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The Changing Face of Bermuda's Seniors

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The Changing Face of Bermuda's Seniors

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Executive Summary

This report gives a thorough look at Bermuda's elderly population, highlighting significant changes that occurred between 1950 and 2004. The main areas of focus include the composition of the elderly population as it relates to age, sex, race, health, living accommodations and income. A brief profile is also presented on the institutional population.

Highlights:

- Between 1950 and 2000, the number of individuals aged 65 years and older rose from 2,135 to 6,722.
- The elderly population has grown faster than the total population over the last 50 years.
- The median age of persons 65 years and older increased from 71 in 1950, to 72 in 2000.
- In 2000, there were 69 elderly men for every 100 elderly women.
- Seven out of 10 seniors owned their own homes in 2000.
- The median annual pension income was less than $11,000 in 2000.
- High blood pressure, arthritis, and diabetes were the most common health conditions self-reported by the elderly in 2000.
- In 2000, 59% of seniors had major medical insurance.
- In 2004, households headed by seniors spent about $6,000 per year on health care.
- In 2000, 5% of seniors lived in institutions.

Note to readers

The statistics in this report include data extracted primarily from surveys of Bermuda's elderly population as well as Bermuda's Population and Housing Censuses. The reference period for the data ranges from 1950 to 2004. The target population for this report covers persons 65 years of age and older residing in private households and excludes overseas visitors.

Annex 1 presents selected social indicators for this population.

The last article, focuses on seniors living in institutions. Because there is limited historical and current data available, it is not possible to incorporate this segment of the population into the full analysis.

Throughout this report there is analysis by race because it is an important social indicator. The following racial categories were used:

- Black – black, black and white, and black and other
- White & other – white, Asian, white and other, and other

Some percentage distributions in the tables may not add up to 100 per cent because the percentages have been rounded.

A snapshot of Bermuda's seniors in 2000

Bermuda's typical senior citizen is a 72-year-old retiree residing in a home with a median household income of less than $36,000 a year, which categorizes them as "poor". In many cases the Government pension is their primary source of income. Fortunately, most seniors are mortgage-free homeowners and therefore, do not have to pay for housing, which is the largest expense for most people in Bermuda.

Seniors generally suffer from one or more health conditions associated with old age. High blood pressure, arthritis and diabetes are the most commonly reported conditions. Since the rising cost of health care is a concern to many seniors, they are typically covered by major medical insurance.

At this stage of life, men tend to be married and living with their wives. In contrast, women, because of a significantly higher life expectancy, are more likely to be widowed. Consequently, an elderly woman would either be living alone or living with relatives.

Some seniors, however, have completely different living arrangements. Five per cent of Bermuda's elderly live in institutions. These individuals are on average 83 years and have usually outlived their spouses. Seniors who are institutionalized tend to have mobility difficulties or suffer from Alzheimer's disease. They may have little or no family who are able to provide the special care that they require.

Bermuda's elderly: living longer, numbers soaring

As in many developed countries, Bermuda's population is getting greyer. Declining birth rates, lower death rates and the ageing of the Baby Boom generation – people born between 1946 and 1964 – are all working to raise the age of the population. Immigration during the 1900s has also been a major factor.

The elderly population in Bermuda is well documented. Pioneer research on this mature population began in the late 1970s and has continued until 2004. During the past 30-years, studies of Bermuda's elderly have focused on the following topics:

- Institutional housing and the poor elderly, with some references to the need for home health care services (1979),
- Community health, social services and housing for the elderly (1991),
- General health care (1996),
- Integration of healthcare services for the ill elderly (1999),
- Housing, nursing homes, residential care, healthcare & transport (1999),
- Long-term care – Housing and supportive services (2003), and
- Caregivers, services and partnerships (2004).[1]

This article examines the current demographic structure of Bermuda's elderly population and how it has changed over the last half a century.

Most pensioners are 65 or older

The terms "elderly", "senior citizens" and the "aged" often are used interchangeably. The age at which these mature persons are categorized as elderly is often linked to the eligibility for retirement benefits which vary across cultures and within countries.

In Europe – including the United Kingdom, Ireland and all other European Economic Community countries – persons are classified as seniors at the age of 60. In America, it is 60 for (some) women and 65 for men. In Bermuda, it is 65 for both men and women.[2]

In 2000, one out of every eight people in Bermuda were between 55 and 64 years old. Some 822 were pensioners. Nearly one-quarter of them were less than 60, and more than half of them (55%) continued working after receiving a pension. Many of these individuals were firefighters, police officers, and prison officers in non-managerial posts in which the mandatory retirement age is 55.[3]

Civil servants who started working for the Bermuda Government under the Public Service Superannuation Pension Act 1970, are also eligible to receive their full superannuation pension upon attaining the age of 55. This option was not available to the Government industrial workers who joined the service during the same period. Government industrial workers and other civil servants who joined the public service are eligible for retirement, with full pension benefits, upon attaining the age of 60 years.

The mandatory retirement age for persons working for the Bermuda Government, the largest employer, is 65. This is linked closely to the Contributory Pension Act 1970, which uses 65 as the age of eligibility for pensioners.

Despite this pensionable age, some banks, hotels, retail stores, construction businesses, and cleaning firms allow people to continue work-

[1] Fleming, Claudette, *A Work under Construction.* pp. 1-11.
[2] www.bermuda-online.org/seniorcitizens.htm. p.2.
[3] Public Service Superannuation Act 1981, available at www.bermudalaws.bm

ing after 65. Within the Government, some persons may be permitted to continue working at a later age with the Governor's consent. For the purposes of this report, however, the age 65 and older will be used to refer to the elderly.

Within this age group, there are biological and psychological differences, because a person's age does not necessarily reflect ability. As a result of these differences, the population aged 65 and over is often subdivided into three groups: "young-old" (aged 65 to 74), the "old" (aged 75 to 84) and the "old-old" (aged 85 and over).

Elderly population growing twice as fast as total population

Bermuda's elderly population has grown faster than the total population in every decade except in 1950. (Figure 1) Between 1950 and 2000, the elderly population increased at an annual average growth rate of 11.5%, more than twice the annual average growth rate of 5.0% for the entire population.

As a result, between the censuses of 1950 and 2000, the number of seniors aged 65 and over more than tripled from 2,135 to 6,722. Their share of the total population nearly doubled from 6% to 11%. (Figure 2)

The elderly population is growing at such a pace because Bermuda, like most developed countries, has experienced three key developments: the ageing of immigrant children and young adults who arrived during the 1900s, as well as declining death rates and decreasing birth rates. (Figure 3)

The main factor in the greying population is that Bermuda women have had fewer than 2.1 children since the 1970s. This is below the so-called "replacement level" of 2.1 children, and it has the effect of increasing the proportion of Bermuda's seniors because there are fewer children being born to offset the trend of the ageing population.

Bermuda's population: "expansive" to "constrictive"

Bermuda is undergoing a demographic shift at both ends of the age spectrum. While the proportion of Bermuda's population of seniors has almost doubled, the proportion of young people has declined sharply.

In 1950, the island had 12,193 young people aged 15 and under who represented one-third of the population; by 2000, the number in this age group had declined to 11,847, and they accounted for only 19% of the population.

As a result of these demographic shifts, the profile of Bermuda's population has changed. In 1950, it was an "expansive" population (Figure 4), with a large number of people in the young ages. However, by 2000, it had changed to a "constrictive" population, with a smaller number of people in the younger ages. (Figure 5)

In light of the ageing population and the accompanying social dynamics, it is essential to examine the impact of these changes on society. The "total dependency" ratio is one of the best known indicators that measures the burden of a changing demographic composition on those in the working population.

The "total dependency" ratio is the number of young people aged 15 and under, plus the number of people aged 65 and older, measured as a ratio for every 100 individuals aged 16 to 64. These are the people who comprise the prime working-age population.

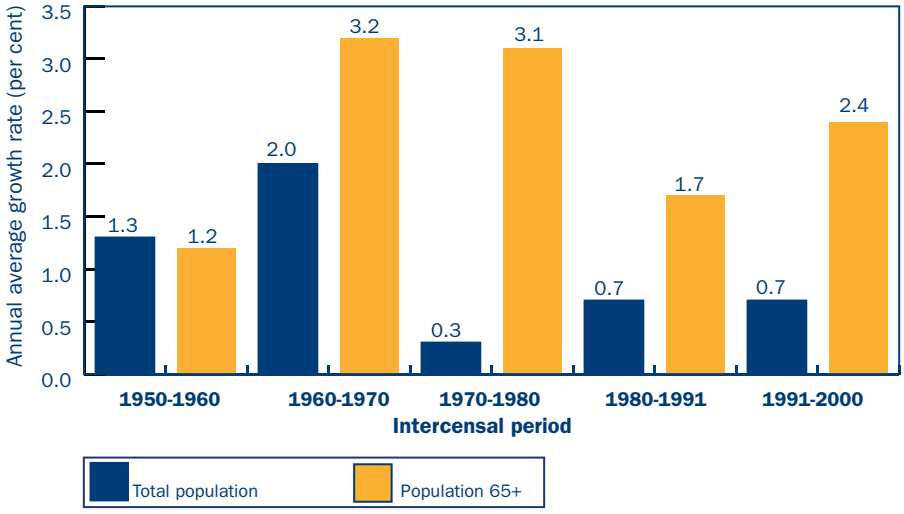
In 1950, for every 100 people in the prime working-age population, there were 67 dependents – either younger or older – to support. By 2000, this had declined to 45 dependents for every 100 workers. (Figure 6) This means that every worker had fewer people to support, in theory.

However, the decline in the "total dependency" ratio was attributable to the drop in the dependency ratio for youth. For every 100 people in the working-age population in 1950, there were 57 individuals up to the age of 15 to support. By 2000, this had dropped to 29 for every 100 individuals.

In contrast, the dependency ratio among seniors actually soared. In 1950, there were only 10 dependents aged 65 and over for every 100 workers. By 2000, this had nearly doubled to 16 seniors for every 100 persons.

Figure 1

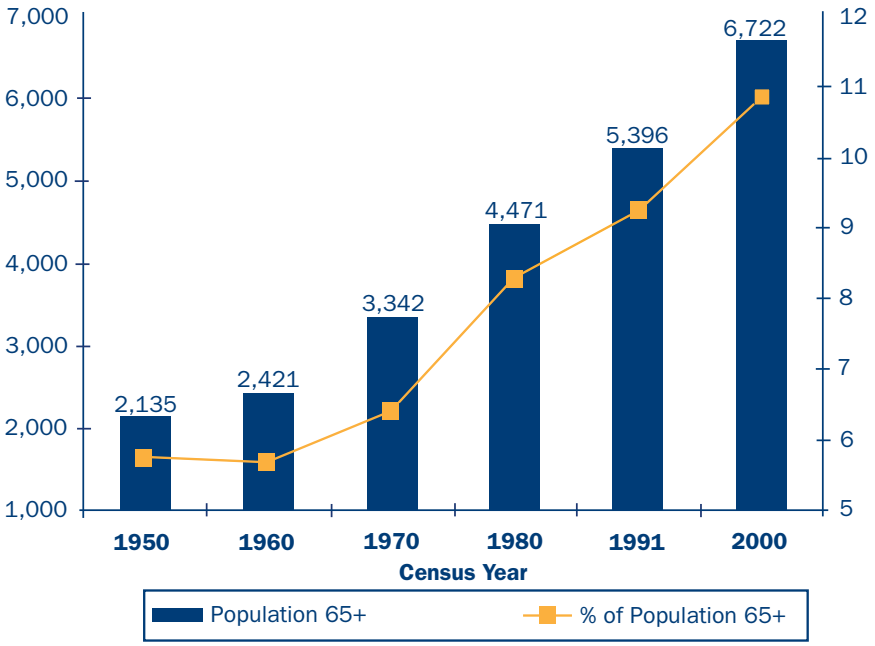
Elderly population is growing faster than total population



Source: Population and Housing Censuses, 1950 to 2000

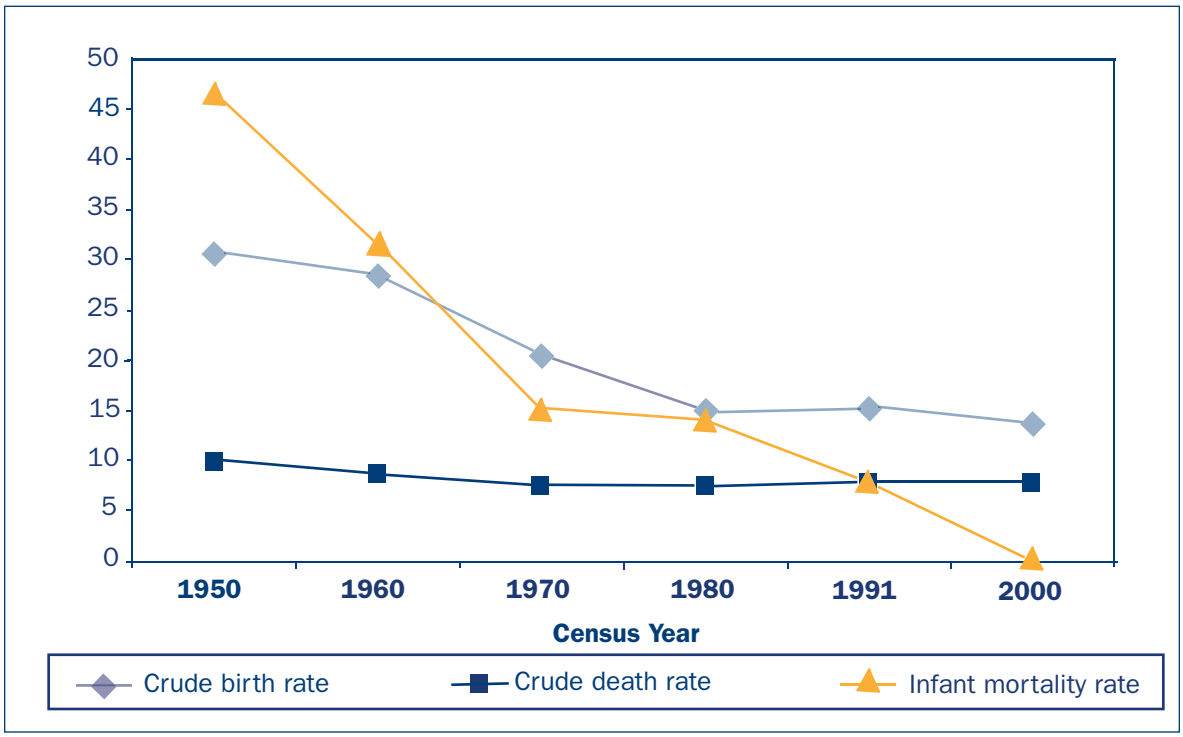
Figure 2

Senior population grows steadily over the past 50 years



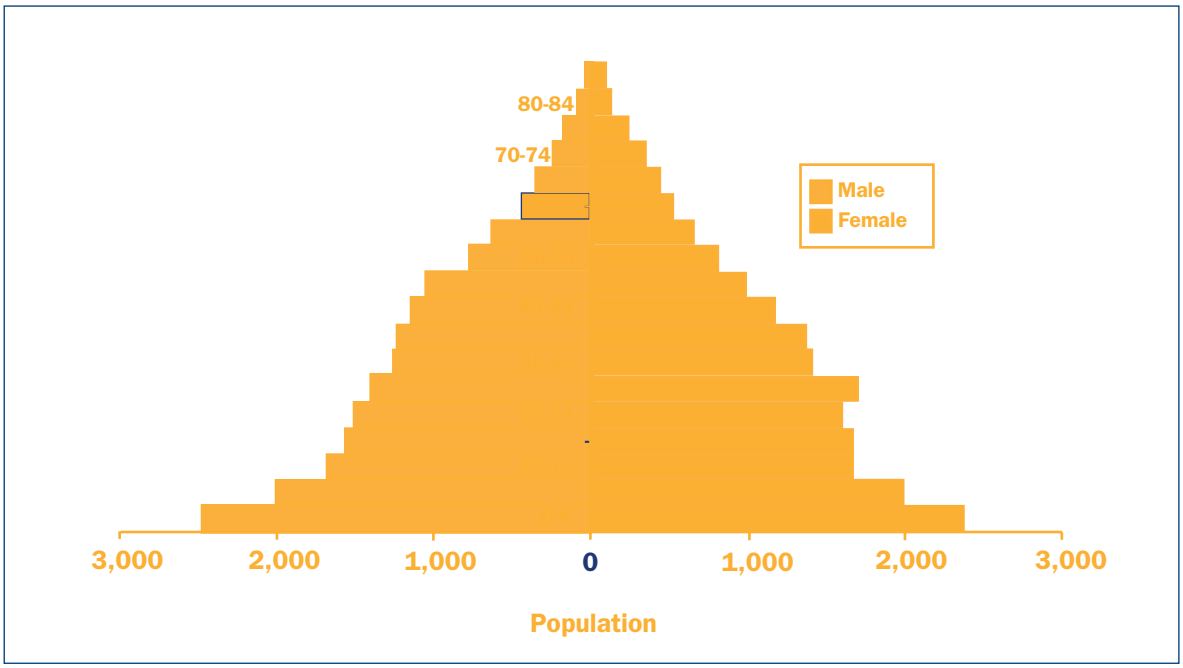
Source: Population and Housing Censuses, 1950 to 2000

Figure 3
Five decades of declining birth and death rates



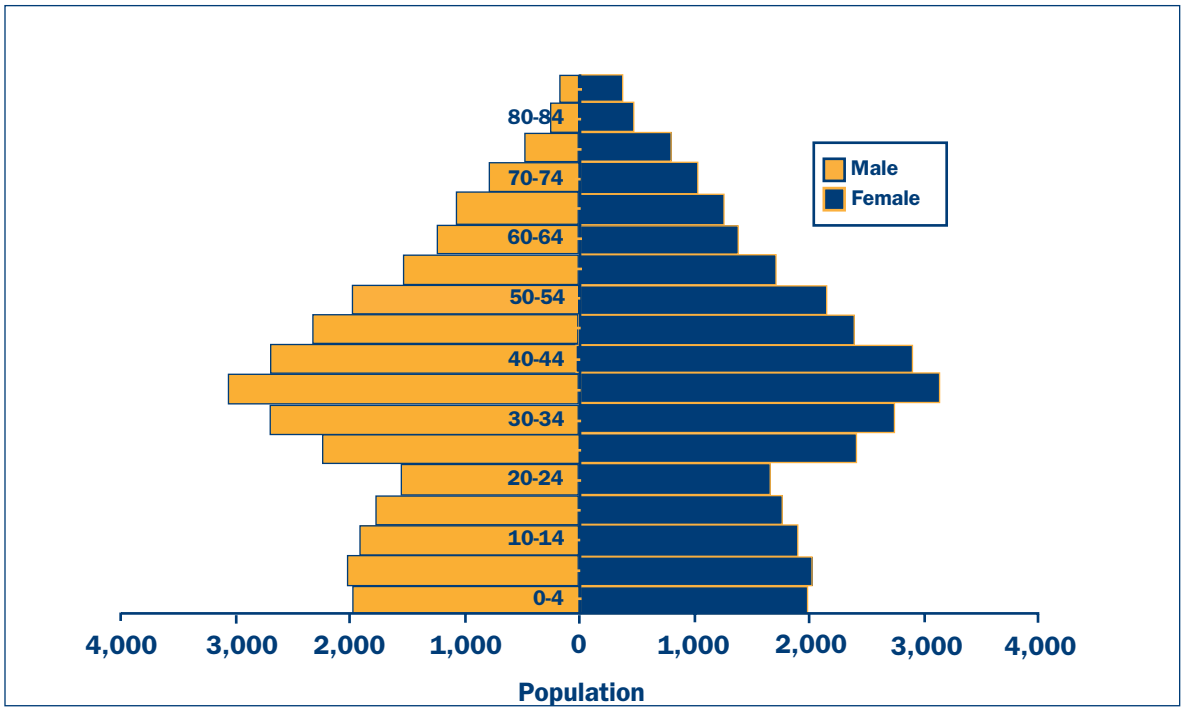
Source: Population and Housing Censuses, 1950 to 2000

Figure 4
Expansive Bermuda population pyramid



Source: Population and Housing Census, 1950

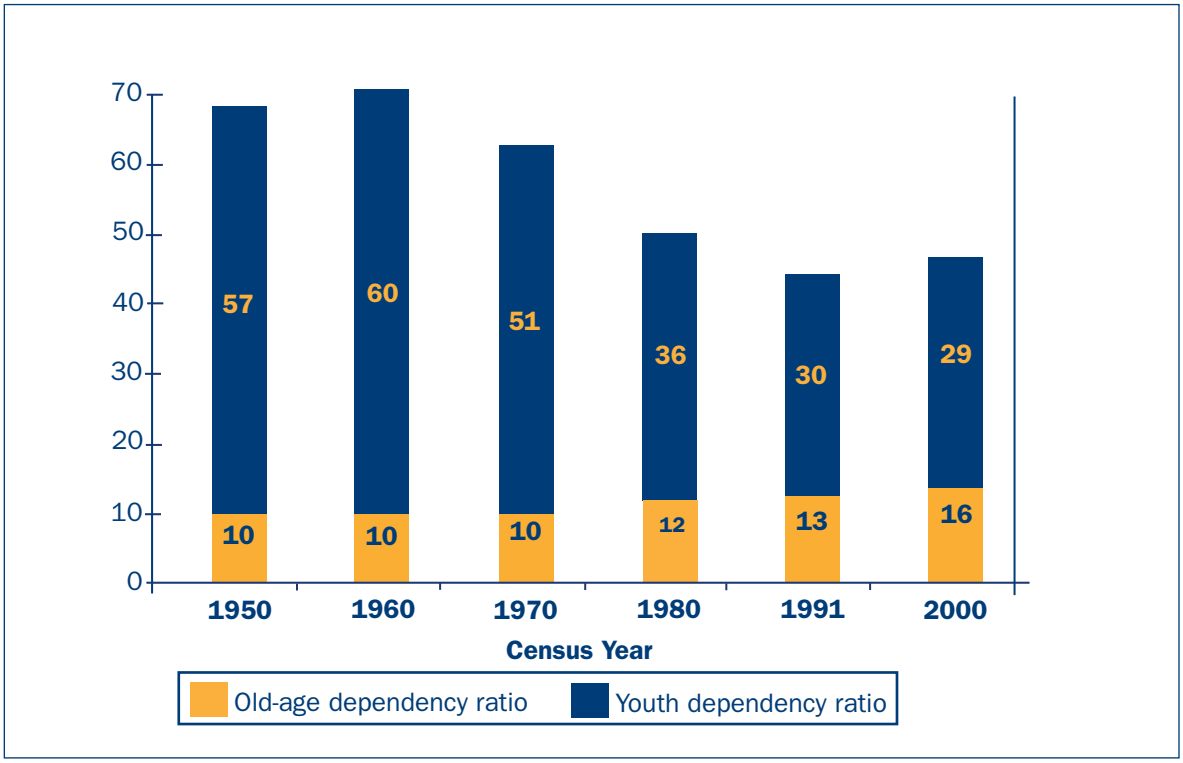
Figure 5
Constrictive Bermuda population pyramid



Source: Population and Housing Census, 2000

Figure 6

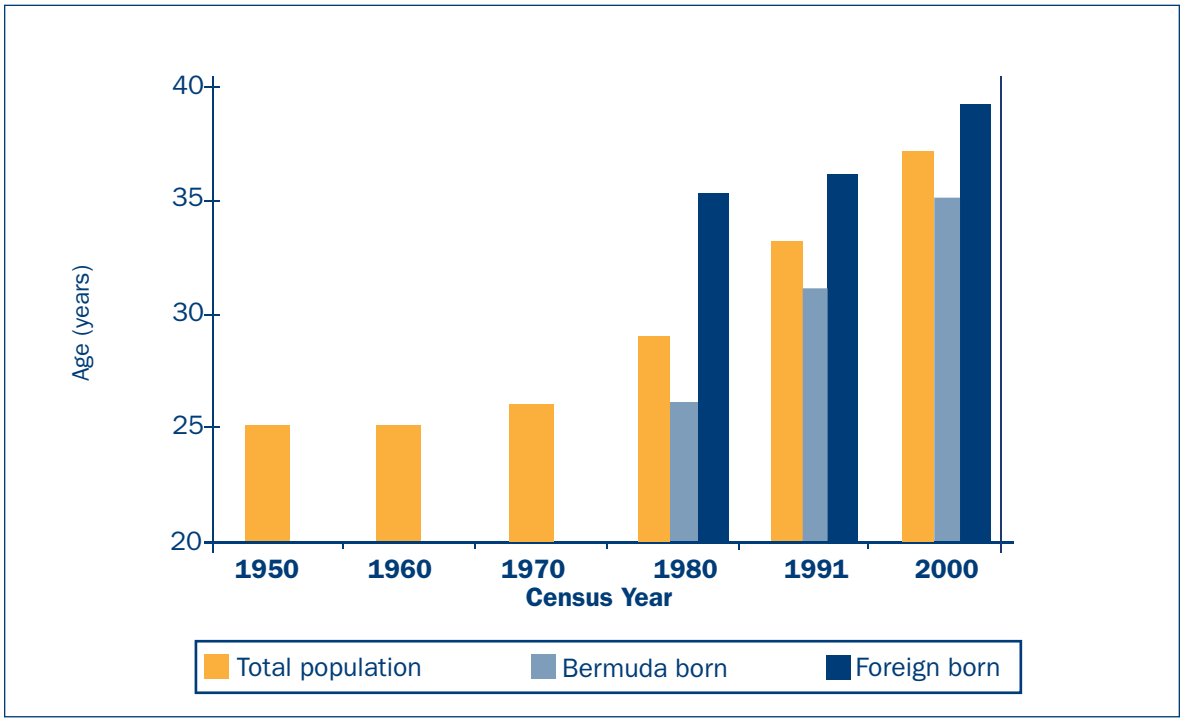
Youth dependency ratio falls, old-age dependency ratio rises



Source: Population and Housing Censuses, 1950 to 2000

Figure 7

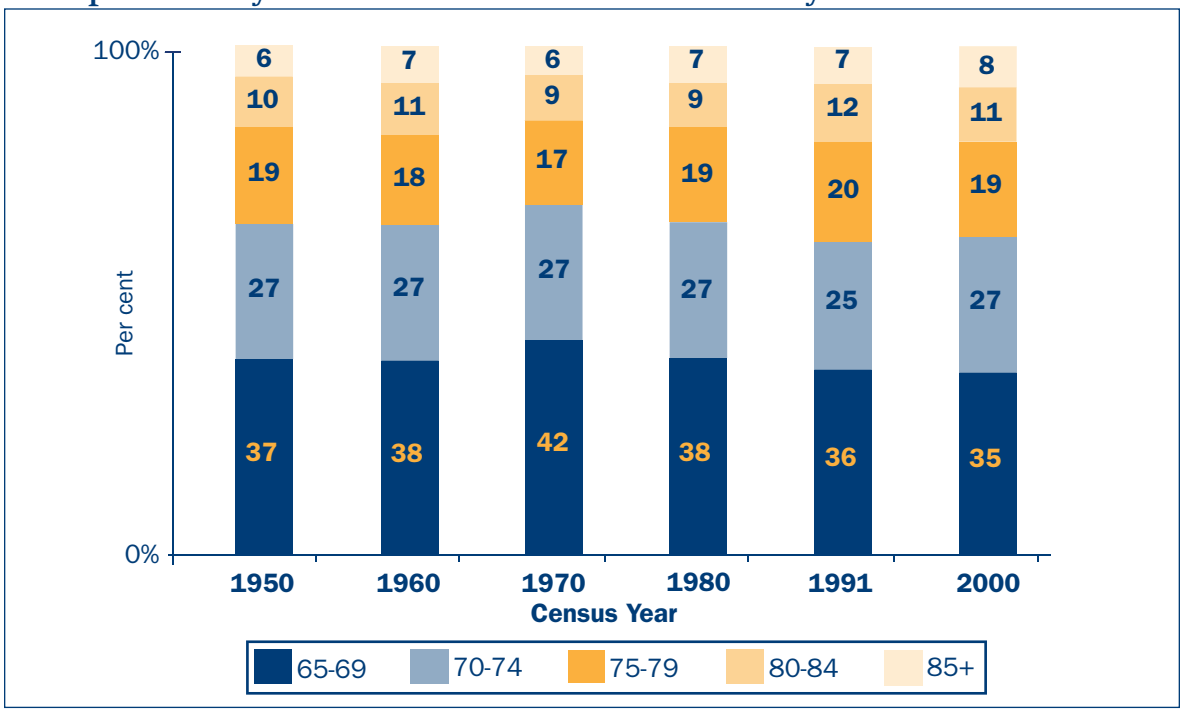
Median age reaches record high



Source: Population and Housing Censuses, 1950 to 2000

Figure 8

More persons 85 years and older in the last half century



Source: Population and Housing Censuses, 1950 to 2000

Among this "old-old" group, Bermuda's 2000 Census captured one white female centenarian (100 years of age and older) who resided in a private home. However, there were eight other centenarians who lived in institutions. (See Bermuda's institutionalized seniors on page 46.)

With the growing proportion of the "old-old" population, the "two-elderly-generation support" ratio should be monitored closely. This ratio is defined as the number of individuals aged 85 and over supported by every 100 persons aged 65 to 69.

In 1950, there were 17 people aged 85 and over for every 100 persons aged 65 to 69. The same trend was noted for whites and blacks. (Table 1)

Five decades later, the ratio had jumped to 24, but it was higher for whites than for blacks. The increase in this ratio has implications for the "young-old" as more people aged 65 to 69 will be responsible for caring for the "old-old".

Table 1

Whites are more likely to be supporting persons 85 years and older [1]

Race	1950	1960	1970	1980	1991	2000
Total	17	18	14	18	21	24
Black	17	19	..	17	17	22
White & other	17	17	..	20	26	28

[1] *Based on the two-elderly-generation support ratio which is the ratio of persons aged 85 years and over to persons aged 65–69 years.*

Source: Population and Housing Censuses, 1950 to 2000

The physical condition of the "young-old" will be important as they help the "old-old" address increasing challenges such as mobility. This is particularly relevant given that an ageing study conducted in 2004 in Bermuda revealed that almost one-fifth of elderly care providers had only fair or poor health. [4]

In addition, close to two-thirds of caregivers reported that they experience a physical strain.[5] The concerns of these caregivers highlight the need for respite and more support services to provide relief for care providers.

Foreign-born seniors slightly older

The median age for foreign-born seniors in 2000 was 73 years, slightly older than the median of 72 for Bermuda-born seniors. This is due to a number of reasons. First, 85% of the foreign-born seniors were white who migrated primarily from the United Kingdom, United States, Canada and Azores/Portugal.

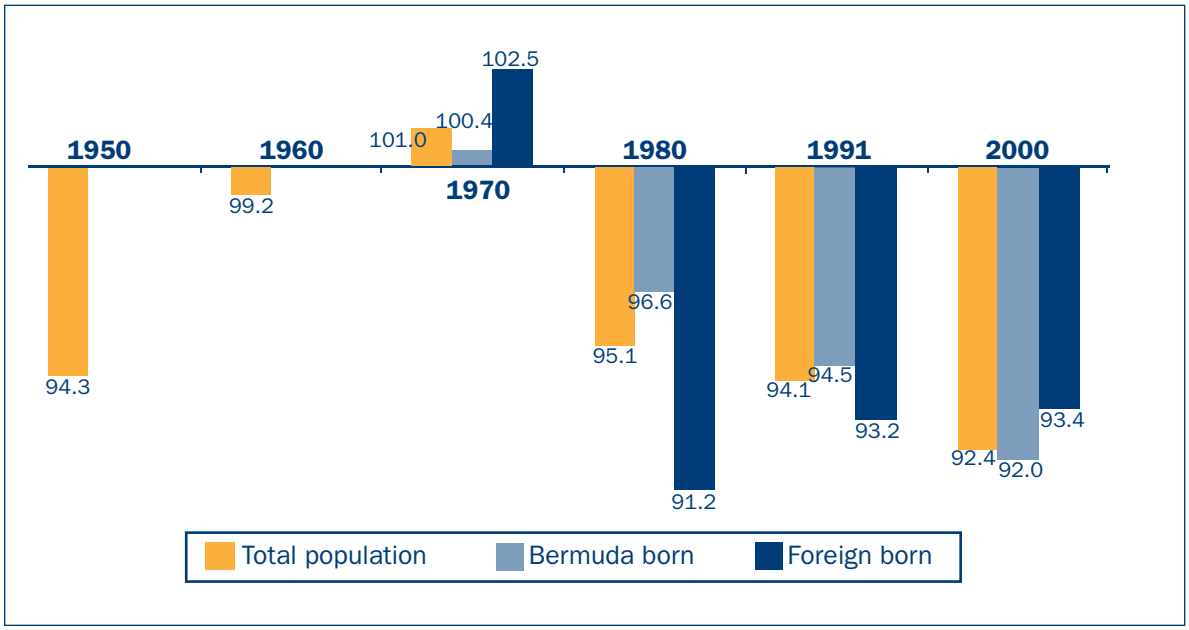
On the other hand, 75% of Bermuda-born seniors were black. The racial composition of these populations is a contributing factor to the difference between the median ages since whites live longer than blacks world-wide. Second, after five decades, the life expectancy for black men increased marginally, by less than a third of a year, which lowered the median age of the black population in 2000.

Women outnumber men

Because of the differential in life expectancy, the majority of elderly people are women.

In most countries, the overall ratio between men and women varies from 105 or 106 men to 100 women. In 1970, Bermuda's sex ratio was about one to one. That is, there were virtually as many men as there were women. However, by 2000, there were only 92.4 men for every 100 women. (Figure 9)

Figure 9
Bermuda's women are more likely to outnumber men
(Men per 100 women)



Source: Population and Housing Censuses, 1950 to 2000

[4] Gutheil, I. and Chenesky, R. *Ageing in Bermuda Meeting the Needs of Seniors*. p. 27
[5] Ibid., p. 31

The fluctuations were attributable primarily to the sex ratio among the Bermuda-born population, which ranged from 100.4 men for every 100 women in 1970 to only 92.0 men in 2000. The unusually high sex ratio in 1970 is attributable to the fact that Bermuda adopted a modified de facto census approach, which excluded students who were studying abroad during the reference period.[6] As a result, there is a deficit of people aged 15 to 19 in the total population.

In 1980, the same census methodology was used but this trend was not as noticeable. Because Bermuda College opened in 1974, by September, 1979 there were 509 students enrolled. The attendance at Bermuda College, therefore, helped to offset the decline in the number of students aged 15 to 19 years captured by the 1980 census.

This decline is not as noticeable in the age group 20 to 24 because it is undoubtedly offset by immigrant workers. The extent that foreign-born people are compensating for the deficit of young adult residents studying overseas is unknown because the datum for the latter is unavailable.

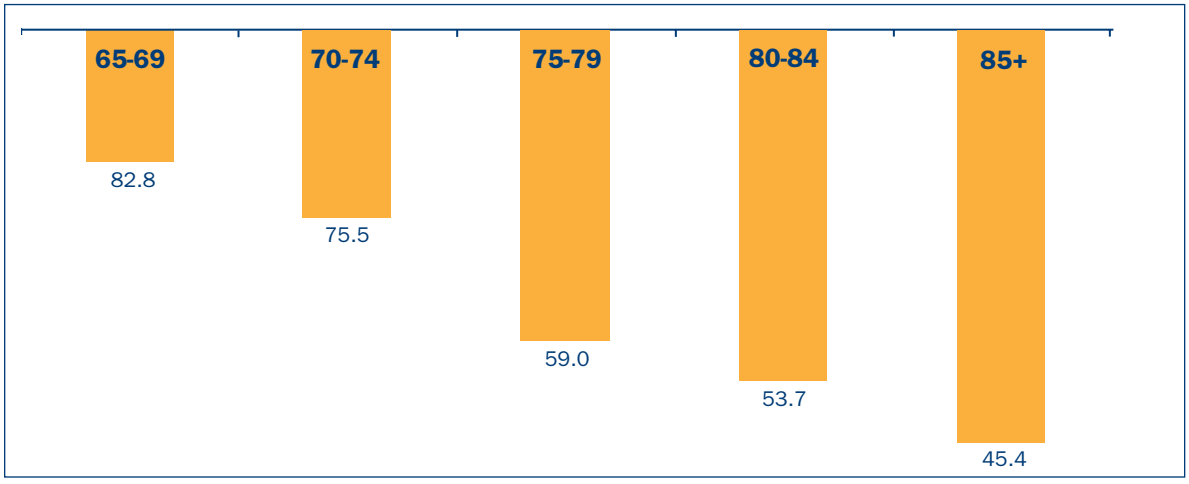
It is evident, however, that this census methodology inflated the sex ratio. This is because in the 1970s, women had a greater opportunity to further their studies overseas than men, thus resulting in a high ratio of men to women.

Except for 1970, the sex ratio for the foreign-born population remained relatively constant around 93.0 men to 100 women. (Figure 9) In 1970, the ratio for the foreign-born population peaked at 102.5 men. This disproportionately high sex ratio occurred because 63% of immigrants were men. Half of them worked in the service industry where they were concentrated in three jobs: waiters (239), chefs (182), and police officers (182). [7]

In contrast, the sex ratio for the elderly population has shown fewer variations. In 1950, the sex ratio for senior citizens was 72.3 men for every 100 women. By 2000, it fell to 69.1. At the time of the last census, Bermuda had nearly 4,000 elderly women, 1,230 more than men.

The difference between the number of men and women increases with age. Between the ages of 65 and 69, the sex ratio was 82.8 men to 100 women. By the age of 85, the ratio had dropped to 45.4 men to 100 women. (Figure 10) The ratio for each of the old age groups illustrates the greater survival propensity among women.

Figure 10
Seniors sex ratio declines with increasing age
(Men per 100 women)



Source: Population and Housing Census, 2000

[6] Bermuda Government, *Report of the Population Census 1970*. p. 12
[7] Ibid., pp. 255–256

Women outlive men at every age

Women are on average older than men. This is because women have a lower incidence of deaths attributable to accidents, violence or, more recently, Acquired Immune Deficiency Syndrome (AIDS), as women participate in less risky behaviours than men.

Life expectancy at birth improved significantly for both sexes during the last 50 years, with women outpacing their male counterparts. In 1950, women were expected to live five years longer than men. However, by 2000 they were expected to outlive men by nearly six years.

Between 1950 and 2000, both had made significant gains in life expectancy, (12.96 years for women, 12.47 years for men) but women still lived longer. (Table 2)

In 2000, the life expectancy for a woman was 80.44 years, while a man was expected to reach 74.74 years. Significant differences were also noted by race, as whites, regardless of their sex, outlived blacks. During the 50-year period white men made greater strides than white women. Among the black community the situation was reversed.

Table 2
Life expectancy by race and sex continues to improve

Sex and race	1950	1960	1970	1980	1991	2000	Absolute increase 2000—1950
				At birth			
All races							
Total	64.85	67.85	70.32	73.11	74.34	77.67	12.82
Male	62.27	64.80	68.33	69.27	71.06	74.74	12.47
Female	67.48	71.16	75.06	77.14	77.78	80.44	12.96
Black							
Total	63.03	65.25	68.50	72.26	72.43	76.59	13.56
Male	61.28	62.22	65.51	67.98	68.25	73.25	11.97
Female	64.84	68.68	72.70	76.98	76.81	79.69	14.85
White & Other							
Total	68.04	71.78	72.60	74.11	77.25	80.37	12.33
Male	64.43	69.01	69.49	71.06	75.46	78.41	13.98
Female	72.06	74.83	76.00	77.52	78.90	82.17	10.11
				At age 65			
All races							
Total	14.02	13.12	14.01	15.40	16.05	16.69	2.67
Male	12.89	11.51	14.39	13.67	14.37	14.57	1.68
Female	14.93	14.50	17.18	16.87	17.49	18.47	3.54
Black							
Total	13.81	12.12	13.55	15.27	15.50	16.25	2.44
Male	13.28	10.48	12.42	13.06	13.63	13.60	0.32
Female	14.24	13.63	15.83	17.32	17.03	18.32	4.08
White & Other							
Total	14.31	14.20	14.45	15.46	16.81	18.09	3.78
Male	12.55	12.88	12.77	14.25	15.45	16.77	4.22
Female	15.77	15.13	15.85	16.47	18.11	19.09	3.32

Source: Department of Statistics

Among seniors aged 65 and over, women were expected to live on average 14.93 additional years in 1950, while their male counterparts were expected to live 12.89 years. By 2000, senior women had gained an additional 3.54 years, and were expected to live 18.47 years. (Table 2)

At the time of the 2000 census, senior men had gained 1.68 years, and were expected to live 14.57 years. In addition, white seniors continued to have a greater longevity than blacks, outsurviving them by 1.84 years.

Elderly men more likely to be married

Men aged 65 and over were twice as likely as their female counterparts to be married. In 2000, 72% of senior men were married, compared with only 36% of senior women. On the other hand, 42% of elderly women were widowed, nearly four times the proportion of 12% among men. (Table 3)

The gender gap in life expectancy explains most of this difference. However, some of the disparity is due to the higher proportion of re-marriages among men. In 2000, 19% of men aged 65 and older had re-married, three times the proportion of only 6% among women. (Table 3) The pattern was similar among elderly blacks and whites.

Table 3

Women are more likely to be widowed or divorced

Marital status and race	Total			65 – 74			75 and over		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Percentage Distribution								
	All races								
Total	100	100	100	100	100	100	100	100	100
Never married	8	6	10	8	6	9	9	6	11
Married first time	40	53	30	46	56	38	30	49	19
Re-married	11	19	6	12	18	7	9	19	4
Widowed	30	12	42	20	8	30	45	21	58
Divorced	11	9	12	13	11	15	7	6	8
Legally separated	1	1	1	1	1	1	0	0	0
	Black								
Total	100	100	100	100	100	100	100	100	100
Never married	11	8	13	10	8	12	12	8	15
Married first time	36	50	27	42	52	34	26	43	18
Re-married	10	17	5	11	17	6	8	17	3
Widowed	29	13	40	21	9	30	44	23	55
Divorced	13	12	14	16	14	17	8	8	8
Legally separated	1	0	1	1	1	1	0	0	1
	White & other								
Total	100	100	100	100	100	100	100	100	100
Never married	4	4	4	4	4	3	4	4	4
Married first time	45	59	35	52	61	45	34	56	22
Re-married	13	21	8	15	21	10	11	20	5
Widowed	30	10	44	19	6	30	45	18	62
Divorced	8	5	9	9	7	11	5	3	7
Legally separated	0	1	0	1	1	0	0	0	0

Source: Population and Housing Census, 2000

25% of seniors live alone

Most seniors lived with their spouse or other relatives, but a significant number resided in one-person households. In 2000, one-quarter of seniors lived alone, down from 36% in 1980. In 2000, women were nearly twice as likely as men to be living alone (30% of women, compared with 17% of men).

While fewer women than men lived with a spouse, a larger proportion of women lived in extended family households with other relatives and no spouse. In 2000, 36% of women aged 65 and older lived with relatives, compared with only 20% of men. (Table 4)

Table 4
Most seniors live with a spouse or relatives

Living arrangements and age	Number			Percentage distribution		
	Total	Male	Female	Total	Male	Female
	65 years and older					
Total	6,722	2,746	3,976	100	100	100
Living alone	1,665	466	1,199	25	17	30
With spouse[1]	2,708	1,582	1,126	40	58	28
With other relatives only	1,965	542	1,423	29	20	36
With non-relatives[2]	384	156	228	6	6	6
	65 to 74 years					
Total	4,177	1,850	2,327	100	100	100
Living alone	833	280	553	20	15	24
With spouse[1]	1,914	1,097	817	46	59	35
With other relatives only	1,187	365	822	28	20	35
With non-relatives[2]	243	108	135	6	6	6
	75 to 84 years					
Total	1,988	722	1,266	100	100	100
Living alone	621	130	491	31	18	39
With spouse[1]	699	417	282	35	58	22
With other relatives only	570	138	432	29	19	34
With non-relatives[2]	98	37	61	5	5	5
	85 years and older					
Total	**557**	**174**	**383**	**100**	100	100
Living alone	211	56	155	38	32	40
With spouse[1]	95	68	27	17	39	7
With other relatives only	208	39	169	37	22	44
With non-relatives[2]	43	11	32	8	6	8

[1] May include children
[2] May also include relatives

Source: Population and Housing Census, 2000

There were significant differences in the living arrangements of seniors, depending on their age and sex. At the age of 85 and older, women were less likely to be living with other relatives (including spouses) than men. In 2000, 51% of women lived with a relative, compared with 61% of men. (Table 4)

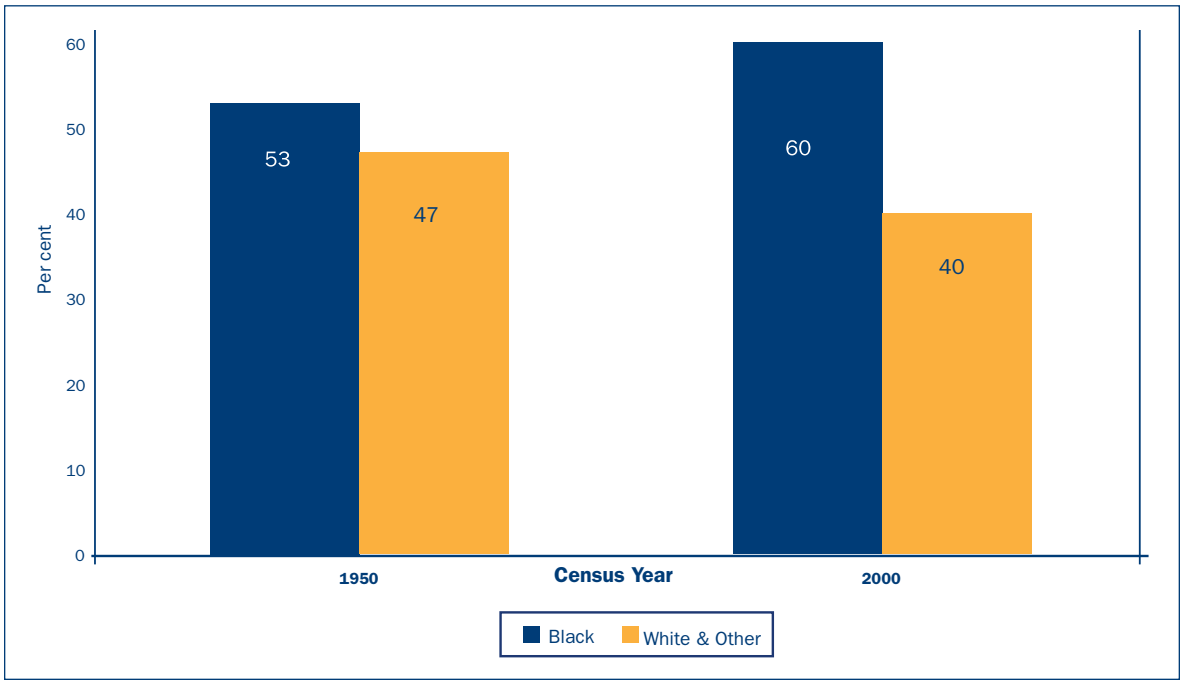
Proportion of black seniors rising

Between 1950 and 2000, the racial composition of the total population has been fairly stable. Throughout this period, the black population has represented about 60%, and the white population 40%. An analysis of the population aged 65 and older, however, reveals a different profile.

During the 50-year period, the proportion of black seniors rose from 53% to 60%, while the proportion of white seniors fell from 47% to 40%. (Figure 11)

Today the racial component of the elderly mirrors that of the total population. The increased proportion of black seniors is probably attributable to two factors: improved life expectancy, and increased immigration of blacks during the 1950s and 1960s, people who now make up part of the senior population.

Figure 11
Proportion of black seniors grows by 7 percentage points



Source: Population and Housing Censuses, 1950 and 2000

Pembroke and Paget parishes comprised the oldest residents

About 13% of the population of Pembroke consisted of seniors aged 65 and over, the highest proportion of any parish. Paget was a close second, with 12% of its population aged 65 and older. (See Table 5 and Figure 12)

Pembroke's total population of 11,306 accounted for 18% of Bermuda's population in 2000. However, it had 1,419 seniors, who accounted for 21% of the island's total population of elderly.

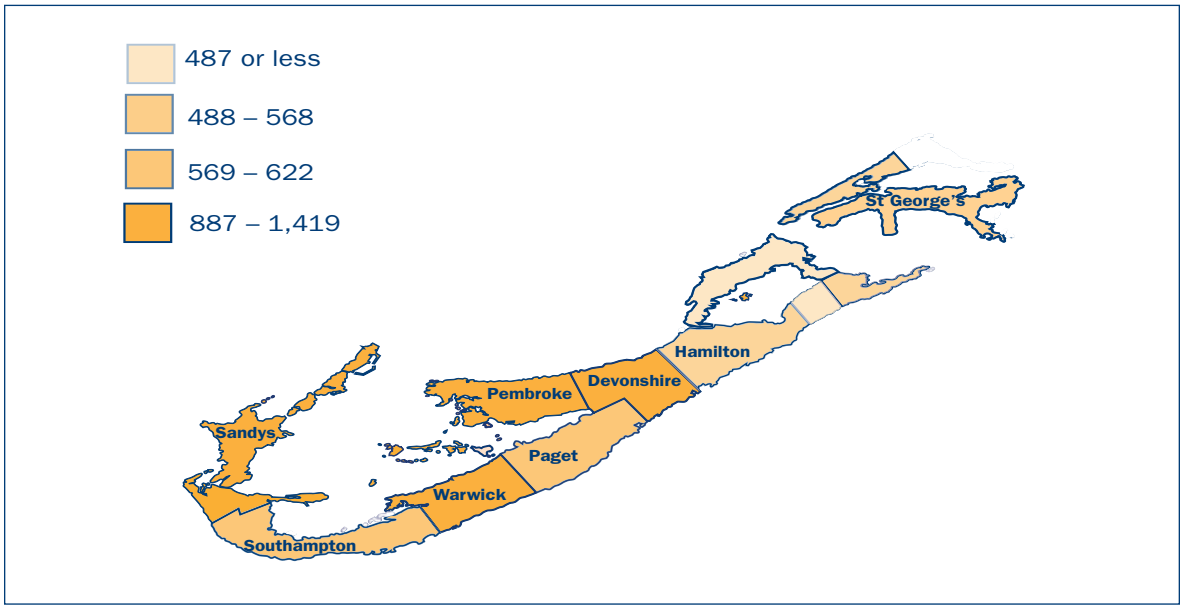
In all the other parishes, the distribution of the elderly was similar to the distribution of the total population. (Table 5)

Table 5
Oldest residents live in Pembroke and Paget

Age Group	Total	St. George	Hamilton	Smith's	Devonshire	Pembroke	Paget	Warwick	Southampton	Sandys
Total population	62,059	5,451	5,270	5,658	7,307	11,306	5,088	8,587	6,117	7,275
Elderly										
65+	6,722	545	487	568	774	1,419	622	886	615	806
65 - 74	4,177	330	330	367	488	828	341	579	392	522
75 - 84	1,988	177	121	150	229	447	221	240	181	222
85+	557	38	36	51	57	144	60	67	42	62
Population as a % of total population										
Total	100	9	8	9	12	18	8	14	10	12
Elderly	100	8	7	8	12	21	9	13	9	12
Elderly population as a % of total population	11	10	9	10	11	13	12	10	10	11

Source: Population and Housing Census, 2000

Figure 12
Bermuda population age 65 and older by parish



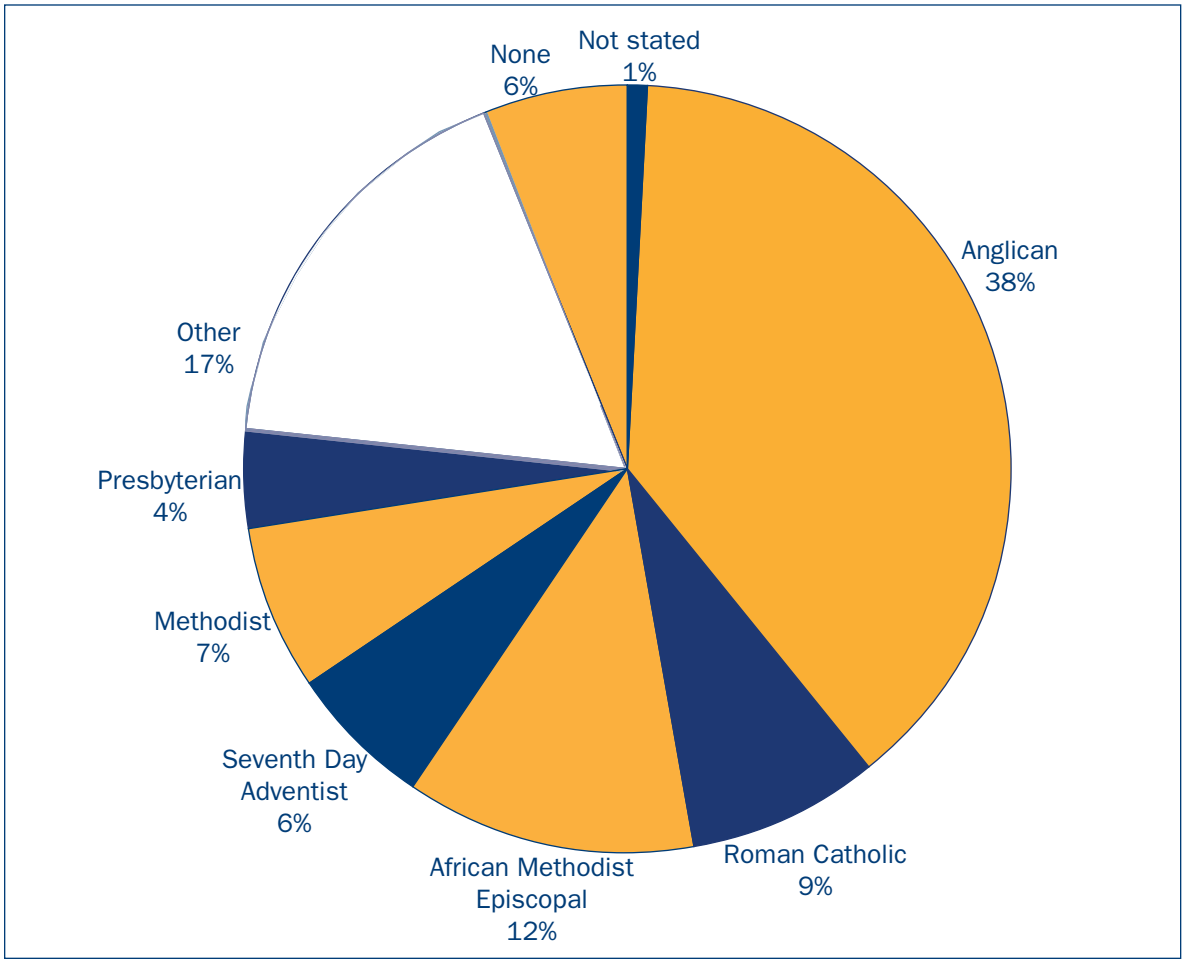
Source: Population and Housing Census, 2000

Traditional religions remain popular among seniors

An individual's religious affiliation tends to increase with age. In 2000, 94% of seniors reported a religious affiliation, compared with 84% of people under the age of 65.

More than one-third (38%) of seniors reported an affiliation with the Anglican Church, the most popular choice. (Figure 13) A distant second were African Methodist Episcopal (12%), and Catholic (9%).

Figure 13
Four out of 10 seniors are Anglican



Source: Population and Housing Census, 2000

Health status of Bermuda's elderly

The health of the elderly and their care, are becoming topics of greater concern in developed nations around the world. Improvements in lifestyles, technology, medicine and education have all resulted in increased longevity. As people live longer, they will inevitably face more illnesses and disabilities, which will increase the demand for health products and services. In 2003, the health sector accounted for 4.1% of Bermuda's Gross Domestic Product (GDP). This is higher than the 3.7% measured in 1996. In other words, the health sector produced a total value of goods and services valued at roughly $164 million in 2003 compared to $100 million in 1996.

Bermuda's 2000 Census captured benchmark data on long-term health conditions of the population aged 65 and over, irrespective of whether the condition affected the activities of daily living. A total of 3,293 seniors reported a physical or mental health condition in 2000. The most commonly self-reported conditions were: high blood pressure, arthritis, diabetes, heart condition, impaired vision and mobility difficulties. (Table 1)

Table 1

High blood pressure is the leading health condition for all seniors

	Total			Male			Female		
Health conditions [1]	Total	Black	White & other	Total	Black	White & other	Total	Black	White & other
Total [2]	3,293	2,034	1,259	1,280	747	533	2,013	1,287	726
High blood pressure	1,201	830	371	365	237	128	836	593	243
Arthritis	883	539	344	226	119	107	657	420	237
Diabetes	752	539	213	310	217	93	442	322	120
Heart condition	692	358	334	347	163	184	345	195	150
Impaired vision	301	213	88	123	91	32	178	122	56
Mobility difficulties	271	155	116	93	53	40	178	102	76
Hearing difficulty	266	112	154	117	34	83	149	78	71
Back/spine problem	265	152	113	84	52	32	181	100	81
Cancer	237	119	118	127	68	59	110	51	59
Asthma	154	69	85	44	18	26	110	51	59
Limited leg use	135	90	45	67	40	27	68	50	18
Stomach problem	129	89	40	67	43	24	62	46	16
Body movement difficulties	114	67	47	43	24	19	71	43	28
Alzheimer's disease	109	65	44	29	14	15	80	51	29
	Percentage distribution [3]								
Total	100	62	38	39	23	16	61	39	22
High blood pressure	37	25	11	11	7	4	25	18	7
Arthritis	27	16	10	7	4	3	20	13	7
Diabetes	23	16	7	9	7	3	13	10	4
Heart condition	21	11	10	11	5	6	11	6	5
Impaired vision	9	7	3	4	3	1	5	4	2
Mobility difficulties	8	5	4	3	2	1	5	3	2
Hearing difficulty	8	3	5	4	1	3	5	2	2
Back/spine problem	8	5	3	3	2	1	6	3	3
Cancer	7	4	4	4	2	2	3	2	2
Asthma	5	2	3	1	1	1	3	2	2
Limited leg use	4	3	1	2	1	1	2	2	1
Stomach problem	4	3	1	2	1	1	2	1	1
Body movement difficulties	4	2	1	1	1	1	2	1	1
Alzheimer's disease	3	2	1	1	0	1	2	2	1

[1] Specific health conditions that were reported by more than 100 persons.
[2] The total number of persons reporting does not equal the total number of conditions reported because respondents were invited to report multiple responses.
[3] Persons reporting a health condition expressed as a percentage of total.

Source: Population and Housing Census, 2000

The biggest differences in race and sex for these conditions occurred in the area of high blood pressure. The proportion of blacks and women reporting this condition was more than twice the rate for whites and men. (Table 1)

Fewer seniors with disabling health conditions

In 2000, a total of 1,040 individuals aged 65 and older self-reported a long-term health condition that affected some aspect of their daily lives. This was 176 fewer seniors than the 1,216 counted in 1991. The leading disabling health conditions that afflicted the elderly population remained unchanged from 1991. These were arthritis, heart condition, high blood pressure, diabetes, mobility difficulties and impaired vision. (Table 2)

During the last decade, the incidence of high blood pressure climbed by 22%. The number of blacks reporting this condition grew nearly five times faster than the number of whites. Similarly, the number of cases of diabetes increased 10%. Its occurrence among black seniors rose 14%, seven times the rate of increase recorded by the white population. Significant increases were also noted among people reporting heart conditions. The increase in the occurrence of heart disease was almost twice as great in the black community as in any other racial group (11% of black versus 6% of white). There is a tendency for diabetes and heart disease to be correlated, hence the high incidence of blacks reporting both diseases. In 2000, 72% of seniors reporting both diabetes and heart conditions were black.

Table 2

Arthritis is the leading disabling health condition for seniors [1]

	2000			1991			Percentage change 1991 - 2000		
Health condition [2]	Total	Black	White & other	Total	Black	White & other	Total	Black	White & other
Total [3]	1,040	627	413	1,216	747	469	-15%	-16%	-12%
Arthritis	347	219	128	387	243	144	-10%	-10%	-11%
Heart condition	284	156	128	262	141	121	+8%	+11%	+6%
High blood pressure	267	177	90	218	134	84	+23%	+32%	+7%
Mobility difficulties	230	126	104	..	..	..	..	..	..
Diabetes	201	144	57	182	126	56	+10%	+14%	+2%
Impaired vision	138	94	44	201	121	80	-31%	-22%	-45%
Back/spine problem	134	71	63	91	41	50	+47%	+73%	+26%
Hearing difficulty	102	38	64	126	51	75	-19%	-26%	-15%
Limited leg use	101	65	36	171	122	49	-41%	-47%	-27%
	Percentage distribution [4]								
Total	100	60	40	100	61	39			
Arthritis	33	21	12	32	20	12			
Heart condition	27	15	12	22	12	10			
High blood pressure	26	17	9	18	11	7			
Mobility difficulties	22	12	10	..	..	..			
Diabetes	19	14	6	15	10	5			
Impaired vision	13	9	4	17	10	7			
Back/spine problem	13	7	6	8	3	4			
Hearing difficulty	10	4	6	10	4	6			
Limited leg use	10	6	4	14	10	4			

[1] Disabling health conditions affects activity of daily living for more than 6 months.
[2] Specific health conditions that were reported by more than 100 persons.
[3] The total number of persons reporting does not equal the total number of conditions reported because respondents were invited to report multiple responses.
[4] Persons reporting a health condition expressed as a percentage of total.
.. Not available
Source: Population and Housing Census, 2000 and 1991

In contrast, the number of seniors reporting impaired vision declined by 31%. Whites experienced twice as much improvement as blacks between 1991 and 2000 (a decline of 45% for whites versus 22% among blacks). This improvement is in part attributable to the availability of laser eye surgery and also the lower incidence of diabetes, which affects vision, among senior citizens in the white community. In 2000, there were 68 seniors with diabetes and impaired vision, only 19% of whom were white.

Disabled elderly require more assistance attending to personal needs

In 2000, nine out of 10 disabled seniors were restricted in the activities that they were able to perform. Six out of 10 were prevented from working at a job. (Table 3) In both 1991 and 2000, women exhibited more of these limitations than men. By the end of the 1990s, the number of individuals, whose activities were limited, plunged by 77%. This decline might have been due to the general improvement in the health of seniors.

Despite this improvement, the number of people who were unable to take care of their personal needs increased by 28%. More (19%) were prevented from leaving home alone in 2000 than in 1991, and more (22%) were confined to a wheelchair.

Table 3

Seniors are more likely to require assistance with personal needs and mobility

Type of activity	2000			1991			Percentage change 1991 – 2000		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1,040	400	640	1,216	477	739	-15%	-16%	-13%
Limit home activity	903	342	561	884	334	550	+2%	+2%	+2%
Prevent leaving home alone	505	144	361	423	134	289	+19%	+8%	+25%
Limits personal activities	313	104	209	245	77	168	+28%	+35%	+24%
Confined to a wheel chair	124	36	88	102	29	73	+22%	+24%	+21%
Prevents individual from working	643	244	399	803	310	493	-20%	-21%	-19%
Limits type and amount of work	230	94	136	992	406	586	-77%	-77%	-77%
Limited in some other way	220	83	137	..	..	..	..	..	..
	Percentage distribution								
Total	100	39	62	100	39	61			
Limit home activity	87	33	54	73	28	45			
Prevent leaving home alone	49	14	35	35	11	24			
Limits personal activities	30	10	20	20	6	14			
Confined to a wheel chair	12	4	9	8	2	6			
Prevents individual from working	62	24	38	66	26	41			
Limits type and amount of work	22	9	13	82	33	48			
Limited in some other way	21	8	13	..	..	..			

.. Not available

Source: Population and Housing Census, 2000 and 1991

The increase in the number of people requiring assistance highlights the importance of monitoring the utilization of support networks for seniors. In 1991, *A Study of the Needs of Elderly People in Bermuda* reported that just over one-third (34%) of seniors were receiving substantial assistance from family and friends, that is, 10 hours or more a week.

Almost one-third (32%) were receiving three to nine hours of assistance a week, while 18% were receiving one to two hours of help a week. About one-half (53%) of seniors believed they were receiving as much help as they need. Nearly three in 10 (27%) said they would like more help than they were receiving currently for one or two activities, while another 22% preferred more assistance on three or more activities.[1]

These seniors required mainly assistance in housekeeping and finances. Unfortunately, updated statistics are not available for the hours of assistance received nor for the adequacy of assistance received. These are topics that can be addressed in future studies of the elderly.

Daughters are primary parent-care providers in adult-children households

With the growing number of seniors requiring personal assistance, it is important to measure the extent that elderly parents are living with their adult children. For the first time, Bermuda's 2000 Census collected benchmark data on this type of household. These heads of households were adult children who were not married, legally separated or living with a partner and were residing with a parent.

In 2000, about 10% or 169 households were headed by adult children aged 65 or older. Daughters headed 80% of these households. The large proportion of daughters in their parent-care years was attributable to increasing divorce rates, a higher proportion of widows and lower re-marriage rates among elderly women.

This situation has implications for the provision of support services for senior adult children. The prevalence of this dilemma is reinforced by the results of the 2004 report, *Ageing in Bermuda: Meeting the Needs of Seniors,* which highlighted the fact that two-thirds of caregivers were providing care to their parents. The report also noted the following:

- Four out of 10 of the seniors who were receiving care lived with the caregiver.
- Eight out of 10 caregivers were providing care for more than one year.
- Over one out of three caregivers worked more than 40 hours per week.

Families providing more support to seniors

Familial support ratios such as the "parent support" ratio and the "sandwich generation" ratio are good indicators of the impact of ageing on families. The "parent support" ratio measures the number of parents aged 85 and older supported by every 100 people aged 50 to 64.

Since 1970, the "parent support" ratio increased steadily, and whites recorded a higher ratio than blacks. (Table 4) This reflects the greater life expectancy of whites.

Another indicator assessing the impact of ageing on families is the "sandwich generation" ratio. This is the ratio of individuals aged 18 to 22 enrolled in college, plus people aged 65 to 79, supported by the number of people aged 45 to 49. Since 1970, the "sandwich generation" ratio has risen from 100 to 154 in 1991. (Table 4)

[1]Chappell, N. and Marshall, V. *A Study of the Needs of Elderly People in Bermuda*. p. 66.

Table 4
Blacks are more likely to be supporting parents and college students

Selected ratios and race	1950	1960	1970	1980	1991	2000
Parent support ratio[1]						
Total	4	3	3	4	5	6
Black	4	3	. .	4	4	5
White & other	3	4	. .	5	6	6
Sandwich generation ratio[2]						
Total	. .	. .	100 [3]	130 [3]	154	142
Black	. .	. .	. .	116 [3]	155	148
White & other	. .	. .	. .	153 [3]	153	133

[1] Parent support ratio is the ratio of persons 85 years and older to persons 50 - 64 years old.
[2] Sandwich generation ratio is the ratio of persons aged 18 - 22 enrolled in college plus persons aged 65 to 79 to persons aged 45 to 49 years.
[3] Excludes students studying overseas.
Source: Population and Housing Censuses, 1950 to 2000

Table 5
Seniors are more likely to use private health care services

	Total			Male			Female		
Type of hired care	Total	Black	White & other	Total	Black	White & other	Total	Black	White & other
Total	340	202	138	116	69	47	224	133	91
Private	201	101	100	63	29	34	138	72	66
Public	106	80	26	41	33	8	65	47	18
Both	33	21	12	12	7	5	21	14	7
				Percentage distribution					
Total	100	100	100	100	100	100	100	100	100
Private	59	50	73	54	42	72	62	54	73
Public	31	40	19	35	48	17	29	35	20
Both	10	10	9	10	10	11	9	11	8

Source: Population and Housing Census, 2000

This ratio demonstrates clearly the growing challenge for middle-aged people in balancing the responsibilities of financing children enrolled in college on one hand, and parents requiring assistance on the other. Since 1991, the ratio was higher for blacks than it was for whites. This shift is primarily a reflection of greater improvements in life expectancy among blacks than whites. Between 1950 and 2000 blacks improved their life expectancy at birth by 13.56 years while whites increased by 12.33 years.

Racial disparity in health care services for disabled seniors

Of seniors who reported a disability, one-third received hired care for their health conditions. Six out of 10 of these people hired health professionals from the private sector, while three out of 10 used public sector health services. Whites utilized services from the private sector roughly three-quarters of the time; blacks selected this option half of the time. (Table 5)

A review of private hired care by race and sex shows minimal differences between the type of health care services and hiring practices used by white men and women. This is probably attributable to the fact that a disproportionately higher percentage of whites than blacks have major medical coverage, which would subsidize many of the health care services needed. At the time of the 2000 census, major medical insurance coverage may have included:

- Doctor's office visits
- Prescription medication
- Eye and dental care
- Overseas expenses
- Air transportation/air ambulance
- Hearing aids
- Private nurse

In contrast, five out of 10 black women and four out of 10 black men opted for private health care services. (Table 5)

Vast majority of seniors have health insurance

In 2000, 95% of Bermuda's elderly population had health insurance coverage. This represented a total of 6,375 seniors, of whom 62% had major medical coverage. Nearly seven out of 10 whites had major medical insurance, while only five out of 10 blacks had similar coverage. (Table 6) More men had major medical coverage than women. This is an indication of the higher labour force participation rate of men, which would have made them more eligible for health insurance coverage after retirement through their employer-sponsored health plans.

Table 6
Most seniors have major medical insurance

Type of health insurance coverage	Total			Male			Female		
	Total	Black	White & other	Total	Black	White & other	Total	Black	White & other
Total	6,722	4,035	2,687	2,746	1,601	1,145	3,976	2,434	1,542
Major medical	3,964	2,040	1,924	1,765	902	863	2,199	1,138	1,061
Basic [1]	2,411	1,734	677	832	587	245	1,579	1,147	432
None	307	234	73	134	103	31	173	131	42
Not stated	40	27	13	15	9	6	25	18	7
	Percentage distribution								
Total	100	100	100	100	100	100	100	100	100
Major medical	59	51	72	64	56	75	55	47	69
Basic [1]	36	43	25	30	37	21	40	47	28
None	5	6	3	5	6	3	4	5	3
Not stated	1	1	**	1	1	1	1	1	**

[1] Includes Bermuda Government's Hospital Insurance Plan
** Less than 1 %

Source: Population and Housing Census, 2000

In 2000, 75% of white men had major medical insurance compared with only 56% of black men. This inequality can be explained by Bermuda's historical legacy where whites had a disproportionately higher percentage of white-collar jobs.

In 1980, 46% of white men over the age of 44 held professional, technical, administrative or managerial positions. By 2000, many of these retired employees who had worked for the Government and banks, for example, and were allowed to remain on their employers' health insurance plan after retirement.

In contrast, 70% of black men over the age of 44 years held service or production, transport and related jobs (blue-collar jobs) in the construction, hospitality and transport and storage industries in 1980. Many of these industries, however, did not offer health benefits after these men had completed their years of service.

The occupational difference, is not entirely owing to academic achievement as only one-third of administrators and managers over the age of 65 had college degrees in 2000. In fact, Dr. Newman reported the following in her report, "even by 1991, a goodly number of Bermudian administrators and professionals were not college graduates, and this was more the case among whites than blacks." [3]

However, apart from this factor, white men are generally in a better position economically than blacks, and therefore, are able to afford the higher premiums for major medical insurance.

Elderly black women, when compared with white women, were less likely to have major medical coverage despite their higher labour force participation rate during their prime-working years. This reflects historical employment where black women dominated blue-collar jobs in the hospitality industry.

In 1980, 55% of maids, holding blue-collar jobs, were over the age of 44. Twenty years later, these women were retirees. Many of them did not receive an attractive retirement package that included remaining on the company's comprehensive health-care scheme after completing their working careers; hence, the high percentage of black women with basic health insurance. (See information on Hospital Insurance Plan Benefits)

[3] Newman, D. *Bermuda's Stride Toward the Twenty-first Century.* pp. 10–11.

Health Insurance Plan Benefits

For your information: With effect from April 1, 2000 the Health Insurance Plan provides Insurance coverage for the following medical and hospital benefits:

Benefits	Maximum	Amount (approximate) $
Hospital – inpatient (public-ward)	Unlimited	—
Hospital – outpatient services	Unlimited	—
Psychiatry hospital		
St. Brendan's only		
Inpatient	40 days per year	—
Outpatient	Unlimited	—
Surgery – in hospital	90 units per admission	1,350.00
Anaethetist – in hospital	30 units per admission	597.00
Medical		
Doctor's in-hospital visit	30 units	715.00
Doctor's home visit	4 units per visit	
(not more than 4 per month)	75.00	
Doctor's pre-admission		
Consultation	1 visit per hospital admission	95.00
Artificial limbs and appliances	Lifetime	15,000.00
Approved Treatment in Doctor's Office:		
(i) Laser Opthalmic Treatment		—
(ii) Trans Rectal Ultrasound		—
Approved Home Health Care		—

Since **April 1, 2001**, some of the benefits listed above have been adjusted, and the following benefits have been included:

Home Health Care Benefits
- Medical administration/management
- Ulcer wound care
- Dressing change
- Stump care
- Ostomy care
- Stroke rehabilitation

Hospital Services
- Wound management
- Bone density tests
- Cardiac care programme
- Stereo tactic breast biopsy
- Interventional radiology

Supplemental Benefits
- Two (2) office visits per year
- MRI (Magnetic Resonance Imaging)
- $1,000 for prescription medication

Services at facilities outside the hospital
- Diagnostic Imaging

Approved Treatment in Doctor's Office:
i. Lithotrispsy, extra corporeal shock wave
ii. Prostate Biopsy

Note:
For medical services the amount payable to your doctor will be based on approved rates for the specialist and non-specialist doctors at the time of treatment.

Source: Department of Social Insurance

In contrast, white women, over the aged of 44, in 1980 were employed as clerical (40%) or professional workers (24%), and would probably have received better health insurance packages upon retirement.

Alternatively, white wives who were unemployed and married to white men were more likely to remain as a dependent on their husband's health insurance policy after he retired than black wives married to black men.

For the 5% of uninsured seniors in 2000, the Bermuda Government provided an indigent clinic and subsidized 80% of the hospital cost for persons who qualify based on a means-tested assessment.

Despite the high percentage of seniors who were insured and the Government's hospitalization subsidy, the working population would have to supplement the increased medical expenses incurred as a result of people living longer.

In addition to health care services and medical insurance coverage, another factor that needs to be considered is health care expenditure. According to Bermuda's Health Care Review Final Report, during the 1980s the cost of health care more than doubled. Over the same period, the cost of living increased by 65%. In 1993, the average household spent about $2,700 a year on health care, more than double the figure in 1982. Health insurance premiums accounted for 63% of this figure. The report also noted the following:

> "It is anticipated that health care costs and the demand for health services will continue to rise at a higher rate than the economy, which is predicted to mature and grow more steadily.
>
> Medical expenses will continue to absorb an increasing share of household expenditure." [4]

The results of the 2004 Household Expenditure Survey tend to support the above prediction. During the last decade, the cost of health care continued to more than double, while the cost of living increased by only 32%. In 2004, the average household spent about $5,600 a year on health care – more than twice the amount spent in 1993. Health insurance premiums accounted for 70% of this figure. [5]

In 2004, households headed by seniors spent $6,000 per year on health care, up from $3,000 in 1993. Nearly two-thirds (65%) of that expenditure was comprised of health insurance. Seniors spent just over $900 on prescriptions and medicinal drugs in 2004, up from $300 in 1993. This represented 17% of their health-care expenditure.

As people live longer, there are more demands placed on the health care system. Issues such as quality of life, access to health care and health care costs become increasingly important. According to the *Health Care Review Final Report*, ". . . there is a limit to the financial burden that families and government can bear. It is essential, therefore, that guiding principles and policies be established to manage the health care system and control health care costs." [6]

[4] Bermuda Government, *Health Care Review Final Report*. p. 6.
[5] Department of Statistics, 2004 Household Expenditure Survey. Unpublished tables.
[6] Bermuda Government, *Health Care Review Final Report*. p. 6.

House rich, cash poor

Seven of 10 seniors live in their own homes. A much higher proportion of Bermuda's senior citizens lived in their own homes at the beginning of the 21st Century. In 2000, 71% of Bermuda's elderly householders were owner-occupiers, up from 69% in 1980. (Table 1) In contrast, the owner-occupancy rate for the total population was only 44% in 2000, up from 40% in 1980.
The higher proportion of homeowners among the elderly is to be expected because the likelihood of owning a home increases with age.

During the past 20 years, the median age of elderly owner-occupiers remained at 72 years. That is, half were above this age, and half below. At the same time the proportion of black and Bermudian homeowners increased. (Table 1) In 2000, elderly whites were slightly more likely to be owner-occupiers than blacks (73% of whites compared with 70% of blacks).

Eight out of 10 elderly owner-occupiers lived in accommodations without a mortgage or loan. The vast majority of whites (92%) were in this type of living arrangement, well above the proportion of blacks (78%). Of those that had a mortgage and/or loan, the median monthly outlay was $1,609 in 2000. (Table 1)

The high percentage of blacks who own homes is perhaps attributable to key socio-economic factors. After Emancipation, many black men started working in the construction industry at an early age, and applied artisan skills that they used during slavery to build their own homes. Also, prior to the 1970s through cooperative economics, black men formed work "rallies" whereby families and friends assisted each other in building their homes.

These two strategies were instrumental in reducing building costs and debt repayment for black homeowners. Additionally, since the 1950s, banks and lending agencies adopted more liberal financial policies and offered more mortgages and loans, which made it easier for black wage earners to borrow money.

In 2000, most elderly owner-occupiers lived in residences that were more than 31 years old. On average, these houses had 5.5 rooms and 2.5 bedrooms in 2000, slightly less than the average of 5.6 rooms and 2.6 bedrooms in 1980. (Table 1)

The reduction in the number of rooms can be explained partly by a decline in the average household size from 2.9 in 1980 to 2.5 persons in 2000, a result of families having fewer children. Even though the average number of rooms declined, the rooms in 2000 may have been more spacious than they were in 1980.

By the 2000 Census, senior homeowners were more likely to be living in a multiple apartment complex (57%) than a detached cottage(42%), as was the case in 1980. In 2000, just under two-thirds (64%) of black owner-occupiers resided in apartment buildings, compared with only 45% of whites.

This shift during the 20-year period suggests that seniors were converting their homes to apartment complexes. In 2000, 6% of senior owner-occupiers lived in condominiums, up from 4% in 1991. Condominium developments tend to have cluster housing and provisions for the maintenance of the exterior buildings and properties.

Alternatively, seniors may be adding apartments to supplement their income, or children extending their parents' home in order to have their own accommodations.

These options are preferred in Bermuda for a variety of reasons: the scarcity and cost of land for development purposes; zoning regulations; rental demand from non-Bermudians because of restrictions on work-permit holders owning residences; and the high cost of building homes. Between 2003 and 2005, the estimated building cost for a new residential unit ranged from $220 to $280 a square foot. In addition, labour costs tend to be high in Bermuda, as the bulk of building materials are imported.

Table 1
Seven out of 10 seniors are owner-occupiers

	2000	1991	1980
Owner-occupiers	3,154	2,571	1,978
Median age	72	72	72
Race	%	%	%
Black	59	56	53
White & other	41	44	47
Bermudian status			
Bermudian	96	93	91
Non-Bermudian	4	7	9
Owner-occupiers	71	71	69
Black	70	71	53
With mortgage/loan	22	30	..
No mortgage/loan	78	70	..
White	73	72	47
With mortgage/loan	8	15	..
No mortgage/loan	92	85	..
Condominimum development	6	4	..
Own another residence in Bermuda	25	27	..
Dwelling type			
Cottage	43	60	63
Two to three apartments	48	33	33
Four or more apartments	9	6	3
Other	**	1	**
Not stated	**	**	**
Rooms			
One room	**	**	1
Two rooms	1	1	4
Three rooms	5	4	16
Four rooms	18	17	28
Five rooms	30	30	25
Six or more rooms	45	48	23
Not stated	**	**	**
Average number of rooms	5.5	5.6	4.6
Number of bedrooms			
Studio	**	**	..
One bedroom	8	9	..
Two bedrooms	42	40	..
Three bedrooms	41	39	..
Four or more bedrooms	8	11	..
Not stated	**	**	..
Average number of bedrooms	2.5	2.6	..
Expected selling price	$512,223	..	..
Median monthly mortgage/loan	$1,609	..	..

.. Not available

** Less than 1%

Source: Population and Housing Censuses, 1980 to 2000

Table 2
Elderly renters are more likely to pay less for their accommodations

Year	Total	Number of bedrooms			
		Studio apartment	One	Two	Three or more
	$	$	$	$	$
		Median monthly rent for elderly households			
2000	768	590	713	892	1,172
1991	454	290	399	583	768
		Median monthly rent for all households			
2000	1,021	716	872	1,185	1,841
1991	797	608	726	899	1,173

Source: Population and Housing Censuses, 2000 and 1991

In 2000, senior owner-occupiers estimated that the median selling price of their homesteads was over half a million dollars. This indicates clearly that many of Bermuda's seniors are "house rich."

Of 3,154 senior owner-occupiers in 2000, one-quarter owned another residential property elsewhere in Bermuda, down from 27% in 1991. (Table 1)

Some 1,258 seniors, 28% of the total, rented their accommodations in 2000. They paid a median monthly rent of $768, compared with a median of $1,021 for the entire population. (Table 2) A number of factors are behind the below-market rent for Bermuda's seniors.

One factor is that seniors could be renting a family-owned apartment at a reasonable rent. Another factor is that 65% of seniors were renting dwelling units that were more than 31 years old, which had the second lowest median monthly rent of $751 in 2000. Alternatively, seniors may be renting an apartment at one of the following Housing Trust Properties (independent seniors' colonies) managed by the Bermuda Housing Corporation:

Housing Trust properties

Senior cottage colony	Parish of location
Elizabeth Hills	Pembroke
Purvis Park	Devonshire
Heydon Trust	Sandys
Fergusson Park [1]	St. George's

At the time of the 2000 Census, there were about 60 units declared as Housing Trust properties. The monthly rent for a studio or one-bedroom apartment ranged from $300 to $500. In contrast, the median monthly rent for all studios or one-bedroom apartments ranged from $716 to $872 for the same period. (Table 2) As of January 1, 2005 there were 81 Housing Trusts Properties (mixture of studio and one-bedroom apartments) and the monthly rent ranged from $500 to $800.

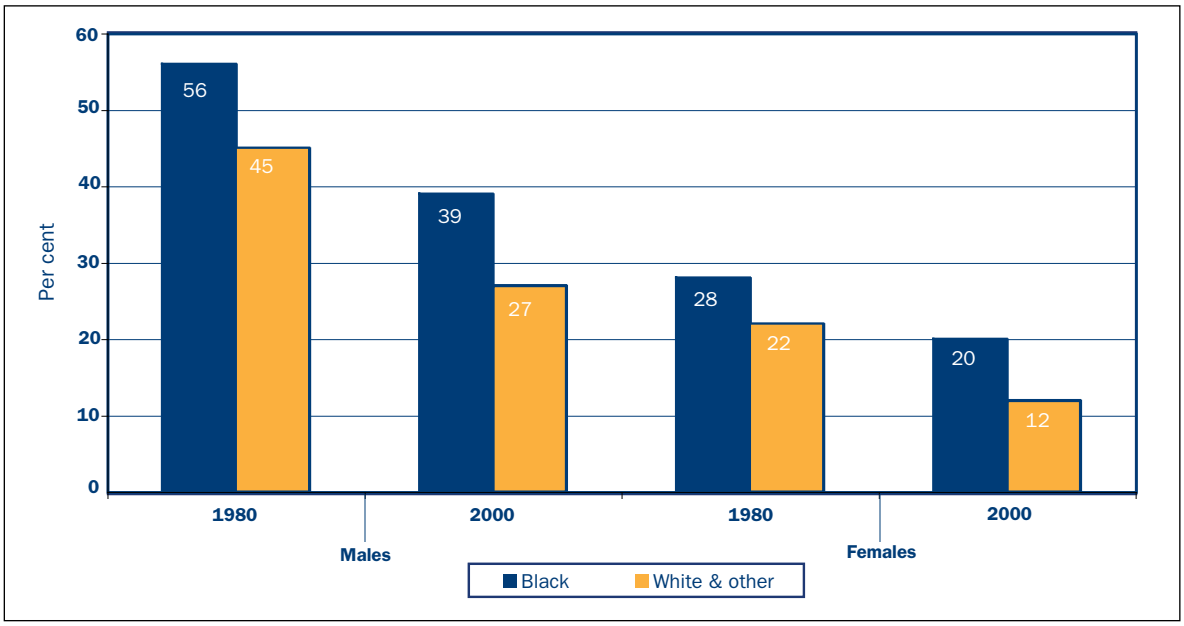
Just over 300 senior households, about 18% of the total, received a rental subsidy in 2000, and 86% were government-assisted. Almost three-quarters of those who received assistance were black.

Of those that rented, 66 elderly householders, 7% of the total, owned a home elsewhere in Bermuda, down from 9% in 1991.

[1] *Opened in August 2001*

Figure 1

Seniors reduce their labour force participation over the past 20 years



Source: Population and Housing Censuses, 1980 and 2000

Fewer seniors working

Bermuda's elderly population is healthier and living longer, but seniors are less likely to be in the labour force. In 1980, individuals aged 65 and older represented 5% of adult workers; by 2000, the proportion had edged down to 4%.

Just over one-third (34%) of elderly men and about 17% of elderly women were labour force participants in 2000. The equivalent proportions in 1980 were 50% for men and 25% for women.

The labour force participation rate for white men fell by 18 percentage points during the 20-year period. This was followed by black men whose participation declined by 17 percentage points. The smallest decrease in labour force participation was recorded by black women, a decline of eight percentage points. (Figure 1)

The decreased share of workers over the age of 65 may be a result of key factors, such as attrition of older workers through business downsizing; reassessment of the need to continue working; and the introduction of Social Insurance pension.

The introduction of the Bermuda Government's Social Insurance Pension in August 1968, provided a greater safety net for seniors who wanted to stop working. (See Social Insurance Contributions and Benefits box for guidelines.) The Bermuda pension arrived late in comparison with the United States where the equivalent began in 1935.

This means that if employees had worked from August 1968 and the employers had made the required contributions to the Bermuda Government, retirees would have had a total of 31 years of Social Insurance contributions by May 2000.

In contrast, their contemporaries who retired in 1980 had only 11 years of contributions to the Government pension plan. This means that, if we exclude the Government budgetary increases, people who retired from the labour force in 2000 received a higher Social Insurance monthly pension than their counterparts did in 1980 because they paid into the system longer.

Social Insurance Contributions and Benefits

Social Insurance contributions and benefits guidelines for senior citizens

1. As a general rule, every person over the age of 16 who is employed in Bermuda for a period of more than 4 hours per week is required to pay Social Insurance contributions. If, however, a person earns less than $58.00 per week, he or she may apply for exemption from liability for weekly contributions.

2. Persons over the age of 65 are exempted from paying Social Insurance contributions, but the employer is required to pay on the person's behalf. As at August 2, 2004 the weekly rate of contributions for employers was $24.19.

Contributory Pension

If you:

- are age 65 or over
- have paid or been credited with a specified number of contributions paid and/or credited between 25 and 50 a year.

You are entitled to a Contributory Pension. The amount received is contingent on the total contributions and number of years a person has put into the scheme, you may qualify whether you stop work or not.

Non-Contributory

If you

- do not qualify for a contributory pension
- are 65 and living in Bermuda
- are Bermudian and have been ordinarily resident here for a period of not less than 10 years during the 20 years prior to your application, you qualify for non-contributory pension.

Source: Department of Social Insurance

SOCIAL INSURANCE BENEFITS

BENEFIT RATES with effect from August 16, 2004

Type of benefit Contributory Pension and Widow's or Widower's Allowance		Basic rate payable	
Avg. conts. per yr.	**Percentage of benefit**	**Weekly $**	**Monthly $**
50 +	100%	177.10	767.43
45-49	90%	159.39	690.69
40-44	80%	141.68	613.94
35-39	70%	123.97	537.20
30-34	60%	106.26	460.46
25-29	50%	88.55	383.72
Contribution pension increment For each 26 contributions in excess of 484		1.04	4.51
		$	**$**
Non-Contributory Pension		81.28	352.21
(* NOTE: Rate payable if pensioner's income is Less than $4,000 per year)		83.64	362.44

Source: Department of Social Insurance

Seniors are dominant in blue-collar jobs

In 2000, half of the seniors who worked held production, transport or service jobs.

Black men were dominant (60%) in production, transport and related jobs, while their white counterparts (34%) held these same positions as well as administrative and managerial jobs (24%). Half of black women (56%) held service jobs, while white women were concentrated in clerical (30%) and sales jobs (25%). (Table 3)

The racial disparity in seniors' occupations can be explained primarily by limited educational and job opportunities for blacks prior to 1970. Another contributing factor was job shifts after individuals reach retirement age. Although occupational changes after retirement affect both races, blacks are probably more likely to have experienced a downward shift in occupation type rather than a lateral shift.

Table 3
Elderly men are most likely to be production and transport workers

	Total			Male			Female		
Major occupational group	**Total**	**Black**	**White**	**Total**	**Black**	**White**	**Total**	**Black**	**White**
Total	1,591	1,102	489	926	615	311	665	487	178
Professional & technical	154	71	83	100	39	61	54	32	22
Administrative & managerial	145	51	94	99	25	74	46	26	20
Clerical	160	87	73	51	32	19	109	55	54
Sales	184	109	75	69	39	30	115	70	45
Service	438	382	56	133	111	22	305	271	34
Production, transport & related	510	402	108	474	369	105	36	33	3
				Percentage distribution					
Total	100	100	100	100	100	100	100	100	100
Professional & technical	10	6	17	11	6	20	8	7	12
Administrative & managerial	9	5	19	11	4	24	7	5	11
Clerical	10	8	15	6	5	6	16	11	30
Sales	12	10	15	8	6	10	17	14	25
Service	28	35	12	14	18	7	46	56	19
Production, transport & related	32	37	22	51	60	34	5	7	2

Source: Population and Housing Census, 2000

For example, if a black man retired in 1991 from the Police Service as a Superintendent at the mandatory retirement age of 60, and chooses to become a taxi driver, he would have had a different occupation at the time of the 2000 Census. During the 1991 Census, he would have been classified as a professional and technical employee; by 2000, his occupational category would have been production and transport worker. (Occupational shifts of this type are more prevalent for black seniors.)

Unfortunately, we are unable to determine the extent to which either of these factors accounts for the racial inequality because the data are not available.

White seniors earn more than black seniors

Among seniors who worked, the median annual personal income from their main job was $23,261 in 2000. The income distribution by race shows a higher median annual personal income for whites across all occupations, except for clerical and production and transport workers. In 2000, white seniors earned 23% more on average than blacks, that is, $27,293 compared to $22,147.

Table 4
Administrators and managers earned the highest median annual personal income from main job

		Race	
	Total	**Black**	**White & other**
Major occupational group	**$**	**$**	**$**
Total	23,261	22,147	27,293
Professional & technical	34,285	28,199	39,817
Administrative & managerial	44,603	38,525	47,999
Clerical	23,703	26,570	20,856
Sales	18,050	17,440	19,090
Service	16,677	16,669	16,736
Production, transport & related	28,151	28,866	23,999

Source: Population and Housing Census, 2000

Income higher for households headed by men

During the last decade, the median annual household income for households headed by seniors rose by 81% from $27,713 to $50,192. That is, half were above this income level, and half below. Household income includes money from the following sources: wages, salaries, commissions, pensions, bonuses, alimony, child support, social assistance, dividends, interest, annuities, net rents, scholarships and rental subsidies, etc.

In 2000, the average household headed by elderly men earned 48% more than those headed by women. In contrast, white households earned 4% more than black households. The greater sex differential can be explained by men being higher earners than women.

A break down by household type, shows that seniors who live in two-parent households have the highest median annual household income, over $92,000. (Table 5) With the exception of one-parent households and extended-family households, white seniors earn more than black seniors in every other household-type category.

Table 5
Two-parent households earned the highest median annual household income ($)

Household type and race	Total	Sex: Male	Sex: Female
		All races	
Total	50,192	59,598	41,784
One person	26,782	28,595	26,136
Adult couple	58,353	59,537	53,288
Two parents	92,633	93,760	87,599
One parent	62,869	74,841	60,671
Extended family	78,856	91,799	71,773
Other	77,869	94,999	67,499
		Black	
Total	49,390	56,249	43,956
One person	24,506	26,460	23,663
Adult couple	51,999	52,992	48,161
Two parents	92,322	92,823	89,999
One parent	63,166	75,374	61,042
Extended family	79,958	92,999	73,635
Other	76,153	85,090	69,599
		White & other	
Total	51,325	63,666	38,258
One person	30,468	33,804	29,634
Adult couple	63,528	64,680	58,153
Two parents	93,599	96,749	80,999
One parent	61,799	71,999	59,249
Extended family	71,454	86,999	62,570
Other	80,099	112,499	65,646

Source: Population and Housing Census, 2000

Decline in the proportion of poor elderly

In 1991, the poor were those whose total income was less than $24,264. By 2000, the total income for the poor was less than $35,851 a year. Between 1991 and 2000, the relative economic position of senior householders improved, even though they continued to comprise the largest percentage of the poor. The proportion of senior households that were poor declined from 45% in 1991 to 40% in 2000.

The definition of "poor" used in this analysis was developed by Professor Timothy M. Smeeding of Dalhousie University, and presented in his paper "Cross-National Comparisons of Inequality and Poverty Position," in Lars Osberg's Economic Inequality and Poverty (1991). Dr. Smeeding's methodology was applied to the 1991 and 2000 census data. The adjustment for demographic data performed by Dr. Smeeding is not possible for this analysis.

Dr. Smeeding's definition of "poor" were households that were defined as those earning less that half the median household income.

At the time of the 2000 census, seniors living alone as well as women were more likely to be living in poverty than men and seniors living in other household arrangements.

About 40% of blacks were "cash poor", only slightly higher than the proportion of whites (39%). (Table 6) An analysis by age shows that a disproportionately higher percentage of the poor were very old. Six out of 10 people aged 85 and older fell into this category in 2000, compared with three out of 10 seniors aged 65 to 74.

The higher percentage of poor among the "old-old" is associated partly with their lower labour force participation rates.

Definition of Relative Economic Position

Poor – households earning less than half the median household income

Near poor – households earning half to 62.5% of the median household income

Middle class – households earning 62.5% to 150% of the median household income

Well-to-do – households earning over 150% of the median household income

Table 6

Seniors are most likely to be poor, black, female, very old and living alone

Characteristics of household reference person	Total	Relative economic position: Poor (Less than $35,851)	Near poor ($35,831 - $44,789)	Middle class ($44,790 - $107,493)	Well-to-do ($107,494 & over)
All households					
Total	100	40	10	34	16
Black	100	40	10	35	16
White & other	100	39	11	34	17
Sex					
Total	100	40	10	34	16
Male	100	32	9	39	21
Female	100	47	11	30	12
Age group					
Total	100	40	10	34	16
65 - 74 (young-old)	100	32	9	39	19
75 - 84 (old)	100	51	11	27	11
85+ (old-old)	100	59	12	22	8
Household type					
Total	100	40	10	34	16
One person	100	69	13	15	4
Adult couple	100	31	9	43	17
Two parents	100	8	5	50	37
One parent	100	22	10	53	15
Extended family	100	16	8	45	31
Other	100	22	10	42	26

Source: Population and Housing Census, 2000

Senior's primary source of income is old age pension

According to *A Study of the Needs of the Elderly People in Bermuda* in 1991, the primary source of income for one-third of Bermuda's elderly was the old age pension.

Of those who stated the pension was their primary source of income, 43% indicated it was their only source of income. The major source was contributory pensions for 13%. Almost one-quarter (24%) listed wages as their primary source of income.[1]

In 2004, the *Ageing in Bermuda Meeting the Needs of Seniors* study showed striking similarities with the 1991 findings. The government pension continued to be the main source of income for seniors. Seniors over 80 years old were far more dependent on the government pension than those aged 65–79. One-quarter of the younger seniors supplemented their pension with wages.

Vast majority of seniors were pension recipients

In 2000, approximately 94%, or 6,310 seniors were pension recipients. Because of the high percentage of pensioners, it is important to monitor the number of working-age people to the number of pension-age people aged 65 and over. This is commonly known as the "pension-

[1]Chappell, N. and Marshall, V. *A Study of the Needs of Elderly People in Bermuda*. p. 18.

er support" ratio, and it is used as a gauge to ensure adequate pensions for future generations. During the past five decades, the number of pensioners has been rising faster than the number of workers because fewer children are born, which means fewer future workers.

As a result, between 1950 and 2000, Bermuda's "pensioner support" ratio fell from 9.2 to 5.9. (Table 7) An analysis by race shows that for the first time there were proportionately fewer black workers supporting black pensioners in 2000 than was the case among whites. The higher ratio for whites was probably a reflection of the level of immigration of white workers, which is compensating for the low fertility level of white Bermudian women.

The decline in the number of births mentioned above, has far-reaching consequences for a pay-as-you-go type pension such as the Bermuda Government's Contributory Pension Fund (CPF). This is because the contributions that are paid into the fund in a given year by workers are generally paid out as benefits in the same year.

The financial viability of this type of pension scheme can be problematic if the number of pensioners is rising at a faster rate than the number of workers. In fact, actuarial evaluations have indicated that ". . . if there are no adjustments to counteract the anticipated deficits between 2001 and 2030, then the CPF may face a condition of insolvency which could require significant tax support as part of the solution or some combination of remedial measures to reduce CPF outlays".[2]

The social implication of an inadequate pension fund could have profound consequences because about half of the 16,500 workforce in 1995 did not participate in an occupational retirement scheme.[3]

Another aspect of the "pension challenge" in Bermuda was expressed by the Auditor General, who wrote that "the slow and non-collection of significant amounts of pension contributions and payroll and land taxes continues to be a major concern."[4]

During the fiscal year 2002/03, 61 employers owed more than $40,000 to the CPF in respect of pension contributions more than 90 days in arrears. Twelve of the 61 employers were in receivership or have gone out of business.[5] The following table illustrates the pension contributions (at July 31, 2003) that were past due more than 90 days. (Table 8)

According to the Auditor General,

> "For the Government and its pension fund to be owed more than $31 million of taxes and pension contributions more than three months in arrears is, in my view, intolerable. Not only should this amount be in the Government's bank accounts, but some of it will inevitably not be collected at all."[6]

Table 7
Ratio of workers supporting pensioners is declining [1]

Race	1950	1960	1970	1980	1991	2000
Total	9.2	9.3	8.8	7.3	7.0	5.9
Black	9.7	10.5	. .	7.9	7.2	5.6
White	8.7	8.2	. .	6.6	6.9	6.4

[1] Based on pensioner support ratio which is the ratio of the number of people at working age (20–64) by the number of people over the pension age (65+)

Source: Population and Housing Censuses, 1950 to 2000

[2] Government of Bermuda. *A Green Paper. A National Pensions Scheme for Bermuda*. p. 5.
[3] Ibid., p.6.
[4] Government of Bermuda. *Report of the Auditor General on the Work of the Office of the Auditor General and on the Ac counts of the Government of Bermuda for the Financial Year April, 2002 to March 31, 2003*. p. 16.
[5] Ibid., p. 136.
[6] Ibid., p. 16.

Table 8
Outstanding pension contributions decline to less than $10 million

Year	1998	1999	2000	2001	2002	2003
	Millions of dollars					
Pension contributions	$10.6	$11.6	$10.7	$11.0	$13.1	$9.2

Source: Auditor General Report for the Financial Year 2002/03

An additional challenge that was outlined in the 1995 Green Paper *A National Pensions Scheme*, is the safety and security of pension assets of some employer-sponsored pension plans. These types of plans are at risk if there is co-mingling of pension assets with the business assets. If the business is unsuccessful the pension assets and benefits will cease. [7]

Bermuda is not alone in facing these challenges. According to the World Bank Policy Research Report,

> "as we grow old we work, produce and earn less, and therefore need a secure source of income to see us through life. Societies and governments have developed mechanisms to provide income security for their older citizens as part of the social safety net for reducing poverty. Today, as the world's population ages old age security systems are in trouble worldwide. Income security in old age is a worldwide problem."[8]

Due to these concerns, it is essential to regulate not only the Bermuda Government pensions; but private pension plans as well.

As a result, the Pension Commission was established by the National Pension Scheme (Occupational Pensions) Act 1998. On January 1, 2000 the Bermuda Government introduced mandatory, private-occupational retirement schemes in response to concerns about the inadequacy of pension income and the long-term viability of Bermuda's CPF. (See Eligibility for pension plan membership box, overleaf, for more information.)

[7] Government of Bermuda. *A Green Paper A National Pensions Scheme for Bermuda*. p. 6.
[8] Stewart, R. *Bermuda An Economy Which Works*. p. 260.

Eligibility for pension plan membership

Effective January 1, 2000, as an Employee you are eligible to be a member of your Employer's pension plan if you . . .

- are Bermudian or the husband or wife of a Bermudian; and
- are 23 years old or more; and
- have completed 720 or more hours of employment with your Employer in any calendar year prior to membership in the pension plan

A pension plan may specifically permit membership eligibility on an earlier basis. Once eligible, an Employee must become a member of the pension plan, membership must continue even if you work less than 720 hours in subsequent years.

Once an Employee has become a member of the pension plan, membership continues until normal retirement age, unless the Employee retires before that time or ceases to be employed (subject to the provisions of the Act).

Where an Employee is employed by more than one Employer, that employee must be a member of each pension plan for which the criteria for eligibility have been met.

Self-employed Persons

As a self-employed person you must apply for registration of a self-employment Pension Plan in accordance with the Act and the Regulations, if you . . .

- are Bermudian or the husband or wife of a Bermudian; and
- are between the age of 23 and 65; and
- have pensionable earnings from self-employment exceeding $20,000, in a calendar year.

This is merely a summary; a comprehensive statement of the Legislative requirements are contained in the National Pension Scheme (Occupational Pensions) Act 1998 and its respective Amendments and Regulations.

Source: Pension Commission Handbook

Pension income under $11,000

In 2000, the median annual pension income for seniors was $10,928. For whites, it was $11,309, while for blacks it was $10,702. The differential between the sexes was greater than the differential between the races.

While the median income for whites was 6% higher than for blacks, the median for men was 14% higher than that for women. White men led with an annual pension income of $12,755 followed by black men with $11,307. White women received a higher pension than black women ($10,420 in comparison to $10,350). (Table 9)

Housing is major portion of seniors' expenditures

In addition to examining senior citizens' assets and income, it is essential to analyse the expenditure patterns of this segment of the population. At the time of the 2004 Household Expenditure Survey, the average senior citizen's household spent on average a total of $1,210 a week on a broad range of goods and services. This represents a 64% increase in weekly expenditure from 1993 when seniors spent $736 per week.

In 2004, the three largest weekly expenditures for seniors were housing (47%); household goods, services and supplies (13%); and medical, health and personal care (11%). (See detailed descriptions box highlighting the leading weekly expenditure items for seniors). This means that for every $1 of spending each week, a senior spends 47 cents on housing, 13 cents on household goods and 11 cents on medical and personal care. (Table 10)

When compared to the 1993 Household Expenditure Survey, seniors are now spending a higher proportion of their weekly income on housing, foreign travel and medical, health and personal care.

Table 9
Men earned the highest median annual pension income

Race	Total	Sex	
		Male	Female
	$	$	$
Total	10,928	11,857	10,376
Black	10,702	11,307	10,350
White & other	11,309	12,755	10,420

Source: Population and Housing Census, 2000

The pension income differences can be linked to a number of factors such as the:

- period of inclusion in Social Insurance pension and/or a private-occupational retirement plan,
- type of pension plan, for example, defined benefit pension or defined contribution pension,
- amount of contributions, and
- hours and months worked.

Table 10
Seniors spent 47 cents out of every dollar for housing

Item	Average weekly expenditure		Percentage of total	
	2004 $	1993 $	2004 %	1993 %
Average weekly household expenditure	1,210	736	100	100
Food & nonalcoholic beverages	97	85	8	12
Alcohol drink & tobacco	16	16	1	2
Clothing & footware	16	16	1	2
Housing [1]	570	280	47	38
Fuel & power	43	32	4	4
Household goods, services & supplies	160	121	13	16
Transportation	75	49	6	7
Education	7	11	1	2
Foreign travel	55	24	5	3
Medical, health & personal care	134	60	11	8
Entertainment & recreation	21	31	2	4
Miscellaneous	16	10	1	1

[1] Includes rent paid, imputed rent for owner-occupiers and cost of repairs and maintenance

Source: 1993 and 2004 Household Expenditure Surveys

Leading weekly expenditure items for seniors

Housing
Housing consists of expenditure for rental payments which includes an imputed rental equivalent value for heads of households who were owner-occupiers; repair and maintenance of the home; insurance of the home; and land tax.

Household goods, services and supplies
Household goods, services and supplies represents spending on various household goods, such as furniture, appliances and entertainment equipment; household services such as child care, cable television, water, telephone, and utilities; and household supplies, which include cleaning liquids, detergents, cleaning utensils and paper supplies.

Medical, health and personal care
Medical, health and personal care includes expenditures on health insurance, for doctor and or dental coverage; medical services such as net doctor bills, laboratory tests, hospital fees, and any other medical service provided by specialists such as nurses and therapists; medical supplies, including hearing aids, artificial limbs, eye wear and contact lenses; and, both prescribed and over-the-counter drugs and medicines; personal care services, men's hair cuts and styling, salon services for ladies and other services such as massages and slenderizing.

Bermuda's institutionalized seniors – the facts!

In general, most persons 65 years and older would rather live in their own homes for as long as possible. However, with increasing age, more seniors are progressively less able to manage their households. In addition, they are more likely to face physical and mental health challenges that may require the assistance of another person to get through the activities of daily living. For some, the need may be minimal, such as assistance with eating, toileting, bathing, dressing or transferring from a chair to a bed. For others, nursing care or skilled nursing care may be required.

As a result, seniors may need to be confined to an institution, at some point in their lives. This can be expected because, as persons get older, the more likely they will experience situations that may make it unsafe for them to live alone.

The decision to place a family member in an institution can be a difficult one. It is often the last resort for the family members who find they can no longer meet the needs of their loved ones. In these cases, there is usually no other alternative and the decision is made with the best interest of the senior at heart.

Highlights from the 2000 census:

- There were 901 institutionalized persons
- Of the 901 persons institutionalized, four out of 10, or 360, were seniors
- As in the United States of America, 5% of Bermuda's seniors resided in institutions
- More than two-thirds of institutionalized seniors lived in rest homes
- The rest home population rose by 34% since 1991.
- Almost one-third of seniors in institutions were confined to hospitals. (Table 1)
- The population in hospitals increased by 11% in the last decade.

Table 1
Seniors are more likely to reside in rest homes

	2000			1991		
Type of institution	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Total	360	139	221	295	107	188
Rest home	244	87	157	182	55	127
Hospital [1]	110	47	63	99	40	59
Other	6	5	1	14	12	2
			Percentage distribution			
Total	100	100	100	100	100	100
Rest home	68	63	71	62	51	68
Hospital [1]	31	34	29	34	37	31
Other	2	4	1	5	11	1

[1]Includes Continuing Care Unit, St. Brendans Hospital and the Hospice

Source: Population and Housing Censuses, 2000 and 1991

Definition of institution

Institutions are facilities in which individuals will remain for generally more than one year. Examples include nursing homes, rest homes, children's homes, homes for the physically challenged, hospitals, hospices and correctional facilities. The accommodations and daily needs are provided by a third party on a professional basis.

Demand for care of the elderly rises

As the number of seniors increases, there will undoubtedly be a demand for more purpose-built facilities with trained staff to care for the aged.

Between 1991 and 2005, the number of government and private rest homes (including nursing homes and the Continuing Care Unit) increased from 15 to 22.

In 2005, Bermuda's stock of institutions for the elderly included:

- 12 independent "residential" care housing facilities (rest homes),
- Six intermediate "residential" care housing facilities (nursing homes), and
- Four skilled nursing homes. (see Elder Care Information box)

Some of these facilities provide multiple services such as more than one type of elder care, adult day-care services and respite care.

Presently there are plans to open an additional mixed-level care facility in St. George's parish.

In 2005, the monthly cost of residing in one of these facilities ranges from $2,500 to $7,588. The cost of living in these facilities can place a financial strain on families.

Elder care information

Independent "residential" care housing (rest home)

Provides long-term and/or short-term care for seniors who are ambulant or independently mobile, may have decreased physical or mental faculties and require minimum supervision or assistance with activities of daily living. The cost can range between $2,500 to $3,500 per month.

Institution	Parish	Number of beds
Bendicion	Sandys	8
Lorraine Rest Home	Warwick	18
Herb Garden	Southampton	12
Mon Reve	Sandys	11
Monte Cristo Gardens	Sandys	10
Sunset Gardens	Southampton	5
Swan Chateau	St. George's	6
Sunny Vale	Paget	8
Yellow Roses	St. George's	7
Twilight	Southampton	4
Westmeath Residential and Rest Home	Pembroke	29
Elder Home Care	Devonshire	12

Intermediate "residential" care housing (nursing home)

Provides long-term and/or short-term care for seniors who have a relatively stabilized chronic disease (physical or mental), or functional disability and may require the availability of personal care on a 24 hour basis, as well as supervision or assistance with activities of daily living. The cost can range between $3,000 to $4,000 per month.

Institution	Parish	Number of beds
Matilda Smith Williams Home	Devonshire	24
Pembroke Nursing Home	Pembroke	25
Easter Lily	Hamilton	10
Packwood Home	Sandys	30
Pleasantville	Paget	11
Westmeath Nursing Wing	Pembroke	18
Mixed Level of Care	St. George's	under construction

Skilled nursing homes

Provides long-term and/or short-term care for seniors who are chronically ill or have a functional disability, have a limited rehabilitation and may require personal care on a 24-hour basis as well as nursing supervision and medical support. The cost can range between $1,395 and $7,588 per month.

Institution	Parish	Number of beds
Continuing Care Unit	Paget	39
Lefroy House	Sandys	40
Westmeath Skilled Wing	Pembroke	16
St. Brendan's Reid Ward	Devonshire	25

Adult day care	$10– $100 per day
Respite care	$45–$150 per day
Weekly care	$315– $1,050 per week

Source: National Office for Seniors and the Physically Challenged

A review of statistical information collected by the King Edward VIIth Memorial Hospital's Continuing Care Unit revealed the following output changes in hospital output measures between fiscal year 1980/81 and 2002/03:

- Bed count increased 12%, from 92 to 103
- Patient days rose 6% from 32,706 days to 34,611 days
- Length of stay climbed by 340 days, from 177 to 517 days
- Per cent occupancy declined from 97% to 92%.

These upward shifts are a clear indication that the demand for health care is rising. In addition, ageing seniors will also add to the demand for more health care professionals and support staff. Between 1991 and 2000, the number of nurse's aides or orderlies increased by 58%. At the same time, the number of medical doctors and nurses rose by 22% and 10%, respectively.

Elderly institutional population is greying

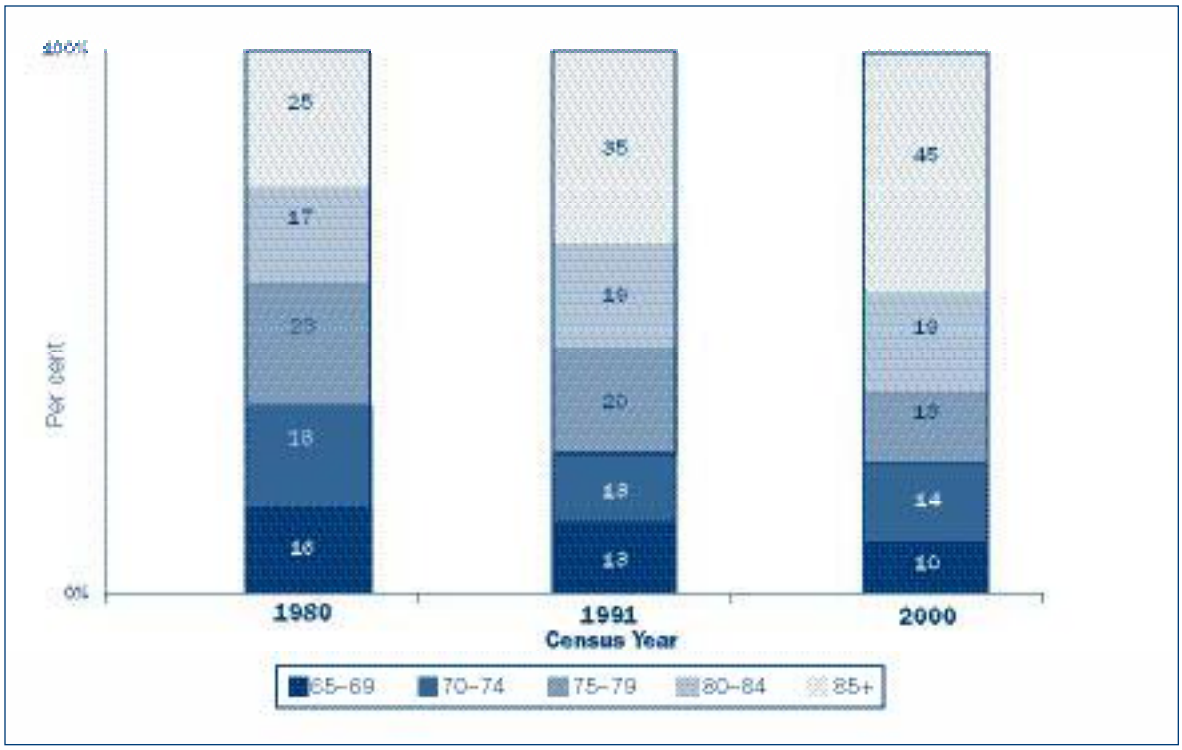
Bermuda's elderly institutional population is ageing. The proportions of persons aged 75 years and older rose from 65% in 1980 to 77% in 2000. During the 20-year period, the proportion of the population aged 85 years and older climbed from 25% to 45%. (Figure 1)

In fact, in 2000 there were eight centenarians (100 years of age and older), six of whom were women, residing in institutions. As a result of the growth of the oldest population, the median age of the elderly institutional population increased from 78 in 1980 to 83 in 2000. (Table 2) This means that half of this population group was older, and half was younger. Women had a median age of 86 years in 2000, nine years older than men.

Six out of every 10 people aged 65 and older, residing in institutions, were women. Two out of 10 institutionalized men were 85 and older, as were six out of 10 women, the highest proportions among the five age groups.

Figure 1

Majority of seniors continue to be found in the 'old-old' age group



Source: Population and Housing Censuses, 1980 to 2000

Table 2

Median age of seniors climbs steadily

	2000			1991			1980		
Age group	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Total	360	139	221	295	107	188	201	65	136
65-69	35	24	11	38	25	13	33	12	21
70-74	51	29	22	37	21	16	36	16	20
75-79	45	24	21	59	25	34	46	14	32
80-84	67	30	37	57	16	41	35	9	26
85+	162	32	130	104	20	84	51	14	37
Median age	83	77	86	80	76	83	78	77	79
	Percentage distribution								
Total	100	100	100	100	100	100	100	100	100
65-69	10	17	5	13	23	7	16	19	15
70-74	14	21	10	13	20	9	18	25	15
75-79	13	17	10	20	23	18	23	22	24
80-84	19	22	17	19	15	22	17	14	19
85+	45	23	59	35	19	45	25	22	27

Source: Population and Housing Censuses, 1980 to 2000

Majority of seniors are widowed

In 2000, one-half of the individuals aged 65 years and older residing in institutions were widowed. As expected, there were more widows (63.3%) than widowers (28.1%). (Figure 2)

Women often outlive their spouses, and men are more likely to re-marry. Only 12% of persons 65 years and older residing in institutions were married.

Seniors are challenged by mobility difficulties

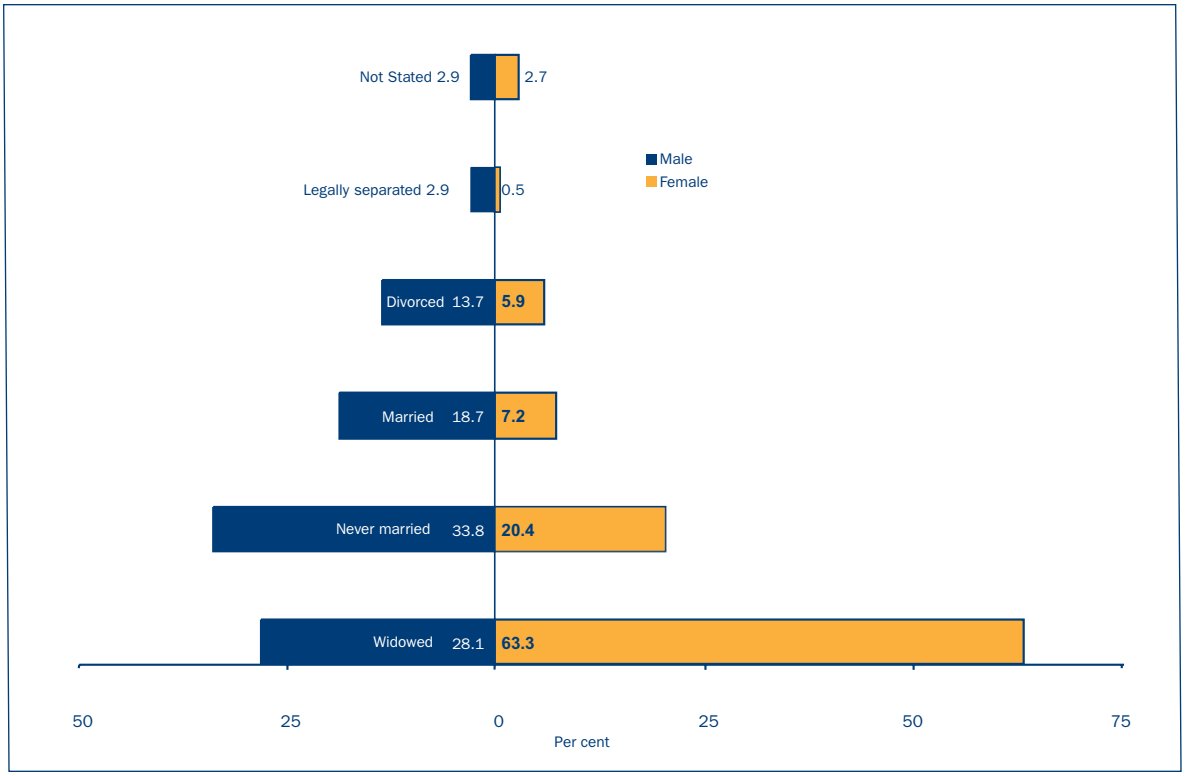
Chronic illnesses and permanent disability can limit the ability of older people to function independently. The leading health condition reported for seniors in 2000 involved difficulties in mobility. In second place was Alzheimer's disease, followed by high blood pressure. The top five conditions in 1991 and 2000 are summarized below:

Table 1

Leading health conditions of institutionalised seniors

2000		1991	
Mobility difficulties	165	Limited use or absence of leg(s)	92
Alzheimer's disease	111	Alzheimer's disease	89
High blood pressure	80	Poor vision or blindness	64
Limited use or absence of leg(s)	75	Limited use or absence of arm(s)	48
Arthritis	66	Arthritis	46

Figure 2
More widows than widowers



Source: Population and Housing Census 2000

Conclusion

When does someone become 'old' or 'elderly'? A number of terms are used to describe people considered old, but there is an increasing awareness that the terms used should acknowledge the tremendous diversity inherent in a group of people whose ages can span a range of 40 or more years.

This report has provided the factual data and information key on ageing in Bermuda. It provides the basis for a greater understanding of the evolving demographic changes for the elderly. As seniors live longer and increase in numbers, a greater 'burden' is being placed upon the younger population who will have to support them.

The change in the complexion of Bermuda's elderly population brings both challenges and opportunities for the private and public sectors. An ageing population has serious implications for outlays on pensions, housing, public transportation, health care services, home care and community support services.

Bermuda's greying population provides a wealth of experience to draw upon and comprises persons who have worked hard, contributed to business and community, and have helped to bring Bermuda to a level of economic and social prosperity enjoyed today. Strategic planning promoting supportive environments for successful aging of the elderly, recognizes that seniors as a collective group are as diverse as younger members of society. As such, a collective approach to ageing and older people will ultimately determine how we and our children and grandchildren experience life in later years.

Annex 1

Selected social indicators	1950				1960				1970			
	Total	Male	Female	Sex ratio	Total	Male	Female	Sex ratio	Total	Male	Female	Sex ratio
Total population	37,403	18,148	19,255	94.3	42,640	21,233	21,407	99.2	52,330	26,293	26,037	101.0
Bermuda born	28,749	..	..	..	33,887	..	..	..	37,834	18,955	18,879	100.4
Foreign born	8,654	..	..	..	8,753	..	..	..	14,496	7,338	7,158	102.5
Not stated	..	..	..		..	..	..		..	..	..	
Elderly population												
Ages 65+	2,135	896	1,239	72.3	2,421	993	1,428	69.5	3,342	1,404	1,938	72.4
65–69	798	357	441	81.0	926	412	514	80.2	1,393	645	748	86.2
70–74	585	243	342	71.1	647	281	366	76.8	898	367	531	69.1
75–79	401	173	228	75.9	424	165	259	63.7	573	225	348	64.7
80–84	215	91	124	73.4	258	89	169	52.7	289	102	187	54.5
85+	136	32	104	30.8	166	46	120	38.3	189	65	124	52.4
Black	1,130	486	644	75.5	1,213	515	698	73.8	1,516	609	907	67.1
White & other	1,005	412	593	69.5	1,208	478	730	65.5	1,820	791	1,029	76.9
Not stated	..	..	..		..	..	..		6	4	2	
% of elderly population												
Ages 65+	100	100	100		100	100	100		100	100	100	
65 - 69	37	40	36		38	41	36		42	46	39	
70 - 74	27	27	28		27	28	26		27	26	27	
75 - 79	19	19	18		18	17	18		17	16	18	
80 - 84	10	10	10		11	9	12		9	7	10	
85+	6	4	8		7	5	8		6	5	6	
Median age (years)												
Total population	25	24	25		25	25	26		26	26	27	
Bermuda born	..	..	..		..	..	..		..	..	..	
Foreign born	..	..	..		..	..	..		..	..	..	
Ages 65+	71	71	72		71	71	72		71	70	72	
Bermuda born	..	..	..		..	..	..		..	..	..	
Foreign born	..	..	..		..	..	..		..	..	..	
Intercensal growth rate												
% Total population	..	..	..		1.31	1.56	1.06		2.05	2.14	1.96	
% Ages 65+	..	..	..		1.25	1.02	1.41		3.23	3.46	3.06	
% of ages 65+ in total population	6	5	6		6	5	7		6	5	7	

Source: Population and Housing Censuses, 1950 to 2000

Selected social indicators	1980				1991				2000			
	Total	Male	Female	Sex ratio	Total	Male	Female	Sex ratio	Total	Male	Female	Sex ratio
Total population	54,050	26,350	27,700	95.1	58,460	28,345	30,115	94.1	62,059	29,802	32,257	92.4
Bermuda born	39,920	19,612	20,308	96.6	42,634	20,712	21,922	94.5	44,290	21,221	23,069	92.0
Foreign born	14,130	6,738	7,392	91.2	15,823	7,632	8,191	93.2	17,675	8,534	9,141	93.4
Not Stated	..	..	..		3	1	2		47	47	0	
Elderly population	4,471	1,823	2,648	68.8	5,396	2,199	3,197	68.8	6,722	2,746	3,976	69.1
65 - 69	1,699	739	960	77.0	1,945	855	1,090	78.4	2,332	1,056	1,276	82.8
70 - 74	1,211	489	722	67.7	1,366	568	798	71.2	1,845	794	1,051	75.5
75 - 79	847	364	483	75.4	1,054	401	653	61.4	1,275	473	802	59.0
80 - 84	402	135	267	50.6	627	238	389	61.2	713	249	464	53.7
85+	312	96	216	44.4	404	137	267	51.3	557	174	383	45.4
Black	2,403	968	1,435	67.5	3,095	1,224	1,871	65.4	4,035	1,601	2,434	65.8
White & other	2,068	855	1,213	70.5	2,287	967	1,320	73.3	2,641	1,126	1,515	74.3
Not stated	..	..	..		14	8	6		46	19	27	
% of elderly population												
Ages 65+	100	100	100		100	100	100		100	100	100	
65 - 69	38	41	36		36	39	34		35	38	32	
70 - 74	27	27	27		25	26	25		27	29	26	
75 - 79	19	20	18		20	18	20		19	17	20	
80 - 84	9	7	10		12	11	12		11	9	12	
85+	7	5	8		7	6	8		8	6	10	
Median age (years)												
Total population	29	29	30		33	32	33		37	36	37	
Bermuda born	26	26	27		31	30	31		35	34	36	
Foreign born	35	34	36		36	35	37		39	38	39	
Ages 65+	72	71	72		72	71	73		72	71	73	
Bermuda born	71	71	72		72	71	72		72	71	73	
Foreign born	72	71	73		72	72	73		73	72	73	
Intercensal growth rate												
% Total population	0.35	0.02	0.04		0.71	0.66	0.76		0.66	0.56	0.76	
% Ages 65+	3.11	2.79	3.33		1.71	1.70	1.71		2.44	2.47	2.42	
% of ages 65+ in total population	8	7	10		9	8	11		11	9	12	

Source: Population and Housing Censuses, 1950 to 2000

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