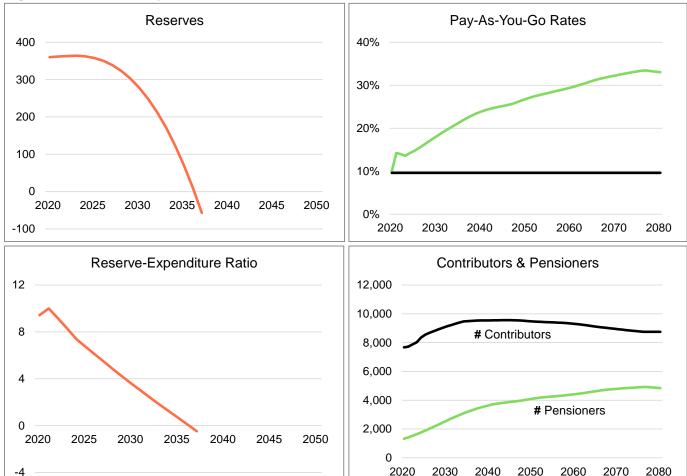
It should be noted that the assumptions and rates in the above table are not targets which Social Security should aim to achieve but instead are the assumptions on which the projections are based.

By assuming that the wage ceiling and pensions in payment will be increased periodically in line with inflation, it is being assumed that the prevailing level of coverage and income security made possible by the ceiling and minimum pension will be generally maintained throughout the remainder of the projection period.

4.2.2 Projection Results

For this report, the projections for the two benefit branches are combined. Reserves as of December 2020 available for the payment of SSF benefits and administrative expenses are assumed to be \$360 million. The charts in Figure 4.2 highlight key projection results of the *Best Estimate* scenario assuming that the contribution rate remains at 10% and that there are no changes to benefit rules.

Figure 4.2. SSF Projections – Best Estimate Scenario



The key results of these projections are summarised as follows:

- 1. Expenditure is expected to exceed contribution income in all years.
- 2. The first cash flow deficit (total expenditure greater than total income) will occur in 2024.
- 3. Reserves are projected to be exhausted in 2037.



- 4. When reserves are exhausted, annual expenditure relative to total insurable wages (pay-as-you-go rate) is projected to be between 22% and 23%. The contribution rate will therefore have to be increased to this level to meet total expenditure.
- 5. The pay-as-you-go rate will increase to over 30% in the early 2060's.
- 6. The number of contributors for each pension in payment at year-end is expected to fall from 5.8 in 2020 to 1.8 in 2080.

The following chart illustrates how the sources of financing expenditure will change as the Fund moves from a state of expenditure being 50% more than contributions in 2020 to 125% more than contributions when all reserves are exhausted in 2037.

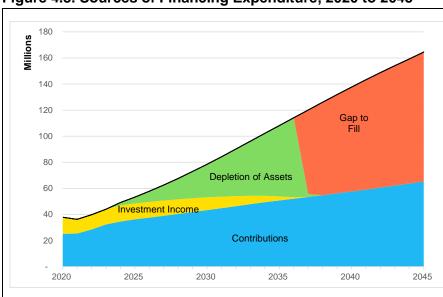


Figure 4.3. Sources of Financing Expenditure, 2020 to 2045

- In 2020, \$12.6m of the \$15.0m in investment income (yellow section) was required to meet expenditure.
- With expenditure projected to first exceed contributions (blue section) plus investment income in 2024, assets will have to be liquidated to help meet expenditure (green section).
- 3. As more and more assets are liquidated to meet expenditure they will eventually run out (2037). If the contribution rate is not increased, the income shortfall (orange section) in 2038 is estimated at 13.1% of insurable wages. The required contribution rate would then have to be 23.1%.

Numerical details of the financial and demographic projections are provided in Tables 4.3 to 4.5.



Table 4.3. Projected Income & Expenditure - Best Estimate (millions of \$'s)

Year	Cash Inflows				Cash Outflows				Rese	erves	
	Contribution Income	Investment Income	Other Income	Total	Benefits & Pensions	Admin. Expenses	SSDF	Total	Surplus/ (Deficit)	End of Year	R-E Ratio
2018	31.7	3.7	0.2	35.6	22.0	8.0	1.5	31.4	4.2	343	10.9
2019	32.9	16.7	0.5	50.1	23.9	8.8	1.0	33.7	16.5	358	10.6
2020	25.3	14.3	0.1	39.8	30.3	7.4	0.4	38.1	1.7	360	9.4
2021	25.4	12.4	0.2	38.0	27.6	7.6	1.0	36.2	1.8	362	10.0
2022	28.4	12.5	0.2	41.1	30.3	8.4	1.1	39.7	1.4	363	9.1
2023	32.4	12.5	0.2	45.1	33.4	9.4	1.2	44.0	1.1	364	8.3
2024	34.6	12.5	0.2	47.3	38.0	9.9	1.3	49.2	(1.8)	362	7.4
2025	36.2	12.4	0.3	48.9	41.8	10.1	1.4	53.3	(4.4)	358	6.7
2026	37.6	12.2	0.3	50.0	46.0	10.3	1.4	57.8	(7.7)	350	6.1
2030	43.3	10.0	0.3	53.6	65.8	11.0	1.6	78.5	(24.8)	278	3.5
2040	57.6	(8.8)	0.4	49.2	121.1	14.4	2.2	195.3	(146.1)	(301)	(2.2)
2050	73.3	(52.9)	0.5	20.9	175.6	18.3	2.7	269.9	(249.0)	(1,626)	(8.3)
2060	91.8	(135.4)	0.6	(42.9)	244.2	22.9	3.4	362.4	(405.3)	(4,093)	(15.1)
2070	114.9	(278.7)	0.8	(163.0)	337.9	28.7	4.3	485.7	(648.8)	(8,370)	(22.6)
2080	143.8	(513.7)	1.0	(368.9)	434.0	36.0	5.4	619.2	(988.0)	(15,357)	(32.3)

Negative reserves indicate the indebtedness of the Fund and negative investment income is the current cost of servicing that debt.



Table 4.4. Projected Benefit Expenditure - *Best Estimate* (millions of \$'s)

		Pensions, Grants & Benefits					Benefits as a % of:	
Year	Age	Invalidity	Survivors	Non-Cont.	Short- term	Insurable Wages	GDP	
2018	12.2	2.0	1.6	0.6	5.6	6.9%	2.5%	
2019	14.9	2.1	1.9	0.6	4.5	7.3%	2.4%	
2020	16.6	2.1	2.0	0.6	8.6	11.9%	4.3%	
2021	18.5	2.2	2.0	0.5	4.3	10.9%	3.8%	
2022	20.3	2.4	2.2	0.5	4.8	10.7%	3.7%	
2023	22.5	2.6	2.3	0.5	5.5	10.3%	3.9%	
2024	26.1	3.0	2.6	0.5	5.9	11.0%	4.2%	
2025	29.2	3.1	2.8	0.5	6.2	11.5%	4.4%	
2026	32.8	3.3	3.0	0.5	6.4	12.2%	4.7%	
2030	49.7	4.2	4.0	0.5	7.4	15.2%	6.0%	
2040	96.6	6.5	7.7	0.5	9.8	21.0%	8.7%	
2050	140.8	9.3	12.4	0.6	12.5	24.0%	10.1%	
2060	197.5	12.7	17.7	0.7	15.6	26.6%	11.3%	
2070	278.5	15.5	23.6	0.8	19.5	29.4%	12.5%	
2080	359.8	19.0	29.8	0.9	24.5	30.2%	12.8%	



Table 4.5. Projected Contributors & Pensioners at Year-end - Best Estimate

	# of Contributors	# of Pensioners			Total # of	Ratio of	
Year		Age	Invalidity	Survivors	Non-Cont.	Pensioners	Contributors to Pensioners
2018	8,074	717	155	188	116	1,175	6.9
2019	8,066	783	169	202	113	1,265	6.4
2020	7,676	856	138	232	101	1,327	5.8
2021	7,724	933	145	240	100	1,418	5.4
2022	7,872	1,015	147	261	98	1,522	5.2
2023	8,029	1,108	153	282	96	1,639	4.9
2024	8,351	1,208	158	303	94	1,763	4.7
2025	8,557	1,315	159	322	92	1,889	4.5
2026	8,680	1,428	166	340	90	2,024	4.3
2030	9,123	1,911	186	397	85	2,579	3.5
2040	9,543	2,775	229	575	76	3,655	2.6
2050	9,475	3,051	260	715	73	4,099	2.3
2060	9,303	3,291	274	781	73	4,419	2.1
2070	8,935	3,660	258	805	73	4,796	1.9
2080	8,746	3,725	246	795	73	4,840	1.8

4.2.3 General Average Premium

For social security systems that are partially funded and designed to be perpetual, costs are usually presented in terms of the pay-as-you-go-rates, which represent annual expenditure as a percentage of insurable wages. For private pension plans, however, where full funding is the financing objective, there are other measures of the system's cost that may be useful for policy makers to be aware of.

The general average premium is the average level contribution rate required over the next 60 years to fully cover total expenditure during that period. This rate may be looked at as the average long-term cost of the complete Social Security benefits package. For the *Best Estimate* projections, the general average premium is 25.0%.



4.2.4 Actuarial Balance

Another measure of the financial sustainability of a social security system is called "actuarial balance." For a given period, the actuarial balance can be defined as the difference between:

- 1. the sum of the beginning reserves and the present value of future contributions (money available to meet expenditure), and
- 2. the present value of future expenditure,

divided by the present value of future insurable wages. This formula produces a rate that indicates the adequacy or insufficiency of the present contribution rate for a given period. For the Social Security Fund, the deficiency expressed in dollars and as a percentage of GDP is shown in Table 4.6.

Table 4.6. Actuarial Balance 2021 – 2080 (\$'s are in millions)

	2020 Year-end Reserves	\$360
Plus	PV of Future Contributions	\$1,550
Minus	PV of Future Expenditure	\$3,870
Equal	PV of Surplus/(Shortfall)	(\$1,960)
	Actuarial Balance (% of Insurable Wages)	(12.6%)

Consistent with previous discussions, the negative actuarial balance indicates that together with reserves, the current contribution rate is insufficient to meet future expenditure for the next 60 years. The shortfall of 12.7% indicates that the average contribution rate would have to be increased to almost 23% for the entire period in order for reserves to last up to 2080.

4.3 Comparison with Results of the Previous Actuarial Review

The previous actuarial review did not include long-term projections for the entire Fund as presented above and thus are not readily comparable.

4.4 Sensitivity Analysis – SSB Factors

Given the extensive set of assumptions required for projecting SSF finances and the length of the projection period, future experience will certainly differ from that projected under best estimate assumptions. To illustrate a reasonable range for the Fund's outlook, projections using two different sets of population, economic and Social Security assumptions are presented in the following chapter. However, certain Social Security factors such as yield on reserves and contribution collection rates will also impact the Fund's outlook. The change in long-term costs for differences in investment returns is shown in the following table.



Table 4.7. Sensitivity Tests – SSB Factors

Assumption	Differs From Best Estimate	Reserve Ratio in 2030	Reserves Depleted
Best Estimate		3.5	2037
Long-term Yield on	+1%	3.7	2037
Reserves (3.5%)	-1%	3.2	2036
Contribution Collections	+2%	3.6	2037
(no effect on benefits)	-2%	3.4	2036
One-time Shock in 6 th projection year	\$10m payout & 20% reduction in contributions in 2026 & 2027	3.2	2036

As shown above, the outlook for the Fund is only slightly better/worse if yields on reserves and contribution collections are greater/lower than assumed, and minimal for a one-time shock that affects both income and expenditure. These small changes in outlook are a consequence of the significant effect that changing demographics will have on future expenditure assuming no changes to projected benefits.



Chapter 5 Alternative Scenarios

Best Estimate projections up to 2080 presented in the previous chapter provide estimates of future Social Security Fund demographics and finances under best-estimate assumptions. Given the uncertainty in forecasting such a long period, two alternative scenarios that highlight the sensitivity of the results to differences in assumptions regarding future outlook have been performed. These alternative projection sets encompass assumptions that are generally more optimistic and more pessimistic than those of the Best Estimate projections. However, since long-term sustainability will likely be more sensitive to future population growth and economic development than SSB-specific factors such as compliance rates and operating costs, the basis for the alternative scenarios also focus on differences in population and economic outlooks.

The Optimistic scenario represents a larger economy with higher wages, better contribution compliance and higher investment returns while the Pessimistic scenario represents a smaller population with lower wages, lower contribution compliance and lower investment returns.

Following is a summary of the main assumptions for the three projection scenarios. The values for all other assumptions are similar across scenarios.

Table 5.1. Principal Demographic, Economic & Social Security Assumptions

	Optimistic	Best Estimate	Pessimistic
Total Fertility Rate	1.6	1.4	1.3
Mortality Improvements^	Very Slow	Very Slow Slow	
Net (In) Migration Per Annum	+140 from 2011 to 2026 decreasing to 100 in 2045, constant thereafter	+140 from 2011 to 2021 decreasing to 60 in 2026, constant thereafter	+140 from 2011 to 2021 decreasing to 40 in 2026, constant thereafter
Real GDP Growth	½% higher in each year	2%,12%,5%,5%,3% (2021 to 2025) 2.0% declining to 1.25% in 2036, constant thereafter	½% lower in each year
Real Increase In Wages (p.a.)	1.25%	1.0%	0.75%
Collection Of Contributions	+2%	-	-2%
Administrative Costs in 10 years as % of Ins. Wages	2.0%	2.5%	3.25%
Long-term Yield on Reserves	4.0%	3.5%	3.0%



The main population and Social Security demographic and financial results of the three projection sets are presented in Figure 5.1 and Table 5.2. The outlook for Social Security finances is affected by the size and age distribution of the general population and Social Security performance indicators such as contribution collection rates and yield on investments but the overall differences are not significant.

Figure 5.1. Projection Results – All Scenarios

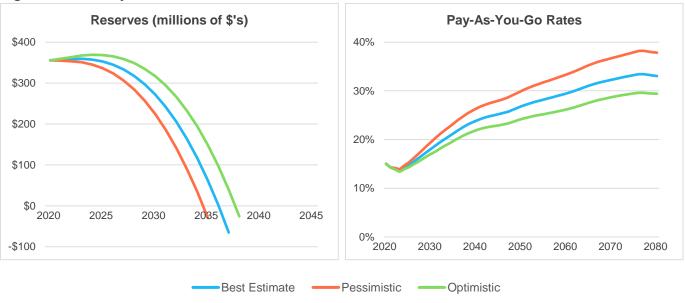


Table 5.2. Summary Results – All Scenarios

	Optimistic	Best Estimate	Pessimistic
Expenditure First Exceeds Total Income	2025	2024	2021
Reserves Depleted	2038	2037	2035
General Average Premium	22.2%	25.0%	28.3%
Pay-as-you-go rate in 2037 (around time Fund expected to be depleted)	20.8%	22.5%	24.7%
# of Contributors per Pensioner – 2080	2.0	1.8	1.6

Chapter 6 Balancing Adequacy & Sustainability

By design, Social Security pension obligations are partially funded; that is, assets on hand are not sufficient to meet total liabilities if all payments were due on a particular date. This funding mechanism is considered suitable for national pension systems given their expected perpetual life. With funding levels (measured by the size of reserves relative to annual expenditure) expected to gradually decrease and pay-as-you-go rates projected to increase to over 30%, changes to the contribution rate and benefit reforms will be required.

SSF sustainability is inextricably linked to the local economy for contributions and investment returns. The COVID-19 pandemic caused an economic and labour market shock in 2020 and much uncertainty remains regarding its medium and long-term effects on economic performance. The ability of any social security system to remain meaningful to insured persons, yet affordable to future generations, is dependent on the following four ingredients:

- (i) A growing economy increasing employment, increasing real wages and low inflation.
- (ii) Good design a system that provides relevant, equitable and affordable benefits that are consistent with prevailing socio-economic and labour market conditions, other employment linked benefits and available technology.
- (iii) Efficient & effective administrative systems low cost, timely and transparent claims processing and benefit payments.
- (iv) Honest & responsible government (good governance) proactive and prudent decision making in the best long-term interest of Anguilla at all governance levels.

While SSB officials have little influence over the economy they can directly impact the other three ingredients listed above. Extensive reforms across the Caribbean intended to improve system design and enhancing financial sustainability have included:

- Increasing pensionable age while keeping the current age for a reduced early Age pension,
- Longer period over which best wages are averaged for Age pensions;
- Slight reductions in pension accrual rates while keeping the 60% maximum after 40 years of contributions;
- Increasing the contribution rate.

Similar changes will have a positive impact on long-term sustainability. Even though these reforms will result in slightly lower pensions in the future, all benefits would still be considered adequate.



Under the headings of the policy objectives previously discussed in Chapter 3, the following table and sections suggest some further reforms and new initiatives, which if implemented soon, should serve to further enhance SS performance against its objectives.

Table 6.1. Policy Objective Challenges And Options For Reform

	Current Challenges	Reform Options
Coverage	 Incomplete coverage for job-related injuries & diseases No permanent unemployment benefit Most self-employed persons do not participate 	 Introduce specific employment injury benefit and a permanent unemployment benefit Flexible options for self-employed contributions Require proof of SS compliance for government issued permits/licenses
Benefit Adequacy	 Wage ceiling and pension adjustments are not automatic Waiting days not paid for some Sickness benefit claims 	 Provide for automatic pension and wage ceiling adjustments linked to inflation
Financial Sustainability	 Low investment returns Deficits expected within four years and Fund depleted in fifteen to twenty years 	 Improve investment diversification with emphasis on liquidity & safety Adopt a policy for contribution rate increases and make benefit reforms
Administrative Efficiency	 High administrative costs 	Set specific 5 and 10-year targetsReduce staff costs
Good Governance	 Actuarial reports and recent audited financial statements not posted on website Documented good governance guidelines not in place 	 Place all reports that have been tabled on the SSB website Prepare good governance policies & guidelines for the SS

Shortly after the COVID-19 pandemic began to affect employment, the GoA and the SSB introduced an income support program to deal with unexpected income losses. Recent experience with COVID-19 and that of previous natural disasters and economic shocks, provides Government and the SSB with an ideal opportunity to re-think all income support programs including those found in labour legislation. Health care should also be included.

The first step in the process of reviewing all income support programs should be the creation of an explicit Benefits Policy and an explicit Funding Policy. For the SSB, each of these policies, should clearly state what the SSB is trying to achieve as well as what it is trying to avoid. Conflicting priorities must then be balanced so that the final result will be a system that is able to adjust to periodic shocks while remaining on a steady path to long-term sustainability.



The other two components of a comprehensive review of the SSB are a thorough review of the Fund's risks, and an update to its Risk Policy and Investment Policy. These four policies, Benefits, Funding, Investments and Risk, should then form a new Governance Policy for the SSB that contains best practices and rational responses to specific potential outcomes. The interconnectedness of four polices and their contents are illustrated in Figure 6.1.

Figure 6.1. Interconnected Policies for a Relevant & Sustainable SSF

Benefits Policy Funding Policy Benefits Policy · What are we What are we trying to trying to accomplish? accomplish? Investment · What are we · What are we Risk Policy **Policy** trying to avoid? trying to avoid? Where objectives Where objectives conflict, what are conflict, what are our priorities? **Funding** our priorities? Policy Investment **Risk Policy Policy** Potential risks • Where to invest? With the above policies in place, the SSB would Prior incidents How will then be able to adopt an outcome-focused Likelihood of conflicting approach to decision making, where it is designed occurrence investment and managed around objectives, preferences and "Treatment Plan" objectives (yield, "what ifs". Instead of hoping for positive results, - how to avoid & liquidity, safety, how to handle leaders should prepare rational responses to social utility) be Track risk specific potential outcomes such as severe balanced? management economic downturns, natural disasters and the · What if we suffer successes & next pandemic. losses? failures

The remainder of this chapter contains discussions and recommendations on design and policy features of these policies geared towards ensuring relevance, benefit adequacy and long-term sustainability. The following chapter contains analysis of specific reform measures aimed at achieving these objectives.



6.1 Funding Policy

Until reserves are exhausted, there is no right or wrong time to increase the contribution rate. The following factors should be considered when deciding whether or not to increase the contribution rate:

- 1. Can workers and employers afford a rate increase in the current environment?
- 2. Can current revenues and liquid assets meet expenditure in the short-term?
- 3. Are there suitable investment opportunities for additional surplus cash?
- 4. Is advanced funding (higher contribution rates and a larger fund now with lower contribution rates later) superior to lower contribution rates and a very small fund in the future?

This last question has been debated by economists and social security scholars for many years. Both options have risks and both depend ultimately on a strong economy and good governance practices.

The SSB does not currently have any explicit funding targets. As a result, there is no requirement for specific actions such as increasing the contribution rate or amending benefit provisions, when a certain funding level is either reached or projected by the actuary. Funding targets and prescribed actions will help ensure that future rate increases are gradual and predictable.

To ensure that future rate increases are gradual and predictable, and are consistent with actuarial projections, it is strongly recommended that a formal funding policy be established. Such a policy would have medium and/or long-term funding objectives and then guided by actuarial advice, a rate adjustment strategy would be devised.

Given the projected depletion of reserves within 20 years from the time of writing this report, the options for funding targets are few. For inclusion in the first Funding Policy, the following three targets are suggested for consideration.

Figure 6.2. Funding Policy Priorities & Triggers

Funding Target #1

 Projected reserves should not be depleted within 30 years of the actuarial review date. (2050 for this review)

Funding Target #2

 Projected reserves should not fall below five (5) times annual expenditure within 10 years of the actuarial review date. (2030 for this review)

Funding Principle

 Contribution rates required to meet the above targets, even if a scheudle of adjustments, should be included in regulations

With targets set based on the number of years from each review date, the target year will be always moving but the minimum number of future years that Fund sustainability is expected, remains constant; 30 years in the above example.



Following are three sets of contribution rate increase schedules, only one of which meets the above recommended funding targets. In each case, the first increase is assumed to take effect in January 2022. These assume no changes to benefit provisions.

 Table 6.2.
 Sample Contribution Rate Adjustment Schedules

Contribution Rate Increase Schedule	Reserves Depleted	R-E Ratio in 2030	Target #1 Met?	Target #2 Met?
½% increase each year for 4 years (12% in 2030)	2039	4.2	X	X
1% increase for each year for 4 years (14% in 2026)	2042	4.9	Х	X
1% increase each year for 8 years (18% in 2030)	2050	5.5	V	√

As shown above, rate increases to 14% starting in 2023 would be insufficient to ensure that the Fund was not depleted within 30 years. It would instead take a gradual increase to 18% for the two abovementioned funding targets to be met.



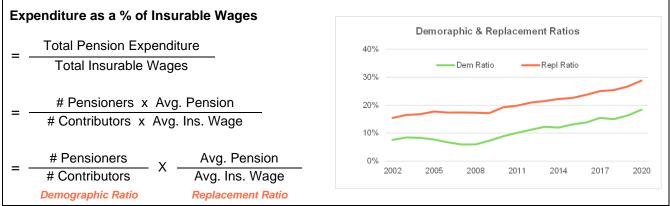
6.2 **Benefits Policy**

It is also recommended that a Benefits Policy be created. A comprehensive Benefits Policy should include specific objectives, priorities and circumstances to be avoided for each benefit. It should specifically consider adequacy, equity and affordability. Analysis presented in Chapter 3 showed that benefits are adequate and equitable while projection results presented in Chapter 4 suggest that current benefits are unaffordable. With such a conflict it may be necessary to reduce some benefits in the future.

Age pensions currently account for close to 50% of total benefit expenditure and will likely reach 80% in the next 20 years. Therefore, any meaningful changes to future benefit costs must focus primarily on Age pension provisions. The provisions and specific parameters that would result in reductions in long-term costs are those that would result in reducing future pay-as-you-go (PAYG) rates. The following formula breaks down PAYG costs for Age pensions into two fractions and four components.

Expenditure as a % of Insurable Wages

Figure 6.3. Components of The Age Pension Pay-As-You-Go Rate



As shown in the chart, both ratios have steadily increased over time. No change in trend is expected soon. To reduce future pay-as-you-go rates, one or both of the two ratios (demographic and replacement) would need to be lower than under the status quo scenario. The following table summarises the means by which each ratio could be reduced over time.

Table 6.3. Options for Reducing Long-term Pension Costs

	Demographic Ratio	Replacement Ratio
Economic growth	$\sqrt{}$	\checkmark
Award pensions at a later age	$\sqrt{}$	
Award pensions only if (substantially) retired	V	
Make it more difficult to qualify	V	
Reduce average new pension amount (slower pension accruals, progressive accrual rates, longer period for average wages, career average formula)		V
No, or smaller, pension increases		V



6.2.1 Age Pension

It is clear from Chapter 4 that contribution rate increases will be required to meet benefit obligations in the future. Following is a list of specific reforms that could be made to Age pension that will lead to reductions in the demographic and/or replacement ratios.

Table 6.4. Options for Reducing Long-term Age Pension Costs

	Tuble 0.4. Options for Reducing Long term Age I chalon obsta			
Reform Measures	Current Provision	Possible Changes	Rationale	
Award pensions at a later age	 Pensionable Age is 65 (unchanged since inception) 	 Increase to 66 or 67, with or without keeping 65 as the first age for reduced pensions 	 Many 65 year olds continue to work. Starting later reduces the number of years pension is paid 	
Maximum benefit rate	 60% (unchanged since inception) 	• 55%	 Reduce initial pension amount 	
Pension accrual rates	 30% after 10 years plus 1% per year up to 60% after 40 years (unchanged since inception) 	 20% or 25% after 10 years increasing at the same rate until 60% after 40 years 	 Heavy weighting for first 10 years was required only at inception to provide a reasonable pension to early awardees 	
Award pension only if retired or at least, substantially retired	 No requirement to have retired or reduced employment income (unchanged since inception) 	 Must be fully retired If still working, have earnings no more than a certain dollar and percentage threshold 	 Change from an age- based pension to a retirement-based pension to reduce the number of pensions in payment and reduce excess combined income 	
Longer reference period for wages used in pension calculations	 Best 3 years in the last 15 years 	 Best 5 in last 15 years Best 7 in last 15 years Best 7 years ever Best 10 years ever 	 A longer average periods achieves (1) closer relationship between earnings and ultimate pension amount, (2) less potential for abuse, and (3) slightly lower pensions 	

While increasing pensionable age and changing the Age benefit to a Retirement benefit may require extensive consultation, the following two changes are recommended for early introduction:

- 1. Pension accrual rates: 20% after 10 years plus 1.3% per year thereafter; and
- 2. Wages used for pension calculations: Average over best 5 years.

These two changes should be phased in over 5 years so that those close to age 65 when the change is first made are not materially affected.



If the two recommended changes are applied to new Age pension awards from 2018 to 2020, with the same minimum pension rate, the average new pension amount would have been approximately 15% lower.

If the Best Estimate projections presented in Chapter 4 are revised to assume new Age pensions were 15% lower, the outlook for the Fund would be materially changed as follows:

- General average premium reduced from 25.0% to 22.5%, and
- Pay-as- you-go rates in 2040 reduced from 23.9% to 21.6%.

6.2.2 Adjustments to Wage Ceiling, Pensions and Grants

The wage ceiling was last increased in 2008. Pensions and grants were last increased, by a flat dollar amount, in 2018. Since the SS Act & Regulations are silent regarding ceiling and pension adjustments, these adjustments have been made on an ad hoc basis after actuarial advice.

Regular adjustments to the ceiling and pensions in payment ensure that the SSB does not lose relevance for both higher paid workers and pensioners. The frequency of adjustments for both the wage ceiling and pensions and grants has been adequate. However, since the decision on when and by how much to adjust ultimately hinges on the government, regular future adjustments in line with inflation, are not guaranteed.

There are three general approaches to adjusting pensions and the many fixed dollar rates such as the earnings ceiling, minimum pension rates, Funeral and Maternity grants. These are described below.

Table 6.5. Ceiling & Pension Adjustment Approaches

Ad	justment Type	Description
1)	Ad Hoc Adjustments	Law does not contain any provisions for periodic review.
2)	Adjustment in Principle	Law provides for periodic review without specifying procedure, mechanism or degree of adjustment.
3)	Systematic or Automatic Adjustment	Law prescribes the procedure, mechanism and degree of adjustment

Social security systems in The Bahamas, Barbados and the BVI provide for automatic wage ceiling and pension/grant adjustments.

Pensions were last increased in 2018 and inflation since then has been very low. In 2019 and 2020, 12% and 10%, respectively, of SSB contributors earned more than the current \$84,000 per annum. With almost 90% of wages fully covered the ceiling is considered to still be an acceptable level. It should be noted that a wage ceiling increase affects both contributions and benefits of higher income contributors, and given the short averaging period for pensions, could unnecessarily inflate the pensions of higher income workers who turn 65 shortly after the adjustment. When the ceiling is adjusted next, the method used to determine average insurable wages for pension calculations should be revised so that only a portion of wages above \$7,000 per month is included.

Although neither a ceiling increase nor pension increase are being recommended at this time, the proposed reform discussions and creation of Funding and Benefits policies should consider when and how such adjustments should occur.



6.2.3 Employment Injury Benefits

Unlike others in the Caribbean, the Anguilla SSB does not explicitly provide the set of employment injury benefits recommended by the ILO. Instead, some coverage is provided through other benefits and some employers are required to purchase Workers' Compensation from private insurance companies. The following table provides a description of typical employment injury benefits and a brief assessment of the extent to which the SSB currently provides coverage.

Table 6.6. Employment Injury Benefits

ILO Benefit	Benefit Described	SSB Equivalent	Gap/Difference
Injury Benefit	Like Sickness benefit but temporary incapacity is due to a job-related injury. Benefit rate often slightly higher than the rate for Sickness benefit.	Sickness benefit	Benefit amount. (if employer required to pay the difference then no real gap)
Medical Care	Covers costs associated with treatment and rehabilitation required following a work-related injury or disease.	None	No SSB coverage. The gap could be filled by a national health insurance program.
Disability benefit	The ILO benefit typically is determined after the percentage of permanent incapacity (0% to 100%) is assessed. Below 25% a single lump sum is paid while a lifetime pension is payable if above 25%.	Disability	SSB's Disability is not based on the extent of the injury and may not be payable for life
Death Benefit	Similar to Survivors' benefit but possibly at a slightly higher rate	Survivors' benefit	Benefit rate

The Board is encouraged to review closely the current level of job-related coverage now in place for workers and then enhance SSB's benefits package if considered necessary.

Adding the full suite of employment injury benefits, with limits on medical care, should not increase SSB costs by more than ½% of insurable wages

6.3 Investment Policy & Committee

A sound governance framework is paramount for the effective and proper investment of social security funds and investment policy statements are designed to guide decision making. The SSB has an "Investment Policy Statement" which was last updated in 2014. This document explicitly covers the area of governance and clearly maps out the operational and oversight responsibilities and duties of all fiduciaries including the Board and the Investment Committee.

Section 11 of the Social Security Act provides for an Investment Committee which is charged with giving general or specific directions on the investment of Fund assets. While this Committee which comprises at least two persons experienced in investment matters does not have the authority to give specific investment instructions, it is a required and critical component in the investment decision-making process. The functioning of this Committee can be strengthened with new Terms of Reference and an updated and expanded Investment Policy.



Projection results in Chapter 3 show that the Fund will soon enter a stage where some reserves will have to be liquidated to meet monthly expenditure. As a result, investments should be managed in a prudent manner, focusing primarily on long-term safety and stability, targeting moderate rates of return as opposed to higher returns from riskier investments. While supporting local private sector initiatives could enhance economic growth, the SSB should be cautious about participating in projects where its liquidity needs in the next fifteen to twenty years may not be consistent with the investment. It should also be noted that when funds are invested locally there is an implicit dependence on the output and productivity of future generations. Therefore, there should be a move to investing a greater portion of the Fund overseas.

The current Investment Policy does not include target asset allocations. These should be added at the earliest opportunity.

6.4 ASSIDCO

Established in 2009 with a primary purpose of investing and developing properties in Anguilla, ASSIDCO is a wholly owned subsidiary of the SSB. As of December 2018, accumulated deficits after providing for impairment losses, totaled \$16.3 million. Excluding allowances for impairment, claims against the Government of Anguilla for lease rentals up to January 31, 2020, were \$36.3 million.

None of the investments made thus far by ASSIDCO appear to be outside the scope of the Social Security Fund as outlined in Section 12 of the Act. However, it is not possible to determine whether the financial experience under ASSIDCO would have been any different had the investment been made directly by the Social Security Fund.

The existence of this separate entity creates additional operating costs including audit and Directors' fees, and allowances to two SSB employees. It also adds to the complexity of the SSB's audited financial statements.

While a recommendation regarding keeping or dissolving ASSIDCO is outside the scope of this actuarial review of the Social Security Fund, it is recommended that the Board and Government:

- a) conduct a thorough review of ASSIDCO's existing purpose, goals, and objectives along with the challenges it has faced since inception, and
- b) Determine what amendments to Sections 11 and 12 of the Social Security Act and the Social Security Fund's Investment policy would be required to achieve revised objectives for developing properties in Anguilla.

Once this review is complete, the Board should make a firm decision on whether ASSIDCO should continue as a wholly owned subsidiary of the Social Security Board.

6.5 Risk Policy

The projections presented earlier indicate that under current contribution rate and benefit provisions the SSF will be depleted within the next 20 years. Specific measures to delay Fund depletion have been presented in this report. There remains, however, several risks that could result in Fund depletion even



sooner than projected as well as SSB not providing adequate benefits to Anguilla's residents. Many of these risks are briefly discussed in the following table. The Board is encouraged to review and update its Risk Policy so that it identifies the various risks that could cause the SSB to not meet its objectives or the Fund to fall short of the projections presented in this report as well as, include rational responses to events that may occur.

Table 6.7. Risks & Risk Mitigation Strategies

Risk Item	Mitigation Strategies/Reactions		
Inadequate cash to meet benefit obligations	 Regularly updated cash flow projections with worst case scenarios Appropriate levels of liquid assets at all times 		
Fund depleted sooner than projected	 Funding policy (when and by how much to increase contribution rate and make other adjustments) Better compliance Higher rate of return on investments with appropriate risks Benefits policy (appropriate benefits each with relevant qualifying conditions and benefit formula and amount) Lower administrative costs 		
Growing # of elderly without a pension	Better enforcement of compliance among both businesses/employers and Self-employed persons		
Benefits being inadequate	 Agree on the ideal level of the wage ceiling and adjust it regularly Periodic pension adjustments to offset the effect of inflation 		
Inability to convert investments into cash if needed	With over 60% of investments in a GoA loan which will not be fully repaid until 2041, new illiquid investments should be avoided		
Unexpected call on SSF to provide income support (e.g., COVID-19)	 Add a permanent Unemployment benefit to the SSB benefit package Pre-identified maximum amount that can be allocated to unexpected purposes Proper case made by government for why the support should be financed by the SSB as well as strict guidelines on how much, to whom and for how long the temporary support would be provided Amend relevant legislation prior to releasing any funds 		

This list of risks is not exhaustive, but it includes many high-level issues that could negatively affect the SSB and Anguilla. It is recommended that the SSB develop a Risk Management Policy which documents the level of exposure to the respective risks, explains the tolerance for such risk, and includes the measures and strategies to mitigate risk to the extent possible.

6.6 Other Matters

6.6.1 Self-employed & Informal Sector Workers



The primary goal of the SSB is to provide income security to workers when they have a temporary or permanent loss of income. The most important benefit is the lifetime Age pension. For formal sector workers, where the employer submits a monthly remittance with payment on behalf of all workers, the SSB works well and most are adequately covered. For informal sector workers, however, the SSB has only been able to consistently capture a small portion.

Low participation rates among informal sector workers are not uncommon in the Caribbean. There are no official estimates of the number of informal sector workers in Anguilla, but this may soon be available from the recently concluded Labour Force Survey. Contributions from self-employed persons account for only 1.3% of total contribution income.

To avoid increasing levels of non-participation among self-employed and informal sector workers, adopting new approaches to reaching them are critical. The most effective approach is likely to include:

- (a) Make SSB contributions a requirement to obtain government issued licenses and permits or authorization to carry on their respective trade, and
- (b) Have severe consequences if they do not have the required permit or license.

Banks, airlines, utilities and other sectors have made significant strides in recent years in how they use technology to interact with their customers to deliver services. These innovations have both reduced costs and afforded customers enhanced opportunities. Living with COVID-19 has also led to a significant shift to more efficient ways of transferring funds between individuals and institutions. Together with various government departments, the SSB should quickly adopt new approaches using available technology to allow its customers, especially informal sector workers, to interact with the SSB.

As it relates to how self-employed persons contribute, the SSB should eliminate the need for forms, specific payments amounts and payments for a specific month and instead adopt a system whereby amounts paid are converted into insurable earnings and contribution weeks for the purpose of determining benefit eligibility and amounts.

6.6.2. Waiting Days for Sickness Benefit

The first day from which Sickness benefit is payable depends on the length of the period of incapacity – 4th day if less than 14 days of incapacity but from the first day if more than 14 days of incapacity. The waiting period is typical among social security schemes and serves to avoid an exorbitant number of claims for one or two days. The Sickness benefit rate is 60%.

The primary goal of Sickness benefit is to replace lost income when off from work due to illness. Section 50 of the Labour (Relations) Act, 2018, covers sick leave and sick leave pay. Provisions related to sick leave pay and Social Security's Sickness benefit for a permanent employee are:

- Employers must grant sick leave on the basis of 1 day for every 110 days worked
- The employee is eligible for sick leave pay for up to 2 normal working weeks per year
- The employee is not eligible for sick leave pay from the employer if he is paid SS's Sickness benefit where the benefit is equal to his/her regular wage
- The minimum sick leave pay by an employer is his/her normal rate of wages less any amount of Sickness benefit



Therefore, where an employee has not yet exhausted 2 weeks of sick leave for the year from his/her employer, there appears to be no loss of income for the employee.

Approximately 2,500 Sickness benefit claims are paid each year and the average duration is between 10 and 11 days at an average daily rate of \$102. If 25% of all claims exceed 14 days and thus are payable from the first day and Sickness benefit, once awarded, is paid from the first day, the additional cost would be approximately \$0.5 million, or 0.2% of IW per annum.

6.6.3 Administrative Efficiency

Administrative efficiency relates to both how well the SSB administers the social security program (collects contributions, adjudicates and pays benefits and invests surplus funds) and how much it costs to perform these functions. As shown in Chapter 2, the cost of administering the SSB during the period 2017 to 2020 was 27% of contributions and 2.7% of insurable wages. Both rates are considered very high. Staff costs account for over 60% of general and administrative expenses. The cost of depreciating the new insurance administration system will further add to operating costs.

There is no single benchmark or target that is ideal for all countries and all social security systems. However, given the level of technology now available for pension and benefit administration, targets of 20% of contributions in 5 years and 15% of contributions in 10 years are not unreasonable. Both targets would be revised downwards if the contribution rate and/or wage ceiling is increased.

6.6.4 Social Security Development Fund (SSDF)

The SSDF is a vehicle that funds socially desirable projects that benefit the citizens of Anguilla through sports development, education, health services, environmental protection, economic development and community revitalization. It receives an allocation of 0.375% of contribution income. With this allocation and administrative costs consuming 2.7% of insurable wages, the effective contribution rate for SSB benefits is less than 7%.

As shown in previous chapters, contribution rate increases are inevitable. Benefit reforms as discussed in Section 6.2 will serve to slightly reduce long-term costs. Prior to deciding whether the SSDF allocation should be reduced or eliminated, the effectiveness of its contribution to desirable projects should be assessed.



6.6.5. Branch Allocations & Transfer of Reserves

As of December 2020, reserves of the Short-term benefits branch were negative following the payment of \$5.4 million in Unemployment benefit. The Long-term benefit branch had reserves of \$360 million. While there is no specific target funding level for the LTB branch, the funding level, of the STB branch is one year's benefit expenditure. The current allocation of 1.5% of insurable wages to the STB branch is below expected benefit and administration costs over the next three years. Therefore, changes to the allocation of contribution income between branches along with a transfer of reserves from the long-term to the Short-term benefits branch are recommended.

Table 6.8. Recommended Changes to Contribution Allocation & Reserve Transfers

Daniell Daniel	Contribution Inc	come Allocation	Danama Tanadan	
Benefit Branch	Current	Recommended	Reserve Transfer	
Short-term	1.500%	1.800%	\$15 mil. from LTB Branch	
Long-term	8.125%	7.825%	\$15 mil. to STB Branch	
All Benefit Branches	9.625%	9.625%		

The reallocation of contributions shown above excludes the SSDF. If a decision is made to reduce the allocation to the SSDF, 1.8% should be allocated to the STB branch with the remainder after the revised SSDF allocation going to the LTB branch.

Since these branches are only sub-accounts within the Social Security Fund, changes in the allocation of contribution and investment income, and transfer of reserves between branches, have no impact on the overall present or future funded position of the Social Security Fund. These adjustments are for internal accounting purposes only and are consistent with the manner that the SSB has elected to finance and account for the various types of benefits.



Chapter 7 Unemployment **Benefit**

While almost all industrialised countries have some form of unemployment insurance, Barbados and The Bahamas are the only Caribbean countries with a permanent unemployment benefit (UEB). This benefit provides partial income replacement to eligible covered workers for short periods following involuntary unemployment. Like other contributory social security benefits, unemployment benefits are paid as a matter of right with no demonstration of need required.

The Labour Force Survey conducted in 2018 estimated the unemployment rate at 6.8%. In 2020, both the Government and the SSB established a temporary income support programme for workers who lost employment income as COVID-19 caused business closures.

A detailed assessment of whether or not the introduction of an unemployment benefit is viable is beyond the scope of this review. However, a brief discussion of the purpose and design issues to be considered prior to implementing such a programme is presented below.

Unemployment insurance programmes have both primary and secondary objectives. The primary objectives involve assisting individual workers during periods of involuntary unemployment while the secondary objectives stress the promotion of economic efficiency and stability. Specifically, these objectives may be summarised as follows:

Table 7.1 **Objectives of Unemployment Insurance Programmes**

Primary Objectives

- (1) Provide cash payments during involuntary unemployment,
- (2) Maintain to a substantial degree the unemployed worker's standard of
- (3) Provide time to find employment consistent with their skills and experience.
- (4) Help unemployed workers find jobs.

Secondary Objectives

- (1) Stabilise economy during recessions by enabling unemployed workers to maintain their personal income & consumption,
- (2) Promote better utilisation of labour by encouraging unemployed workers to find appropriate jobs and, where necessary, helping them to improve their job skills.
- (3) Help employers maintain a skilled work force as skilled workers are not forced to seek other jobs, and thus are free to return when they are called back.

When designing an unemployment benefit, the following issues should be considered:



 Table 7.2
 Unemployment Benefits Design Considerations

Design Element	Typical Provision	Issues for Added Consideration
Who should be covered	 Employed persons - those most at risk of becoming involuntarily unemployed 	 Should permanent civil servants be covered? (In Barbados they are not but in The Bahamas they are) Self-employed persons are more difficult to cover but could be included with some differences
Definition of unemployment	 Lost job through no fault of your own and are available for and able to work, but can't find a job 	 Unemployed could also include "partial unemployment" – working for reduced hours/days/income (Included in Barbados but not in The Bahamas)
Eligibility Requirements	 Was employed in insurable employment Lost job through no fault of your own (a few exceptions may be allowed) Been without work and without pay for at least a certain # of days or weeks Worked and contributed to the SSB for the required # of weeks in one or more recent periods, or since the last UEB claim Ready, willing and capable of working Actively looking for work 	 Could add an element of job- specific online training
Benefit Replacement rate	 Will depend on initial design objectives (currently 60% in Barbados, 40% in The Bahamas) 	 Start with a modest rate first (e.g., 40% or 50%) and increase as experience unfolds
Maximum benefit duration	 Will depend on initial design (currently 26 weeks in Barbados, 13 weeks in The Bahamas) 	 Start with say 13 weeks and increase as experience unfolds
Verified continued eligibility Efficient integration of UEB with labour law (Severance/Redundancy)	 Thorough checks required to verify ongoing eligibility status Avoid duplication and/or anomalies between UEB and benefits payable by employer if made redundant 	 Verification could be conducted within the SSB or by a 3rd party Amendments to the Labour law may be required



Design Element	Typical Provision	Issues for Added Consideration
Contribution Rate	 Rate required based on benefit rules and funding objectives 	 Rate reviewed triennially as part of actuarial review
Sharing of Contributions between workers and employer	 50%/50% employer/employee 	
Accounting for UEB	 Separate Fund (Barbados) or part of the STB Branch (The Bahamas) 	 Could also be a new branch within the SSF
Funding objectives (adequacy of reserves)	 Build up enough reserves, even for times of "crisis" when a significant portion of workforce is unemployed for an extended period 	 Addition of UEB should not compromise long-term sustainability of the SSF
Job-matching service (JMS)	 Place for employers to post available jobs and unemployed persons to register 	 Registration with a JMS should be a prerequisite for claiming UEB. Claimant must sign a "Job Seeker Agreement" This service could also be used to confirm whether unemployed persons meet the conditions for ongoing eligibility

Rough estimates of the incidence of unemployment claims and the likely average duration suggest that a contribution rate of 0.3% to 0.7% of insurable earnings should be sufficient to meet expenditure for a scheme that replaces 50% of earnings for a maximum of 13 weeks.

The following matrix shows the contribution rates required for various combinations of unemployment incidence rates and average benefit durations for a 50% benefit rate.

Table 7.3 Estimated UEB Costs For 50% Benefit Rate

Avg. Benefit Duration	% of Eligible Insureds That Claim in A Year		
(weeks)	3%	5%	7%
6	0.20%	0.34%	0.48%
8	0.27%	0.45%	0.63%
10	0.34%	0.57%	0.79%
12	0.41%	0.68%	0.95%
14	0.48%	0.79%	1.11%
16	0.54%	0.90%	1.27%



Chapter 8 Good Governance

A very influential but often invisible contributor to the state of public sector agencies is political interference and the failure to adopt and follow good governance practices. For example, poor governance practices and political interference at many regional social security schemes have resulted in overstaffing, poor investment diversification, delays in implementing recommended reforms, and the failure to table in Parliament and publish key reports that outline the state of the fund's current and future finances.

To assist social security schemes like the Anguilla SSB, the International Social Security Association (ISSA) in 2011 published *ISSA Good Governance Guidelines for Social Security Institutions*. These guidelines provide ISSA member organizations with guiding principles and practical guidelines on good governance. They also present a virtual checklist of essential elements that help engender and support good governance within the institution. It is strongly recommended that the Board adopt the principles and guidelines included in ISSA's *Good Governance Guidelines* and initiate steps to ensure that good governance practices are commonplace in all aspects of the Social Security's administration and operations.

ISSA Good Governance Guidelines

ISSA defines governance as:

"the manner in which the vested authority uses its powers to achieve the institution's objectives, including its powers to design, implement and innovate the organisation's policies, rules, systems and processes, and to engage and involve stakeholders."

ISSA's *Good Governance Guidelines* further suggests that "good governance implies that the exercise of the vested authority is accountable, transparent, predictable, participative and dynamic." It describes these five principles as follows:

Accountability is the ability to hold legally responsible the officials who are in charge of the institution for managing the program prudently, efficiently and equitably.

Transparency is the availability and accessibility of accurate, essential and timely information to stakeholders and in reference to the decision-making process, promotes honesty, integrity and competence, and discourages wrongdoing.

Predictability refers to the consistent application of the law, policies, rules and regulations. Surprises and sudden changes in contribution rates, benefit entitlements or other features could undermine the credibility of the programme.

Participation refers to the active education, engagement and effective involvement of stakeholders to ensure the protection of their interests.

The principle of *dynamism* is defined as the element of positive change in governance. While the first four principles of governance may well be applied in the context of maintaining the status quo, dynamism



refers to changing and improving by doing things more efficiently and equitably, and by responding to the evolving needs of insured persons.

In addition to outlining in detail the five good governance principles as they specifically relate to Boards and Management, the *ISSA Good Governance Guidelines* include further guidelines in six specific areas that are of common concern to social security institutions. These guidelines, which support and promote the good governance principles listed above, are provided for the following areas:

- a) Actuarial soundness
- b) Enforcing the prudent person principle in investment management
- c) Prevention and control of corruption and fraud
- d) Service standards
- e) Staffing policies & performance appraisals
- f) Investments in Information and Communication Technology infrastructure

The third component of the ISSA Good Governance Guidelines is the "Questionnaire on Good Governance." Through hundreds of specific multiple choice questions on general governance practices of the Board and Management as it relates to the five principles and six specific areas of social security administration, institutions are able to determine the extent to which they practice good governance and where improvements are required. Completion of this document will be the ideal start to the Board's adoption of ISSA's recommended good governance principles and guidelines.

A Good Governance Guidelines manual that is localized for SSB could include specific sections that deal with the following:

- a) Powers of the Minister
- b) Functions and duties of the Board
- c) Terms of reference for the Chairman, Executive Director and Committees of the Board
- d) Board Member orientation
- e) Board Member code of conduct
- f) Disclosure of information

ISSA is the world's leading organization bringing together national social security administrations and agencies. It provides information, research, expert advice and platforms for members to build and promote dynamic social security systems. As a member organisation the SSB should take full advantage of the extensive work of the ISSA and make full use of the Good Governance Guidelines, Investment Guidelines, along with other tools and research designed to strengthen various aspects of its administration.



Statement of Actuarial Opinion

It is our opinion that for this report of the 12th Actuarial Review of the Social Security Fund:

- the data on which the projections and analysis are based are sufficient and reliable;
- the assumptions used are, in the aggregate, reasonable and appropriate, and
- the methodology employed is appropriate and consistent with sound actuarial principles.

This report has been prepared in accordance with the Caribbean Actuarial Association Actuarial Practice Standard #3 for Social Security Programs.

LifeWorks Ltd.

Derek Osborne

Partner

Marcia Tam-Marks

Mercie Soullent.

Partner

November 12, 2021



References

Annual reports and Financial Statements of the Social Security Fund

Social Security Act & Regulations

SSB Investment Policy & Guidelines

Report of the Actuarial Review of the Social Security Fund as of December 2019, Consultores Actuariales, SRL.

Various reports and publications by the Anguilla Central Statistical office



Appendix A Summary of Contribution & Benefit Provisions

Following is a general description of the coverage, contributions and benefits provisions of the Anguilla Social Security Board (SSB) as of December 31st, 2020.

A.1 Contingencies Covered & Benefits Provided

The SSB provides the following benefits:

- (a) **Long-term benefits:** Old Age, Disability, Survivors' and NCOAP.
- (b) **Short-term benefits:** Sickness, Maternity, Paternity and Funeral grant.

Employed and self-employed aged 15 - 65 are covered for the above contingencies

A.1.1 Insured Persons

Employed, self-employed and voluntary insured persons aged 16 to 65 are covered for the above contingencies as follows:

- (a) Employed persons: All contingencies.
- (b) Self-employed persons: All contingencies

A.1.2 Insurable Earnings and Contributions

Insurable earnings, which include basic salary and all other earnings paid in cash, are limited by a ceiling. The annual wage ceiling has increased since 1982 as follows:

Table A.1. Wage Ceiling Amounts, 1982 to Present

Period	Annual Amount	Monthly Amount	Weekly Amount
1982 - 1985	\$24,000.00	\$2,000.00	\$462.00
1986 – May 1993	\$24,000.00	\$2,000.00	\$462.00
June 1983 – 1996	\$36,000.00	\$3,000.00	\$693.00
1997 - 1998	\$48,000.00	\$4,000.00	\$923.00
1999 - 2006	\$60,000.00	\$5,000.00	\$1,154.00
2007	\$72,000.00	\$6,000.00	\$1,386.00
2008 - Present	\$84,000.00	\$7,000.00	\$1,617.00



Table A.2 Contribution Rates

Insured Category	Employee	Employer	Total
Employed	5%	5%	10%
Self-employed	-	-	8%

A.2 Summary of Benefits Provisions

A.2.1. LONG-TERM BENEFITS

(a) AGE BENEFIT

Contribution Requirement: 500 paid weekly contributions.

Age Requirement: 65. The pension is not dependent on retirement from the workforce.

Amount of Benefit. 30% of average annual insurable earnings over the best three years in the last 15 years, plus 1% for every 50 weeks credited over 500.

Duration of Benefit: Payable for life.

Maximum Pension: 60% of average insurable earnings.

Minimum Pension: \$165.00 per week

(b) AGE GRANT

Contribution Requirement: 150 paid weekly contributions.

Eligibility: Other than for the contribution requirement, the applicant must be eligible for Age Benefit.

Amount of Benefit. 6 times average weekly insurable earnings for each 50 weekly contributions paid. This amount is paid as a lump sum.

(c) DISABILITY BENEFIT

Contribution Requirement: 150 paid weekly contributions.

Eligibility: The applicant is:

- (i) Under the age of 65,
- (ii) Be permanently incapable of work,
- (iii) Has been unable to work for 1 year

Amount of Benefit. Calculated in the same manner as for Age benefit.

Minimum Pension: \$165.00 per week

Duration of Pension: Payable as long as insured remains permanently unable to work, or until the age of 65 when the insured will receive an Age pension.



(d) DISABILITY GRANT

Contribution Requirement: 50 paid weekly contributions.

Eligibility: Other than for the contribution requirement, the applicant must be eligible for Disability Benefit.

Amount of Benefit. 6 times average weekly insurable earnings for each 50 weekly contributions paid. This amount is paid as a lump sum.

(e) SURVIVORS' BENEFITS

Contribution Requirement: The deceased, at time of death, was in receipt of Age or Disability pension benefit, or had paid at least 150 contributions.

Eligibility: Widow or widower, unmarried child(ren) under 15, 21 if in full-time education, parent.

Amount of Benefit: The portion of the Age or Disability pension shown above:

Widow or widower: 2/3;

Child: 1/3;Orphan: 2/3

- Where there is no surviving qualifying spouse, the entire amount of survivor's pension shall be paid to the dependent children.
- Maximum benefit: 100% of pension deceased would have been entitled to.

Minimum pensions: Widow(er) - \$125 per week

Child - \$45 per week Child (orphan) - \$90 per week

Duration of Benefit.

- Widow or widower more than 40 years payable for life. (Ceases upon remarriage)
- Widow(er) under age 40, incapable of supporting self on reason of disability payable 1 year;
 (Ceases upon remarriage)
- Widow(er) under age 40, with dependent children payable as long as there are dependent children:
- Widow or widower with no dependent child and not invalid payable for one year;
- For dependent children, up to age 15, or 21 if in full time education;
- For a disabled child, for as long as disability continues.

If a pensioner meets the qualifying conditions for a Survivors pension and either an Age or Disability pension, then he/she shall receive 100% of the higher amount plus 60% of the lower amount, subject to a maximum of 90% of average monthly insurable earnings.

(f) SURVIVORS' GRANT

Contribution Requirement: 50 contributions paid or credited by the deceased insured person.

Eligibility: Other than for the contribution requirement of the deceased, the applicant must be eligible for Survivors pension.

Amount of Benefit: The same proportion of the Age grant as Survivors' pension bears to the Age pension.



(g) NON-CONTRIBUTORY OLD AGE PENSION (NCOAP)

Eligibility: A Belonger who is at least 68 years of age, with no means of support, who has resided in Anguilla for at least 20 years since attaining age 40, or for a total of 30 years since attaining age 16.

Amount of Benefit. \$105 per week.

A.2.2. SHORT-TERM BENEFITS

(a) SICKNESS BENEFIT

Contribution Requirements: 26 paid contribution weeks with at least 5 weeks in the last 13 contribution weeks immediately before illness began. The insured must be under 65 and be unable to work because of the illness.

Waiting Period: 3 days. If incapacity lasts for more than 14 days, benefit is payable from the first day.

Amount of Benefit: 60% of average weekly insurable earnings during the 13 weeks prior to illness.

Duration of Benefit: Maximum of 26 weeks.

(b) MATERNITY ALLOWANCE

Contribution Requirement: 26 paid contribution weeks with at least 20 contributions in the last 39 weeks immediately preceding the week that is six weeks before the expected or actual date of confinement.

Amount of Benefit: 60% of average weekly insurable earnings during the last 39 weeks.

Duration of Benefit: Up to 14 weeks while insured is off work.

(c) MATERNITY GRANT

Contribution Requirement: 26 weeks paid contributions by either the woman and/or the qualifying father (i.e. husband or single man living in the same household for at least 2 years)

Even if the woman is not entitled to Maternity Benefit, she will be entitled to a Maternity Grant if the qualifying father has paid at least 26 contributions.

Amount of Grant. \$1,350.00 per child

(d) PATERNITY ALLOWANCE

Contribution Requirement: 26 paid contribution weeks immediately before the date of confinement.

Amount of Benefit: 60% of average weekly insurable earnings during the last 26 weeks.

Duration of Benefit: Up to 2 weeks while insured is off work.

(e) FUNERAL GRANT



Eligibility: The insured person must have made at least 26 contributions. A grant is also payable in respect of the death of the spouse or a dependant child of the insured.

Amount of Grant. The amount is dependent on the age of the deceased.

Not exceeding 2 years \$1,000 Exceeding 2 years \$6,000



Appendix B Methodology, Data & Assumptions

This actuarial review makes use of the comprehensive methodology developed at the Financial and Actuarial Service of the ILO (ILO FACTS) for reviewing the long-term actuarial and financial status of a national pension scheme. The review has been undertaken by modifying the generic version of the ILO modeling tools to fit the specific case of Anguilla and the Social Security Fund. These modeling tools include a population model, an economic model, a labour force model, a wage model, a long-term benefits model and a short-term benefits model.

The actuarial valuation begins with a projection of Anguilla's future demographic and economic environment. Next, projection factors specifically related to Social Security are determined and used in combination with the demographic/economic framework to estimate future cash flows and reserves. Assumption selection takes into account both recent experience and future expectations, with emphasis placed on long-term trends rather than giving undue weight to recent experience. Projections have been made under three assumption sets for which the demographic and economic assumptions vary.

B.1 Modelling the Demographic & Economic Developments

The general Anguilla population has been projected beginning with totals obtained from the results of the 2011 national census and by applying appropriate mortality, fertility and migration assumptions. For the Best Estimate scenario the total fertility rate is assumed to remain constant at 1.4 throughout the projection period. Table B.1 shows ultimate age-specific and total fertility rates for each assumption set.

Table B.1. Age-Specific & Total Fertility Rates

Age		Ultim	ate Fertility	Rates
Group	2020	2020 Optimistic Best Estimate		Pessimistic
15 - 19	-	-	-	-
20 - 24	0.039	0.044	0.039	0.036
25 - 29	0.077	0.088	0.077	0.071
30 - 34	0.061	0.069	0.061	0.056
35 - 39	0.063	0.072	0.063	0.058
40 - 44	0.033	0.038	0.033	0.031
45 - 49	0.010	0.011	0.010	0.009
TFR	1.40	1.60	1.40	1.30



Mortality rates have been determined using United Nations life tables for Latin America. These rates have been adjusted selected to model closely the actual number of deaths in Anguilla. Improvements in life expectancy for the Best Estimate scenario have been assumed to follow the "slow" rate as established by the United Nations. Sample mortality rates for the Best Estimate scenario and the life expectancies at birth and at age 62 for sample years are provided in Table B.2.

Table B.2. **Sample Mortality Rates & Life Expectancies**

Age -		Males			Females	
Age	2020	2050	2080	2020	2050	2080
0	0.0285	0.0067	0.0042	0.0038	0.0049	0.0050
5	0.0006	0.0003	0.0002	0.0001	0.0001	0.0001
15	0.0004	0.0004	0.0002	0.0002	0.0001	0.0001
25	0.0008	0.0010	0.0009	0.0008	0.0003	0.0002
35	0.0013	0.0010	0.0009	0.0007	0.0004	0.0004
45		0.0024	0.0020	0.0017	0.0015 0.0040 0.0093	0.0015 0.0039 0.0092 0.0248
55		0.0064	0.0055	0.0047		
65	0.0175	0.0160	0.0131	0.0108		
75	0.0453	0.0449	0.0378	0.0315	0.0255	
85	0.1120	0.1244	0.1160	0.1019	0.0735	0.0701
95	0.2512	0.2799	0.2748	0.2578	0.2149	0.2097
Life Expectan	cy at:					
Birth	73.9	76.2	78.0	79.7	82.2	82.4
Age 65	16.6	16.5	17.6	18.7	20.5	20.6

Table B.3. Life Expectancies At Age 65

	2020		2080	
	2020	Optimistic	Best Estimate	Pessimistic
Male	16.6	16.5	17.6	19.0
Female	18.7	18.5	20.6	20.6



For the Best Estimate scenario, net in-migration is assumed to reduce from 140 per year to 80 per year in 2045, remaining constant thereafter. The Optimistic and Pessimistic scenarios assume higher and lower ultimate in-migration of 100 and 40 person per year, respectively.

Table B.4. **Net Migration**

Λ.α.ο.		2020			2045+	
Age	Opt.	Best Est.	Pess.	Opt.	Best Est.	Pess.
0 - 9	12	12	12	8	7	3
10 - 19	11	11	11	8	6	3
20 - 29	65	65	65	46	37	19
30 - 39	38	38	38	27	22	11
40 - 49	11	11	11	8	6	3
50 - 59	3	3	3	2	2	1
60 - 69	1	1	1	1	0	0
70+	0	0	0	0	0	0
All Ages	140	140	140	100	80	40

The projection of the labour force, i.e. the number of people available for work, is obtained by applying assumed labour force participation rates to the projected number of persons in the total population. Labour force force participation rates for both males and females are assumed to remain unchanged throughout the projection period. Table B.5 below shows the assumed age-specific labour force participation rates in 2020 and 2080.

Table B.5. Age-Specific & Total Labour Force Participation Rates

Year	Voor Me	Year Males
	Teal Wi	
2020	2020 78	2020 78%
2025	2025 78	2025 78%
2030	2030 78	2030 78%
2040	2040 7	2040 77%
2050	2050 70	2050 76%
2060	2060 70	2060 76%
2070	2070 75	2070 75%
2080	2080 70	2080 76%

The projected real GDP divided by the projected labour productivity per worker gives the number of employed persons required to produce total output. Unemployment is then measured as the difference between the projected labour force and employment.

Estimates of increases in the total wages as well as the average wage earned are required. Annual average real wage increases are assumed equal to the assumed increase in labour productivity as it is



expected that wages will almost adjust to efficiency levels over time. The inflation assumption affects nominal average wage increases. Actual assumptions for each scenario are found in Table 4.1.

B.2 Projection of Social Security Income & Expenditure

This actuarial review addresses all Social Security Fund revenue and expenditure items. For Short-term benefits, income and expenditure are projected as a percentage of insurable wages. Projections of pensions are performed following a year-by-year cohort methodology. For each year up to 2080, the number of contributors and pensioners, and the dollar value of contributions, benefits and administrative expenditure, is estimated.

Once the projections of the insured (covered) population, as described in the previous section, are complete, contribution income is then determined from the projected total insurable wages, the contribution rate and contribution density. Contribution density refers to the average number of weeks of contributions persons make during a year.

Benefit amounts are obtained through contingency factors based primarily on SSB experience and applied to the population entitled to benefits. The yield on reserves is assumed to remain constant throughout the projection period. Social Security's administrative expenses are modelled as a percentage of insurable earnings. Finally, the end-of-year reserve is the beginning-of-year reserve plus the net result of cash inflow and outflow.

B.3 Social Security Population Data and Assumptions

The data required for the valuation of the Social Security Fund is extensive. As of December 31st, 2020, required data includes the insured population by active and inactive status, the distribution of insurable wages among contributors, the distribution of paid and credited contributions and pensions in payment, all segregated by age and sex.

SSB specific assumptions such as the incidence of invalidity, the distribution of retirement by age, density and collection of contributions, are determined with reference to the application of the SSBs provisions and historical experience.

Projecting investment income requires information of the existing assets at the valuation date and past performance of each class. Future expectations of changes in asset mix and expected rates of return on each asset type together allow for long-term rate of return expectations.

Details of Social Security specific input data and the key assumptions used in this report are provided in tables B.6 through B.10.



Table B.6. 2020 Active Insured Population, Earnings & Past Credits

Age	# of Active	Insureds	Average M Insurable E	-	Average # of Years of Past Contributions		
	Male	Female	Male	Female	Male	Female	
15 - 19	82	95	2,338	2,182	0.8	0.8	
20 - 24	354	356	3,231	3,070	2.3	2.3	
25 - 29	403	438	3,802	3,469	4.7	5.3	
30 - 34	456	536	4,125	3,993	7.4	8.9	
35 - 39	503	580	4,628	4,350	9.8	11.8	
40 - 44	410	469	4,724	4,423	11.6	13.9	
45 - 49	416	460	4,766	4,057	14.0	17.4	
50 - 54	391	463	4,619	4,029	16.0	20.9	
55 - 59	330	410	4,590	3,807	18.0	22.1	
60 - 64	219	236	4,266	3,288	17.0	22.1	
65+	33	35	3,826	3,197	17.0	22.1	
All Ages	3,597	4,078	4,597	4,134	10.6	13.3	



Table B.7. Pensions in Payment - December 2020

Age	Old-Age	Benefit		lidity nefit		vivors nefits	Assistance	
_	Male	Female	Male	Female	Male	Female	Male	Female
0 - 4	-	-	-	-	2	3	-	-
5 - 9	-	-	-	-	7	4	-	-
10 - 14	-	-	-	-	11	12	-	-
15 - 19	-	-	-	-	6	13	-	-
20 - 24	-	-	1	-	-	1	-	-
25 - 29	-	-	2	-	-	-	-	-
30 - 34	-	-	-	-	1	1	-	-
35 - 39	-	-	1	3	1	1	-	-
40 - 44	-	-	1	2	-	6	-	-
45 - 49	-	-	7	7	1	8	-	-
50 - 54	-	-	10	8	4	13	-	-
55 - 59	-	-	14	20	2	20	-	-
60 - 64	-	-	16	46	5	21	-	-
65 - 69	186	237	-	-	7	29	3	4
70 - 74	106	112	-	-	4	12	13	4
75 - 79	48	71	-	-	2	15	9	14
80 - 84	24	39	-	-	2	8	7	10
85 - 89	13	9	-	-	1	5	9	12
90 - 94	3	4	-	-	-	3	3	8
95 - 99	1	3	-	-	-	1	-	5
# of Pensioners	381	475	52	86	56	176	44	57
Avg Monthly Pension	\$ 1,669	\$ 1,466	\$1,199	\$1,171	\$ 464	\$ 659	\$ 455	\$ 455



The following table shows assumed density factors, or the average portion of the year for which contributions are made. These rates are assumed to remain constant for all years.

Table B.8. **Density of Contributions**

Age	Ma	ales	Fem	ales
Aye	2021	2022+	2021	2022+
17	44%	44%	37%	40%
22	58%	61%	58%	63%
27	66%	70%	68%	73%
32	68%	72%	72%	77%
37	69%	74%	74%	79%
42	71%	75%	75%	80%
47	70%	73%	76%	81%
52	71%	74%	76%	83%
57	71%	74%	74%	81%
62	69%	73%	73%	80%

The following table shows the expected incidence rates of insured persons qualifying for Invalidity benefit which is assumed for all projection years.

Table B.9. **Rates of Entry into Invalidity**

Males	Females
-	-
-	-
1.494	0.855
0.796	1.415
0.807	0.648
1.850	0.888
2.854	3.326
9.790	2.613
7.563	14.332
17.536	37.599
	- 1.494 0.796 0.807 1.850 2.854 9.790 7.563



Table B.10, shows the assumed probability of Survivor benefit claims and the average ages of new claimants, groups by the age of the deceased.

Table B.10. Probability of a Deceased Having Eligible Survivors & Their Average Ages

	Ma	ales	Fema	les
Age	Probability of Eligible Spouse	Avg # of Eligible Children	Probability of Eligible Spouse	Avg # of Eligible Children
17	-	-	-	-
22	0.09	0.0	-	0.1
27	0.32	0.1	-	0.3
32	0.43	0.5	0.07	0.7
37	0.36	0.9	0.23	1.4
42	0.39	1.4	0.28	1.3
47	0.58	1.3	0.13	1.2
52	0.71	0.8	0.13	0.9
57	0.77	0.5	0.36	0.2
62	0.68	0.6	0.41	0.1
67	0.39	0.2	0.17	-
72	0.19	0.2	0.03	-
77	0.16	0.2	0.03	-
82	0.11	0.1	0.02	-
87	0.04	0.0	0.01	-



Appendix C Projection Results– Alternate Scenarios

Table C.1. Projected Anguilla Population, All Scenarios

Year	All Ages	0-15		16-63	1	62+		Age Depend. Ratio
2011	13,572	3,378	24.9%	9,171	67.6%	1,023	7.5%	0.11
			Bes	st Estimate				
2021	15,682	2,995	19.1%	11,188	71.3%	1,499	9.6%	0.13
2031	17,264	2,889	16.7%	11,857	68.7%	2,518	14.6%	0.21
2041	18,295	2,960	16.2%	11,907	65.1%	3,429	18.7%	0.29
2051	18,695	2,809	15.0%	11,893	63.6%	3,993	21.4%	0.34
2061	18,722	2,690	14.4%	11,670	62.3%	4,362	23.3%	0.37
2071	18,566	2,672	14.4%	11,179	60.2%	4,715	25.4%	0.42
			0	ptimistic				
2021	15,905	3,204	20.1%	11,194	70.4%	1,507	9.5%	0.13
2031	18,308	3,401	18.6%	12,361	67.5%	2,546	13.9%	0.21
2041	20,219	3,700	18.3%	13,015	64.4%	3,504	17.3%	0.27
2051	21,421	3,679	17.2%	13,580	63.4%	4,163	19.4%	0.31
2061	22,248	3,651	16.4%	13,907	62.5%	4,690	21.1%	0.34
2071	22,910	3,752	16.4%	13,842	60.4%	5,316	23.2%	0.38
			P	essimistic				
2021	15,612	2,935	18.8%	11,183	71.6%	1,494	9.6%	0.13
2031	16,650	2,638	15.8%	11,526	69.2%	2,486	14.9%	0.22
2041	16,984	2,548	15.0%	11,085	65.3%	3,351	19.7%	0.30
2051	16,648	2,270	13.6%	10,518	63.2%	3,861	23.2%	0.37
2061	15,891	2,037	12.8%	9,751	61.4%	4,102	25.8%	0.42
2071	14,941	1,920	12.8%	8,810	59.0%	4,212	28.2%	0.48



Table C.2. Projected Cash Flows & Reserves, Pessimistic Scenario (millions of \$'s)

		Cash In	flows			Cash Out	flows			Res	erves
Year	Contribution Income	Investment Income	Other Income	Total	Benefits & Pensions	Admin. Expenses	SSDF	Total	Surplus/ (Deficit)	End of Year	R-E Ratio
2018	31.7	3.7	0.2	35.6	22.0	8.0	1.5	31.4	4.2	343	10.9
2019	32.9	16.7	0.5	50.1	23.9	8.8	1.0	33.7	16.5	358	10.6
2020	25.3	14.3	0.1	39.8	30.3	7.4	0.4	38.1	1.7	360	9.4
2021	24.7	10.6	0.2	35.6	27.6	7.6	0.9	36.1	(0.5)	359	10.0
2022	27.5	10.6	0.2	38.3	30.2	8.5	1.0	39.7	(1.4)	358	9.0
2023	31.2	10.6	0.2	41.9	33.3	9.7	1.2	44.1	(2.2)	356	8.1
2024	33.1	10.4	0.2	43.8	37.8	10.4	1.2	49.5	(5.6)	350	7.1
2025	34.6	10.2	0.2	45.1	41.6	10.9	1.3	53.8	(8.8)	341	6.3
2026	35.7	9.9	0.3	45.9	45.8	11.4	1.3	58.5	(12.7)	329	5.6
2030	40.3	7.3	0.3	47.9	65.6	13.3	1.5	80.4	(32.5)	230	2.9
2040	51.0	(11.5)	0.4	39.8	118.5	16.9	1.9	137.3	(97.5)	(439)	(3.2)
2050	61.8	(51.3)	0.4	10.9	166.1	20.5	2.3	188.9	(178.0)	(1,826)	(9.7)
2060	73.6	(120.5)	0.5	(46.4)	223.2	24.4	2.8	250.4	(296.8)	(4,227)	(16.9)
2070	87.6	(233.0)	0.6	(144.7)	296.0	29.1	3.3	328.4	(473.1)	(8,120)	(24.7)
2080	104.5	(406.2)	0.7	(301.0)	364.6	34.6	3.9	403.2	(704.2)	(14,095)	(35.0)

Negative reserves indicate the indebtedness of the Fund and negative investment income is the current cost of servicing that debt.



Table C.3. Projected Benefit Expenditure- Pessimistic Scenario (millions of \$'s)

Year		Pensions	Benefits as a % of:				
	Age	Invalidity	Survivors	Non-Cont.	Short- term	Insurable Wages	GDP
2018	12.2	2.0	1.6	0.6	5.6	6.9%	2.5%
2019	14.9	2.1	1.9	0.6	4.5	7.3%	2.4%
2020	16.6	2.1	2.0	0.6	8.6	11.9%	4.3%
2021	18.5	2.2	2.0	0.5	4.3	10.9%	3.9%
2022	20.3	2.4	2.2	0.5	4.8	10.7%	3.7%
2023	22.4	2.6	2.3	0.5	5.4	10.5%	3.9%
2024	26.0	2.9	2.6	0.5	5.7	11.2%	4.2%
2025	29.2	3.0	2.8	0.5	6.0	11.8%	4.5%
2026	32.7	3.3	3.1	0.5	6.2	12.6%	4.8%
2030	49.8	4.1	4.1	0.5	7.0	15.9%	6.3%
2040	95.1	6.1	7.9	0.5	8.8	22.8%	9.4%
2050	134.3	8.4	12.1	0.6	10.7	26.4%	11.1%
2060	182.5	10.9	16.4	0.7	12.8	29.7%	12.5%
2070	245.9	12.6	21.5	0.8	15.2	33.1%	14.0%
2080	303.9	14.5	27.2	0.9	18.1	34.2%	14.5%



Projected Contributors & Pensioners, Pessimistic Scenario Table C.4.

Year	# of Contributors		# of P	Total # of	Ratio of		
		Age	Invalidity	Survivors	Non-Cont.	Pensioners	Contributors to Pensioners
2018	8,074	717	155	188	116	1,175	6.9
2019	8,066	783	169	202	113	1,265	6.4
2020	7,676	856	138	232	101	1,327	5.8
2021	7,685	932	144	241	100	1,418	5.4
2022	7,720	1,014	146	264	98	1,521	5.1
2023	7,759	1,105	152	286	96	1,638	4.7
2024	7,951	1,204	157	308	94	1,762	4.5
2025	8,025	1,310	157	328	91	1,885	4.3
2026	8,132	1,421	163	346	90	2,020	4.0
2030	8,514	1,894	179	407	84	2,564	3.3
2040	8,882	2,712	216	585	76	3,589	2.5
2050	8,403	2,951	240	701	73	3,965	2.1
2060	7,794	3,111	240	738	72	4,162	1.9
2070	7,062	3,305	213	751	72	4,342	1.6
2080	6,523	3,204	190	734	72	4,200	1.6



Table C.5. Projected Cash Flows & Reserves, Optimistic Scenario (millions of \$'s)

	Cash Inflows				Cash Out	flows			Rese	erves	
Year	Contribution Income	Investment Income	Other Income	Total	Benefits & Pensions	Admin. Expenses	SSDF	Total	Surplus/ (Deficit)	End of Year	R-E Ratio
2018	31.7	3.7	0.2	35.6	22.0	8.0	1.5	31.4	4.2	343	10.9
2019	32.9	16.7	0.5	50.1	23.9	8.8	1.0	33.7	16.5	358	10.6
2020	25.3	14.3	0.1	39.8	30.3	7.4	0.4	38.1	1.7	360	9.4
2021	26.0	14.2	0.2	40.4	27.6	7.7	1.0	36.3	4.2	364	10.0
2022	29.3	14.4	0.2	43.9	30.3	8.3	1.1	39.7	4.1	368	9.3
2023	33.5	14.5	0.2	48.3	33.5	9.2	1.3	43.9	4.4	373	8.5
2024	36.0	14.7	0.3	50.9	38.1	9.5	1.3	48.9	2.0	375	7.7
2025	37.9	14.7	0.3	52.8	41.8	9.7	1.4	52.9	(0.1)	375	7.1
2026	39.5	14.6	0.3	54.4	46.0	9.7	1.5	57.2	(2.8)	372	6.5
2030	46.4	13.1	0.3	59.9	65.7	9.6	1.7	77.0	(17.2)	326	4.2
2040	64.7	(4.2)	0.5	60.9	121.8	12.7	2.4	136.9	(76.0)	(147)	(1.1)
2050	86.2	(49.2)	0.6	37.6	179.5	16.9	3.2	199.6	(161.9)	(1,336)	(6.7)
2060	113.1	(138.7)	0.8	(24.9)	255.3	22.2	4.2	281.7	(306.5)	(3,692)	(13.1)
2070	148.1	(304.3)	1.0	(155.2)	367.8	29.0	5.6	550.5	(705.7)	(8,040)	(20.0)
2080	193.9	(592.9)	1.4	(397.7)	491.2	38.0	7.3	730.4	(1,128.1)	(15,588)	(29.1)

Negative reserves indicate the indebtedness of the Fund and negative investment income is the current cost of servicing that debt.



Projected Benefit Expenditure- Optimistic Scenario (millions of \$'s) Table C.6.

		Pensions	s, Grants & E	Benefits		Benefits as	as a % of:	
Year	Age	Invalidity	Survivors	Non-Cont.	Short- term	Insurable Wages	GDP	
2018	12.2	2.0	1.6	0.6	5.6	1.8%	2.5%	
2019	19.5	0.0	0.0	0.0	4.5	1.4%	2.4%	
2020	21.3	0.0	0.0	0.0	9.0	3.5%	4.3%	
2021	18.5	2.2	2.0	0.5	4.3	10.8%	3.8%	
2022	20.3	2.4	2.2	0.5	4.9	10.6%	3.7%	
2023	22.4	2.6	2.3	0.5	5.6	10.2%	3.8%	
2024	26.0	2.9	2.6	0.5	6.0	10.8%	4.1%	
2025	29.1	3.0	2.8	0.5	6.3	11.3%	4.3%	
2026	32.6	3.3	3.1	0.5	6.6	11.9%	4.6%	
2030	49.2	4.2	4.1	0.5	7.7	14.4%	5.7%	
2040	95.9	6.6	8.0	0.5	10.8	19.2%	8.0%	
2050	141.8	9.9	12.8	0.6	14.4	21.2%	8.9%	
2060	203.1	14.2	18.5	0.7	18.8	23.0%	9.7%	
2070	298.3	17.9	26.2	0.8	24.7	25.3%	10.6%	
2080	399.0	23.1	35.8	0.9	32.3	25.8%	10.8%	



Projected Contributors & Pensioners, Optimistic Scenario Table C.7.

	# of		# of P	ensioners		Total # of	Ratio of
Year 	Contributors	Age	Invalidity	Survivors	Non-Cont.	Pensioners	Contributors to Pensioners
2018	8,074	717	155	188	116	1,175	6.9
2019	8,066	783	169	202	113	1,265	6.4
2020	7,676	856	138	232	101	1,327	5.8
2021	7,763	932	144	241	100	1,418	5.5
2022	7,987	1,014	146	264	98	1,521	5.2
2023	8,227	1,105	152	286	96	1,639	5.0
2024	8,643	1,204	157	308	94	1,764	4.9
2025	8,901	1,310	158	329	92	1,889	4.7
2026	9,051	1,421	165	348	90	2,024	4.5
2030	9,607	1,894	186	413	85	2,578	3.7
2040	10,348	2,737	232	603	76	3,648	2.8
2050	10,701	3,013	272	739	73	4,097	2.6
2060	10,932	3,293	299	812	73	4,477	2.4
2070	10,880	3,794	290	880	73	5,037	2.2
2080	11,004	3,965	288	928	73	5,254	2.1



Appendix D Income, Expenditure & Reserves, 2018–2020

	2018	2019	2020
Income			
Contribution Income	31.7	32.8	25.1
Investment Income	3.7	16.7	15.0
Other Income	0.2	0.4	0.1
Total Income	35.6	49.9	40.2
Expenditure			
Benefits			
Sickness Benefit	2.9	3.2	2.1
Maternity Benefit	0.8	0.8	0.8
Paternity Benefit	-	0.0	0.0
Funeral Grant	0.4	0.5	0.4
Unemployment	1.5	-	5.2
Age Pension	12.2	14.9	16.6
Invalidity Pension	2.0	2.1	2.1
Survivors' Pension	1.6	1.9	2.0
Non-Cont Ass Pension	0.6	0.6	0.6
Total Benefit Expenditure	22.0	23.9	29.9
Administrative Expenditure	8.0	8.7	7.5
Other Expenditure	-	0.2	-
Total Expenditure	30.0	32.8	37.4
SS Dev Fund	1.5	1.0	0.4
Excess of Income over Expenditure	4.2	16.1	2.4
Reserves at End of Year	336.9	353.0	355.4
Short-Term Benefits Branch	1.9	1.1	(5.3)
Long-Term Benefits Branch	336.5	352.3	360.4
Social Security Dev. Fund	0.2	0.4	1.1



Appendix E Benefit Experience & Analysis

E.1. Long-term Benefit Experience, 2018 – 2020

LTB Branch Expenditure As % of Insurable Wages, 2018-2020 Table E.1.

Pension Type	2018	2019	2020
Age Pension	3.84%	4.55%	6.60%
Disability Pension	0.63%	0.63%	0.84%
Survivors' Pension	0.52%	0.59%	0.80%
Non-Contributory Assistance Pension	0.19%	0.18%	0.23%
All Benefits & Grants	5.18%	5.94%	8.47%
Administrative Expenses	2.66%	2.32%	2.30%
Total Branch Expenditure	7.84%	8.27%	10.77%

Pensions In Payment, Awarded & Terminated, 2018-2020 Table E.2.

Pension Type	Paid in Dec. 2017	Awarded 2018-20	Terminated 2018-20	# Paid in Dec. 2020	Avg. Monthly Pension Dec. 2020
Age	695	315	154	856	\$1,556
Invalidity	144	83	89	138	\$1,181
Survivors	214	128	169	173	\$734
Assistance	132	25	56	101	\$455



E.2. Short-term Benefit Experience, 2018 – 2020

STB Branch Expenditure As % of Insurable Wages, 2018 - 2020 Table E.3.

Benefit Type	2018	2019	2020
Sickness Benefit	0.91%	0.96%	0.83%
Maternity Allowance & Grant	0.25%	0.24%	0.33%
Paternity Benefit	0.00%	0.01%	0.02%
Funeral Grant	0.12%	0.14%	0.17%
Unemployment Benefit	0.47%	0.00%	2.08%
All Benefits & Grants	1.75%	1.36%	3.43%
Administrative Expenses	0.53%	0.49%	0.71%
Total Branch Expenditure	2.28%	1.85%	4.13%

With an allocation of 1.5% of insurable earnings plus investment returns, the STB Branch incurred deficits in each year.

Table E.4. Sickness Benefit Experience, 2018 – 2020

Year Ended	# Claims Awarded per 1,000 Insureds		Average Weekly Benefit	
2018	308	11.4	\$606	
2019	341	11.3	\$609	
2020	267	9.9	\$620	

Table E.5. Maternity Allowance Experience, 2018 - 2020

Year Ended	# Claims Awarded per 1,000 Insureds	Average Allowance Duration (days)	Average Weekly Allowance
2018	12.3	72.9	\$669
2019	13.1	71.8	\$632
2020	10.8	71.6	\$826



Table E.6. Paternity Allowance Experience, 2019 – 2020

Year Ended	# Claims Awarded per 1,000 Insureds	Average Allowance Duration (days)	Average Weekly Allowance
2019	5.0	1.8	\$509
2020	7.2	1.9	\$581

Maternity Grant & Funeral Grant Experience, 2018 – 2020 Table E.7.

Year Ended	# Births	# Grants Awarded	# Deaths	# Grants Awarded
2018	114	136	80	64
2019	130	139	91	74
2020	137	131	88	69



Appendix F Summary of Report's Recommendations

The following table classifies the many recommendations made in this report into three priority categories. While all recommendations are considered important and necessary, some may be delayed temporarily if further dialogue with stakeholders is considered necessary.

High Priority

- 1. For Age pension (i) revise the schedule of pension accrual rates and (ii) average wage over at least 5 years.
- 2. Gradually increase the contribution rate to 12% by 4 annual adjustments of ½% each starting in 2023.
- 3. Reduce administrative costs.
- 4. New approach for contributions and benefits for Self-employed persons.
- 5. Share this and other actuarial review reports with the general public and place them to the Social Security website.
- 6. Create two new polices Funding Policy and Benefits Policy. From these policies other changes such as increasing the contribution rate, increasing pensionable age and changing the "Age" pension to a "Retirement" pension can be decided.
- 7. Update the existing Risk Policy.
- 8. Update the Investment Policy Statement and include specific target asset allocations for different asset classes, location and sector.
- 9. Determine whether ASSIDCO is still suitable and necessary for the development of properties in Anguilla.
- 10. Create a comprehensive set of Good Governance Guidelines

Medium Priority

- 1. Implement a permanent unemployment benefit
- Assess whether specific employment injury benefits should be added

Low Priority

Transfer reserves from the LTB to STB branch and revise the contribution allocation.



Appendix G COVID-19 Effect in 2020 on Employment & Wages in Anguilla

The Social Security Board captures data on most workers in Anguilla and therefore has an extensive amount of employment and wage data. Following is an illustrative analysis of the impact of COVID-19 on wages and employment in 2020 compared with 2019 from SSB data.

Following is a summary of results presented below.

- 1. The number of persons who made at least one contribution during the year fell by 5%.
- 2. The total number of contribution weeks in 2020 were 21% fewer than in 2019.
- 3. Total insurable wages in 2020 were 22% lower than in 2019.
- 4. While the average insurable wage for weeks worked only fell by 1% in 2020 compared with 2019, the average annual insurable wage among Social Security contributors fell by 18%.

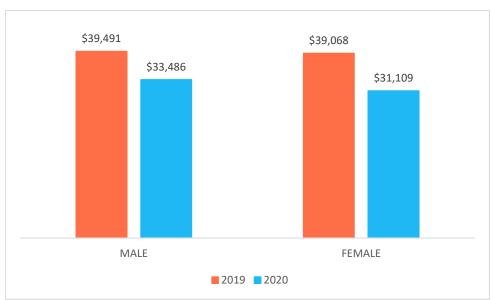


Figure G.1. Average Annual Insurable Wages, 2019 vs 2020



Figure G.2. Average Weekly Insurable Wages for Weeks Worked, 2019 vs 2020

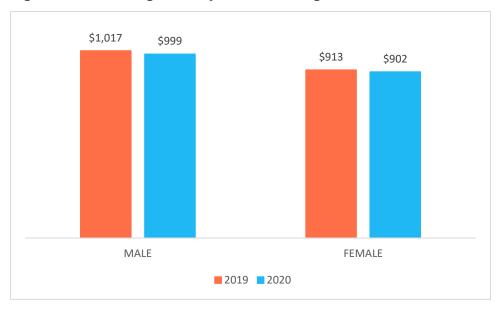


Figure G.3.Average # of Contribution Weeks, 2019 vs 2020

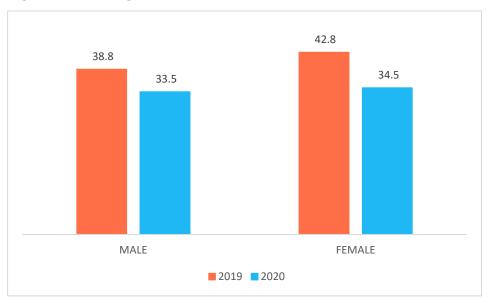


Figure G.4. Change in the Number of Contributions Made in 2020 Compared with 2019

# Weeks in	# Weeks of Contributions in 2020							# 2019
2019	0	1 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50+	Contributors
1 to 9	298	63	106	47	49	56	30	649
10 to 19	193	76	79	38	57	66	44	553
20 to 29	140	55	72	36	53	50	54	460
30 to 39	188	75	154	76	74	76	80	723
40 to 49	92	107	496	406	345	298	306	2,050
50+	26	126	272	196	1012	464	1,535	3,631
Total	937	502	1,179	799	1,590	1,010	2,049	8,066

In the above table, the green shade indicates more contribution weeks in 2020 and 2019 (14%), yellow shade indicates fewer (49%), and the blue shade indicates similar number of contributions in both years (26%). The orange shows those who contributed in 2019 but not in 2020 (12%). For this analysis, contributors of all ages are included.

Figure G.5. 2020 Insurable Wages Compared with 2019 (by income level)

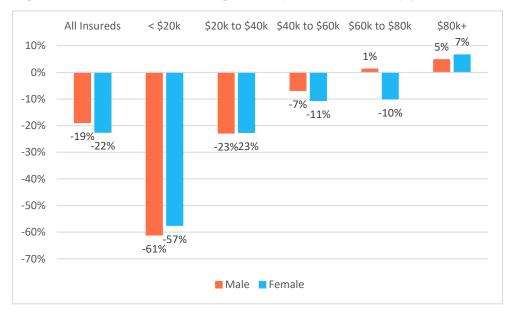
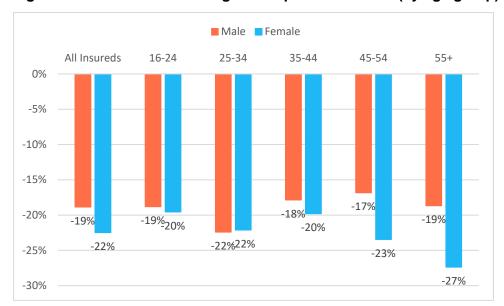


Figure G.6. 2020 Insurable Wages Compared with 2019 (by age group)







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