

2016

Population and Housing Census Preliminary Report



GOVERNMENT OF BERMUDA
Department of Statistics

Because
People Count
BERMUDA CENSUS 2016

2016

Population and Housing Census

Preliminary Report



GOVERNMENT OF BERMUDA
Department of Statistics

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INTRODUCTION

This report presents the preliminary results of the 2016 Population and Housing Census which was launched on Census Day Friday, May 20, 2016. It contains highlights, concepts and definitions, brief analyses of the data contained within the tables and makes comparisons with the 2010 Census results. The majority of this report's analysis is focused on the de jure civilian non-institutional population. A subsequent report containing administrative information and the final census results with more detailed analysis and cross-tabular data will be completed by March 2018.

Melinda Williams
Director of Statistics
December 2017

TECHNICAL NOTE

Coverage and Completion Rate

During the undertaking of every census, interviewers are dependent on household respondents to provide the correct information and data in response to questions asked on the questionnaire. Also, household members often respond to the census on behalf of other persons who live in the same household and who are not available or are difficult to contact. In this regard, there will always be a degree of partial response, non-response or undercounting. Similar to previous censuses, the 2016 Census was susceptible to these occurrences.

In the 2016 Census, all households that were not completed were called or visited, giving a 100% coverage rate. The completion rate was 98%, leading to 827 households that were not completed. In order to achieve a data set for all households, data was imputed for these missing households. In cases of partially completed households, data was also imputed for some variables.

Limitations and Comparability

The imputation process differed between the 2010 Census and 2016 Census resulting in lower levels of non-response in the 2016 Census. Therefore, users are cautioned not to calculate changes in absolute numbers or intercensal percentage changes to compare the two data sets. Intercensal changes reflect a combination of real change and change as a result of lower non-response for the 2016 Census.

The emigration and immigration statistics are not comparable due to the limitations of the emigration data. The census information collected on emigrants was proxy data; information provided on behalf of the emigrant by the household reference person. The main limitation of the 2010 and 2016 Census emigration data is that it was unable to capture situations where entire households left the island, as there was no one to provide this information. In addition, if all of the household members of an emigrant moved to another household in Bermuda, the information about the emigrant would not likely have been collected.

HIGHLIGHTS (2010-2016)

- ❖ The population decreased to 63,779.
- ❖ The sex ratio increased to 93 males per 100 females.
- ❖ The median age of the population increased to 44 years.
- ❖ The unemployment rate remained unchanged at 7%.
- ❖ The number of dwelling units increased to 28,192.
- ❖ The average household size declined to 2.26 persons per household.

SUMMARY ANALYSIS

This analysis is based on the data displayed in the tables for the years 2010 and 2016.

DE JURE POPULATION

The de jure population decreased to 63,917 and was comprised nearly entirely of the civilian non-institutional population, which decreased to 63,779. The number of non-sheltered persons counted increased to 138.

TABLE 1: DE JURE POPULATION

De Jure Population	Number		Percentage Distribution		Percentage Point Change
	2016	2010	2016	2010	2010-2016
De Jure Population	63,917	64,319	100	100	
Civilian Non-Institutional Population	63,779	64,237	100	100	**
Non-Sheltered Population	138	82	**	**	**

** Less than 1%.

DE JURE CIVILIAN NON-INSTITUTIONAL POPULATION

Parish and Municipality

Amongst the nine parishes, Pembroke retained the largest share of the population distribution at 17%. Smith's and Warwick had the only percentage point increases (+1) in their percentage distributions and St. George's and Sandys had the only percentage point decreases (-1). The municipalities of the Town of St. George's and the City of Hamilton both had 1 percentage point declines in their distributions. The map overleaf shows the population distribution by parish and municipality. Bermuda's population density was 3,086 persons per square mile in 2016.

Sex

The distribution of males and females remained unchanged at 48% and 52%, respectively. The sex ratio increased from 92 to 93 males per 100 females.

Age

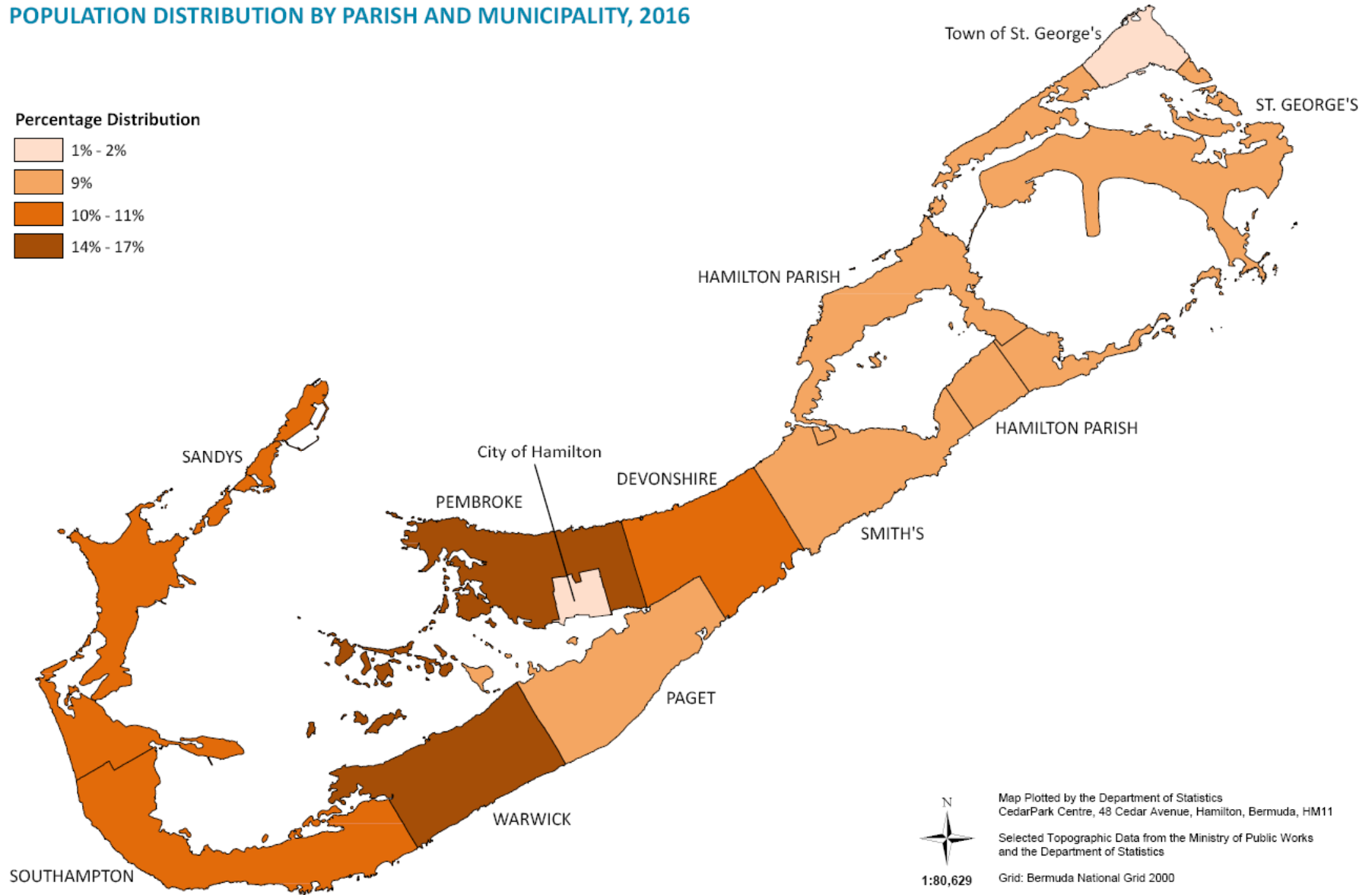
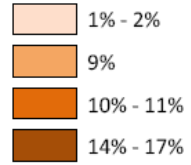
The population 65 years and older represented 17% of the population, shifting from the least populated age group in 2010 to the third most populated in 2016. There were percentage point decreases in the three youngest age groups and percentage point increases in the two oldest age groups, an indicator of a continued ageing population. Specifically, the population 65 years and older had the largest percentage point increase (+3) and the population aged 15-29 years had the largest percentage point decrease (-2). The median age of the population increased from 41 to 44 years, another indicator of an ageing population.

Dependency ratios can be used as an indicator of the economic burden carried by persons aged 15-64 years to support persons of dependency age (under 15 years and 65 years older). The total dependency ratio increased from 43 to 46 dependents per hundred persons aged 16-64 years. The old age dependency ratio also increased from 19 to 25 while the youth dependency ratio decreased from 23 to 22.



POPULATION DISTRIBUTION BY PARISH AND MUNICIPALITY, 2016

Percentage Distribution



Map Plotted by the Department of Statistics
 CedarPark Centre, 48 Cedar Avenue, Hamilton, Bermuda, HM11
 Selected Topographic Data from the Ministry of Public Works
 and the Department of Statistics
 Grid: Bermuda National Grid 2000

Nativity

The population born in Bermuda edged up 1 percentage point to 70%. The distribution of the foreign-born population remained static.

Bermudian Status

The percentage distributions for every Bermudian status category remained the same from 2010 to 2016, with the Bermudian population having the largest share at 79%. Of the three non-Bermudian subcategories, other non-Bermudian was the most chosen response at 15% of the total population.

Race

Despite a two percentage point decline in their percentage distribution, blacks still represented more than half (52%) of the population. The only intercensal percentage point increase (+1) was by those who reported to be of mixed race. All other racial categories remained unchanged in their percentage distributions.

Migration

Despite the 2000 to 2010 intercensal period being 4 years longer than the 2010 to 2016 intercensal period, the number of emigrants counted increased. On the other hand, immigration declined. A more refined indicator of the changes in migration are annual averages which factor out differing intercensal period lengths. Both average annual immigration and emigration increased. Net migration cannot be calculated for the reasons outlined in the *Limitations and Comparability* section on page 1.

Highest Academic Qualification (16 Years +)

A high school certificate was still the most common highest academic qualification, accounting for 35% of the total. In contrast, the no formal certificate category remained the least common with a 14% share. The technical or vocational certificate or associate degree category had the largest percentage point increase (+5) and the population with no formal certificates had the only percentage point decline (-9).

Economic Activity (16 Years +)

The labour force remained the most popular economic activity category at 71%, despite a 4 percentage point decline in its percentage distribution. In contrast, the distribution of the economically inactive population increased by 5 percentage points to 29%, largely due to the 3 percentage point increase in retirees.

As with the total population, the median age of the working population also increased, reaching 46 years. The labour force participation rate fell from 85% to 83% and the unemployment rate remained static at 7%. Workers averaged fewer weekly hours from their main jobs, declining from 41 to 40 hours.

Housing

The total number of dwelling units increased to 28,192 as a result of increases in the number of private and group dwelling units. The percentage distributions of the dwelling unit types remained constant, with the vast majority (97%) being comprised of private dwelling units. The percentages of private dwelling units that were owner-occupied (48%) or rented for cash (47%) were nearly identical.

Households

Pembroke continued to have the largest share of the household distribution, increasing one percentage point to 18%. Smith's and Pembroke had the only percentage point increases (+1) in their percentage distributions and the Town of St. George's had the only percentage point decrease (-1).



During the intercensal period, the average household size contracted to 2.26 persons per household. Households' median monthly rental and mortgage values both declined to \$1,605 and \$3,201, respectively.

TABLE 2: DE JURE CIVILIAN NON-INSTITUTIONAL POPULATION

Selected Characteristics and Indicators	Number		Percentage Distribution		Percentage Point Change
	2016	2010	2016	2010	2010-2016
De Jure Civilian Non-Institutional Population					
Parish and Municipality	63,779	64,237	100	100	
St. George's	5,659	6,422	9	10	-1
Town of St. George's	1,298	1,801	2	3	-1
Hamilton	5,584	5,862	9	9	**
Smith's	5,984	5,406	9	8	+1
Devonshire	7,087	7,330	11	11	**
Pembroke	11,160	10,614	17	17	**
City of Hamilton	854	1,032	1	2	-1
Paget	5,899	5,702	9	9	**
Warwick	9,002	8,615	14	13	+1
Southampton	6,421	6,633	10	10	**
Sandys	6,983	7,653	11	12	-1
Population Density per Square Mile	3,086	3,057 r			
Sex	63,779	64,237	100	100	
Male	30,690	30,858	48	48	**
Female	33,089	33,379	52	52	**
Sex Ratio	93	92			
Age Groups	63,779	64,237	100	100	
0-14	9,519	10,504	15	16	-1
15-29	9,583	10,849	15	17	-2
30-44	13,781	14,853	22	23	-1
45-64	20,192	19,348	32	30	+2
65 & Over	10,704	8,683	17	14	+3
Median Age (<i>years</i>)	44	41			
Total Dependency Ratio	46	43			
Youth Dependency Ratio	22	23			
Old Age Dependency Ratio	25	19			
Nativity	63,779	64,237 ¹	100	100 ²	
Bermuda Born	44,411	42,802	70	69	+1
Foreign Born	19,332	18,532	30	30	**
Not Stated	36	352	**	1	
Bermudian Status	63,779	64,237	100	100	
Bermudian	50,201	50,565	79	79	**
Non-Bermudian	13,578	13,516	21	21	**
Permanent Resident Certificate Holder	1,879	1,881	3	3	**
Non-Bermudian Spouse of a Bermudian	2,186	2,112	3	3	**
Other Non-Bermudian	9,513	9,523	15	15	**
Not Stated	0	156	**	**	

TABLE 2: DE JURE CIVILIAN NON-INSTITUTIONAL POPULATION

Selected Characteristics and Indicators	Number		Percentage Distribution		Percentage Point Change
	2016	2010	2016	2010	2010-2016
Race	63,779	64,237	100	100	
Black	33,339	34,532	52	54	-2
White	19,466	19,926	31	31	**
Mixed	5,780	4,838	9	8	+1
Asian	2,592	2,289	4	4	**
Other	2,553	2,273	4	4	**
Not Stated	49	379	**	1	
Migration ³					
Immigration (<i>intercensal period</i>) ⁴	7,360	10,530			
Emigration (<i>intercensal period</i>) ⁴	1,424	1,121			
Average Annual Immigration (<i>intercensal period</i>) ⁴	1,227	1,053			
Average Annual Emigration (<i>intercensal period</i>) ⁴	237	112			
Highest Academic Qualification (16 Years +)	53,613	53,041 ⁵	100	100 ⁶	
No Formal Certificate	7,296	11,815	14	23	-9
High School Certificate	18,773	15,077	35	30	+5
Technical/ Vocational Cert./ Associate Degree	11,922	9,458	22	19	+3
Degree	15,537	12,766	29	25	+4
Other	1	627	**	1	-1
Not Stated	84	1,202	**	2	
Economic Activity (16 Years +)	53,613	53,041	100	100	
Labour Force	38,159	40,041	71	75	-4
Working	35,533	37,197	66	70	-4
Unemployed	2,626	2,844	5	5	**
Economically Inactive	15,424	12,574	29	24	+5
Retired	8,318	6,712	16	13	+3
Engaged in Home Duties	1,671	1,416	3	3	**
Unable to Work (<i>due to a disabling health condition</i>)	1,174	834	2	2	**
Not Actively Seeking Work	828	606	2	1	+1
Voluntary Work Without Pay	401	273	1	1	**
Other	3,032 ⁷	2,733 ⁸	6	5	+1
Not Stated	30	426	**	1	
Median Age (<i>years</i>) of Working Population	46	45			
Labour Force Participation Rate (<i>16-64 years</i>)	83%	85%			
Unemployment Rate	7%	7%			
Average Weekly Hours Worked in Main Job	40	41			
Housing					
Dwelling Units	28,192	26,923	100	100	
Private Dwelling Units	27,418	26,200	97	97	**
Group Dwelling Units	751	696	3	3	**
Other Dwelling Units (<i>boats</i>)	23	27	**	**	**

TABLE 2: DE JURE CIVILIAN NON-INSTITUTIONAL POPULATION

Selected Characteristics and Indicators	Number		Percentage Distribution		Percentage Point Change
	2016	2010	2016	2010	2010-2016
Type of Tenure (<i>Private Dwelling Units</i>)	27,418	26,200 ⁹	100	100 ¹⁰	
Owner-Occupied	13,266	12,238	48	49	-1
Rented for Cash	13,012	11,719	47	47	**
Rent Free	1,128	1,004	4	4	**
Not Stated	12	133	**	1	
Households					
Parish and Municipality	28,192	26,923	100	100	
St. George's	2,452	2,547	9	9	**
Town of St. George's	564	717	2	3	-1
Hamilton	2,440	2,407	9	9	**
Smith's	2,578	2,245	9	8	+1
Devonshire	3,010	2,983	11	11	**
Pembroke	5,121	4,571	18	17	+1
City of Hamilton	467	508	2	2	**
Paget	2,641	2,510	9	9	**
Warwick	4,012	3,649	14	14	**
Southampton	2,970	2,939	11	11	**
Sandys	2,968	3,072	11	11	**
Average Household Size	2.26	2.39			
Median Monthly Household Rent	\$1,605	\$1,712			
Median Monthly Household Mortgage	\$3,201	\$3,302			

** Less than 1%.

r - revised

Note: Percentages may not add to 100 due to rounding.

¹ Includes 2,551 persons for whom there is no data.

² The denominator used for the percentage distribution is 61,686 (64,237-2,551).

³ 2010 figures excludes persons for whom there is no data.

⁴ The intercensal periods are May 21, 2000 to May 20, 2010 and May 21, 2010 to May 20, 2016. The intervals are unequal and therefore comparisons should be made with caution unless annual averages are used.

⁵ Includes 2,096 persons for whom there is no data.

⁶ The denominator for the percentage distribution is 50,945 (53,041-2,096).

⁷ Comprises solely of the 'Full-time student not actively seeking work' category.

⁸ Includes 2,554 'Full-/part time student without a job' responses and 179 'Other' responses.

⁹ Includes 1,106 households for which there is no data.

¹⁰ The denominator for the percentage distribution is 25,094 (26,200-1,106).



DE FACTO POPULATION

Between 2010 and 2016, the de facto population declined to 64,486. The vast majority of the de facto population in 2016 continued to be comprised of the civilian non-institutional population, increasing 8 percentage points to 91% of the total. The distribution of overseas visitors and transients decreased 9 percentage points to 7%, largely due to fewer cruise ships and yachts in Bermuda on Census Night in 2016. The institutional population on Census Night declined to 711. The institutional population on Census Night declined to 711.

TABLE 3: DE FACTO POPULATION

De Facto Population	Number		Percentage Distribution		Percentage Point Change
	2016	2010	2016	2010	2010-2016
De Facto Population	64,486	71,328	100	100	
Civilian Non-Institutional Population	59,000	58,932	91	83	+8
Overseas Visitors & Transients	4,637	11,492	7	16	-9
Institutional Population	711	822	1	1	**
Non-Sheltered Population	138	82	**	**	**

** Less than 1%.

Note: Percentages may not add to 100 due to rounding.

CONCEPTS AND DEFINITIONS

Age

Age is the length of time a person has been alive, measured in completed years. It is measured as the difference between date of birth and Census Day, May 20, 2016.

Average Household Size

Average household size is calculated by dividing the total de jure civilian non-institutional population by the total number of households.

$$\frac{\text{Total De Jure Civilian Non-Institutional Population}}{\text{Total Number of Households}}$$

Bermudian Population

This is a sub-group of the total population and includes only persons who have or are deemed to have Bermudian status either by birth, grant or marriage. Persons in this sub-group include persons born in Bermuda (local born) as well as persons born in other countries (foreign born) but who have acquired Bermudian status.

Census Day

The reference date to which the majority of census questions refer to. For the 2016 Census, Census Day was Friday, May 20, 2016.

Census Night

The reference night that is used to determine whether a person was in Bermuda or abroad, for census purposes, was the period between sunset and 11:59 p.m. on Friday, May 20, 2016.

Completion Rate

This is the total number of assessment numbers counted in the census divided by the total number of assessment numbers.

$$\frac{\text{Total Number of Assessment Numbers Counted in the Census}}{\text{Total Number of Assessment Numbers}} \times 100$$

Civilian Non-Institutional Population

The civilian non-institutional population includes persons who usually, for six months or more, reside in Bermuda irrespective of where they were physically on Census Night. As such, residents temporarily overseas for vacation, business, school or other purposes are included. It excludes overseas visitors, the institutional population and the non-sheltered population.

De Facto Population

The de facto population refers to all persons who were physically present in Bermuda on Census Night.

De Jure Population

The de jure population refers to those persons who have lived, or are expected to live, in Bermuda for six months or more as of Census Day irrespective of where they were physically on Census Night. As such, residents temporarily overseas for vacation, business, school or other purposes are included. It excludes overseas visitors and the institutional population.



Dwelling Unit

Dwelling units include private dwelling units, group dwelling units and other dwelling units (boats).

Emigrant

An emigrant is a person who leaves one country with the intent to settle in another for a period of at least one year. A student who has gone abroad to study for a specific period or a person seeking medical attention or on vacation (even an extended vacation) is not considered an emigrant.

Employed/ Working Population

Persons were employed or part of the working population if they were 16 years and over and if, during the week of May 13 to 19, 2016, they either: worked for pay or payment in kind. The working population also includes persons who had a job but were not at work due to vacation, sick leave, etc.

Group Dwelling Unit

This describes a situation where the occupants of a building live collectively for disciplinary, health, custodial, work or other reasons and share the cooking, sleeping and/or sanitary facilities with other households. Generally, group dwellings are available primarily to select persons, not the general population. They differ from institutions in that occupants' movements to and from the premises are less restricted. Examples of group dwellings include hotel staff quarters, transitional housing, police barracks and rooming houses catering for six or more paying guests.

Highest Academic Qualification

Highest academic qualification refers to an individual's success which is verified by the receipt of a certificate, diploma or degree as of Census Day. The range of academic achievement is from none (no formal certificate) to post-graduate degree. Professional designations, such as Doctor of Dental Surgery and Certified Public Accountant, are excluded.

Hours Worked in Main Job

Hours worked in main job is the total number of hours usually worked in a main job each week by a person aged 16 years and over and includes paid or unpaid overtime.

Household

A household is a person or group of persons living together in a dwelling unit.

Household Reference Person

The household reference person is the person aged 18 years or older who carries the main responsibility of the household's affairs. In the case of a group of unrelated persons sharing a dwelling on an equal basis, the person whom the others acknowledge as the household reference person is accepted as such for census purposes.

Immigrant

An immigrant is a person who enters a country after residing in another with the intent of taking up residence for 6 months or more.

Imputation

A statistical technique for assigning reasonable values for inconsistent, poor quality or missing data. For the 2016 Census, a donor imputation method was used for household non-response and donor imputation and administrative resources were used for item imputation.



Institutional Population

The institutional population refers to the inmates of correctional facilities and youth detention centres, persons in homes for the aged, long-stay hospital patients, persons in the hospice and those in adult shelters and children's homes.

Intercensal

This is the period between two censuses. The previous two intercensal periods are May 21, 2000 to May 20, 2010 and May 21, 2010 to May 20, 2016.

Labour Force/ Economically Active Population

These terms refer to the body of persons 16 years and older who furnish the supply of labour for the production of economic goods and services.

It includes only those persons aged 16 years and older who were either employed or actively seeking work (inclusive of students irrespective of education level) during the week preceding Census Day, May 13 to 19, 2016. Hence, the labour force is a combination of two groups: those who were employed (the working population); and, those who were actively seeking work (the unemployed population).

Labour Force Participation Rate

The labour force participation rate is the percentage of the population 16 to 64 years of age who were either employed or unemployed.

$$\frac{\text{Labour Force 16 to 64 Years}}{\text{Population 16 to 64 Years}} \times 100$$

Main Job

A person's main job is one where he or she receives health insurance and pension benefits.

Median

The median is the value which divides a distribution into two equal groups, half having values above the median and half having values below the median.

Municipality

A municipality is a town or city which has incorporated status and powers of self-governance. There are two municipalities in Bermuda: the City of Hamilton in Pembroke Parish and the Town of St. George's in St. George's Parish.

Nativity

Nativity refers to a person's country of birth.

Non-Bermudian Population

This is a sub-group of the total population and refers to all persons who do not have Bermudian status. Persons in this sub-group include persons born in Bermuda (local born) as well as persons born in other countries (foreign born) but who have not acquired Bermudian status.

Non-Sheltered Population

The non-sheltered population are those who have no fixed abode and who do not stay in adult shelters. Such persons have no habitable dwelling to call home and usually sleep outdoors. The non-sheltered form part of the de jure population.



Not in the Labour Force/ Economically Inactive

These terms refer to any person of working age (16 years and over) who was neither employed nor unemployed (e.g. retired, not actively seeking work, etc.)

Not Stated

The category 'not stated' is used exclusively where a person has not given any response to the question asked.

Old Age Dependency Ratio

The old age dependency ratio is the ratio of the population 65 years and older to the population aged 15 to 64 years.

$$\frac{\text{Population 65 Years and Older}}{\text{Population 15 to 64 Years}} \times 100$$

Overseas Visitor Population

The overseas visitor population comprises people who were in Bermuda on Census Night but resided overseas for six months or more.

Parish

A parish is an area of land with each containing a Parish Council. There are nine parishes in Bermuda and they are listed as follows from east to west: St. George's, Hamilton, Smith's, Devonshire, Pembroke, Paget, Warwick, Southampton and Sandys.

Population

The term population refers to the de jure civilian non-institutional population.

Population Density

Population density is a measure of the average population per unit of area. It is calculated by dividing the de jure civilian non-institutional population by the total land area. Bermuda's land area as of 2010 was 21.01 square miles and as of 2016 was 20.67 square miles (source: Department of Land Title and Registration).

$$\frac{\text{De Jure Civilian Non-Institutional Population}}{\text{Total Land Area}}$$

Private Dwelling Unit

A private dwelling unit is a room or group of rooms used, or intended to be used, for living purposes. It must be capable of permanent human habitation and must have:

- Its own separate access to the street or common landing or staircase, and,
- Its own cooking, living, sleeping and sanitary facilities which the occupants of the dwelling do not have to share with any persons other than their own household members.

From a structural perspective a private dwelling may be contained within a single family cottage, a house comprising two or more apartments, an apartment building, or within part of a building which is used for residential as well as business or other purposes.

Sex

Sex is the distinction between males and females based on the biological differences in sexual characteristics.



Sex Ratio

The sex ratio is the number of males per 100 females.

$$\frac{\text{Number of Males}}{\text{Number of Females}} \times 100$$

Tenure

Tenure refers to the household's occupancy arrangement for the private dwelling unit (e.g. owner-occupied or non-owner occupied).

Total Dependency Ratio

The total dependency ratio is the ratio of the population under 15 years and 65 years and older to the population aged 15 to 64 years.

$$\frac{\text{Population Under 15 years} + \text{Population 65 Years and Older}}{\text{Population 15 to 64 Years}} \times 100$$

Unemployed

The unemployed comprise all persons 16 years and older who during the week prior to Census Day were without work but were actively seeking work.

Unemployment Rate

The unemployment rate is the number of unemployed people as a percentage of the labour force. The labour force includes persons aged 16 years and older who were either employed or actively seeking work.

$$\frac{\text{Unemployed 16 Years and Older}}{\text{Labour Force 16 Years and Older}} \times 100$$

Youth Dependency Ratio

The youth dependency ratio is the ratio of the population under 15 years to the population aged 15 to 64 years.

$$\frac{\text{Population Under 15 Years}}{\text{Population 15 to 64 Years}} \times 100$$





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Department of Statistics

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