

# **CONSUMER PRICE INDEX**

October 2017

#### **INFLATION DECLINES**

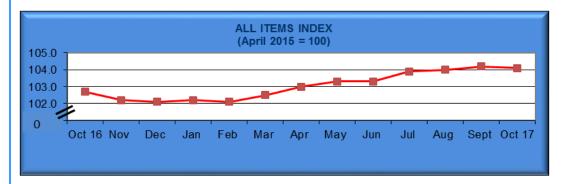
Consumers paid 1.4 per cent more in October 2017 than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). The level of inflation decreased 0.1 percentage point from the 1.5 per cent measured in September 2017.

Between September 2017 and October 2017, the average cost of goods and services in the CPI decreased by 0.1 per cent. The all-items index fell to 104.1 in October. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$104.10.

#### YEAR-TO-YEAR ANALYSIS

The Clothing & Footwear sector was the largest contributor to the year-over-year increase in October (+1.6 per cent). The average cost of jewelry rose 8.4 per cent.

In addition, the Tobacco & Liquor sector and the Food sector rose 9.2 per cent and 2.5 per cent, respectively.



Inflation Rate 1.4%

The compilation of the CPI involves the processing of several thousand price quotations. The Department of Statistics wishes to acknowledge the cooperation of the business community in supplying the required price data.

SUMMARY STATISTICS								
	Мо	nthly		Qua	Quarterly			
Period	Index	Annual per cent Change	Period	d Index	Annual per cent Change			
2016			2015					
Oct	102.7	+2.1	Q1	98.9	+1.5			
Nov	102.2	+1.7	Q2	100.2	+1.7			
Dec	102.1	+1.6	Q3	100.6	+1.5			
			Q4	100.5	+1.2			
2017								
Jan	102.2	+1.9	2016					
Feb	102.1	+1.9	Q1	100.2	+1.3			
Mar	102.5	+2.4	Q2	101.2	+1.0			
Apr	102.8	+1.7	Q3	102.2	+1.6			
May	103.3	+2.4	Q4	102.3	+1.8			
Jun	103.3	+1.8						
Jul	103.9	+1.7	2017					
Aug	104.0	+2.3	Q1	102.3	+2.1			
Sept	104.2	+1.5	Q2	103.1	+1.9			
Oct	104.1	+1.4	Q3	104.0	+1.8			

### **MONTH-TO-MONTH ANALYSIS**

#### **Health & Personal Care**

The increase in the average cost of doctor visits (+5.4 per cent) propelled a 0.5 per cent rise in the Health & Personal Care sector in October.

#### Rent

After no price movement in September, the Rent sector reported a 0.1 per cent increase in October. Properties subjected to rent control rose 0.2 per cent.

#### Food

The Food sector moved up 0.1 per cent. Price increases were reported for sweet potatoes (+2.9 per cent), condensed milk (+1.9 per cent) and fresh salmon (+1.7 per cent).

# **Household Goods, Services & Supplies**

The Household Goods, Services & Supplies sector reported no change.

# **Tobacco & Liquor**

The average cost of beer (+0.7 per cent) contributed to a 0.2 per cent rise in the Tobacco & Liquor sector.

#### Clothing & Footwear

The average cost of female clothing (+0.3 per cent) led to a 0.1 per cent rise in the Clothing & Footwear sector.

#### Fuel & Power

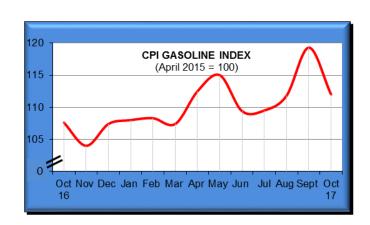
Following a 0.2 per cent increase in September, the Fuel & Power sector reported no price movement in October.

### **Education, Recreation, Entertainment & Reading**

The Education, Recreation, Entertainment & Reading sector dipped 0.2 per cent. The average cost of pet up-keep (+0.4) was offset by the average cost of recreational equipment (-0.5).

# **Transport & Foreign Travel**

The Transport & Foreign Travel sector slipped 1.4 per cent. Decreases were reported in the average cost of premium fuels (-6.1 per cent) and overseas car rentals (-1.5 per cent).



#### **COMPUTING PRICE INCREASES**

The Department of Statistics receives calls daily requesting the rate of inflation over specific periods of time. The following calculations are provided to guide users as to how to compute rates of price increases. The monthly index numbers can be obtained from our website <a href="https://www.gov.bm">www.gov.bm</a>.

# A) Month-to-Month Price Change

The price change between November and October, 2015 is calculated as Follows:

$$= \frac{\text{Nov} 15 \text{ index} - \text{Oct} 15 \text{ index}}{\text{Oct} 15 \text{ index}} \times 100$$

$$=\frac{100.5-100.6}{100.6}\times100$$

$$=-0.1\%$$

# B) Year-to-Year Price Change

The price change between December 2015 and December, 2014 is calculated as follows:

$$= \frac{\text{Dec } 15 \text{ index} - \text{Dec } 14 \text{ index}}{\text{Dec } 14 \text{ index}} \times 100$$

$$=\frac{100.5-98.7}{98.7}\times100$$

$$=1.8\%$$

#### C) Particular Period Price Change

The price change between April 2014 and January, 2016 is calculated as follows:

$$= \frac{\text{Jan } 16 \text{ index } - \text{Apr14 index}}{\text{Apr14 index}} \times 100$$

$$=\frac{100.3-98.3}{98.3}\times100$$

$$=2.0\%$$

# BERMUDA CONSUMER PRICE INDEX

# **APRIL 2015 = 100**

	All Items	Food	Rent	Clothing & Footwear	Tobacco & Liquor	Fuel & Power	Household Goods, Services & Supplies	Transport & Foreign Travel	Education, Recreation, Entertain. & Reading	Health & Personal Care
2013 WEIGHT	1000	115	267	25	31	39	116	130	147	130
ANNUAL AVERAGE ( per cent)										
2012 2013 2014 2015 2016	+2.4 +1.8 +2.0 +1.5 +1.5	+3.5 +3.0 +3.1 +2.7 +1.9	+0.2 -0.3 +0.8 +0.6 +1.0	+4.3 +0.1 +2.0 +1.3 +0.4	+2.5 +4.4 +2.4 +1.2 +5.1	+9.3 -1.9 -2.4 -8.9 -3.3	+1.0 +0.5 +0.8 +2.1 +1.6	+1.6 +1.4 +1.7 -1.3 -2.2	+2.7 +2.5 +1.9 +0.9 +3.3	+6.6 +8.3 +6.7 +7.8 +4.5
				MOM	NTHLY ( pe	r cent)				
2045										
2015 Oct Nov Dec	-0.1 -0.1 Nil	+0.2 -0.5 -0.2	+0.1 Nil +0.1	Nil Nil Nil	Nil Nil +0.3	-1.3 -1.3 -2.0	Nil Nil Nil	-1.2 +0.1 +0.4	+0.2 Nil +0.1	+0.5 Nil Nil
2016 Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec  2017 Jan Feb Mar Apr May	-0.2 -0.1 -0.1 +0.9 -0.1 +0.5 +0.8 -0.5 +1.0 Nil -0.5 -0.1 +0.1 +0.1 +0.4 +0.3 +0.4	+1.2 +0.6 -0.1 +0.3 -0.3 +0.2 +0.3 +0.1 +0.1 -0.1 -1.3 +2.0 Nil +0.4 -1.1 +1.7	-0.1 +0.1 Nil Nil +0.1 Nil +1.0 +0.1 Nil Nil +0.1 Nil -0.8 +0.1 Nil	+0.1 Nil Nil -0.5 Nil Nil +0.1 Nil +0.3 +0.1 Nil Nil Nil Nil Nil Nil	+0.4 +1.1 Nil +2.0 +1.5 +0.8 Nil Nil +0.1 Nil Nil -0.4 +0.8 -0.1 +0.1 +2.8 +4.7	-3.7 Nil -0.8 -2.6 -5.0 +10.4 +4.3 Nil +6.0 -0.9 -2.3 -3.1	+0.1 Nil +0.1 Nil Nil +0.1 Nil +0.1 Nil Nil Nil Nil Nil -0.1	-1.6 -1.4 -0.7 +0.8 -0.3 +1.0 +2.5 -4.3 +4.5 Nil -2.8 +1.3	Nil -0.3 +0.2 +2.7 +0.5 Nil -0.2 Nil +1.1 +0.1 -0.2 +0.1 Nil +0.1	Nil +0.1 Nil +3.2 Nil
Jun Jul Aug Sept Oct	Nil +0.6 +0.1 +0.2 -0.1	+0.6 +0.2 +0.1 -0.1 +0.1	+0.1 Nil +0.1 Nil +0.1	Nil +0.2 Nil Nil +0.1	Nil +0.7 Nil +0.1 +0.2	+3.3 +3.0 Nil +0.2 Nil	+0.2 +0.2 Nil +0.1 Nil	-1.2 +2.4 Nil +0.2 -1.4	-0.1 +0.1 +0.2 +0.8 -0.2	Nil Nil +0.5 Nil +0.5
Oct '17	104.1	105.4	101.3	102.3	116.4	108.3	103.4	101.7	106.3	105.1
Oct '17 Oct '16	+1.4	+2.5	-0.3	+1.6	+9.2	+4.6	+0.5	+1.8	+0.9	+1.3

# WHAT IS THE CONSUMER PRICE INDEX?

The Consumer Price Index (CPI) is a statistical tool used for measuring changes in the general level of prices of consumer goods and services purchased by private households.

The index measures price movements of a given quality and quantity of goods and services. The mix of these consumer goods and services comprising the index, are figuratively thought of as a "shopping basket." In constructing this "shopping basket", the selected goods and services are organized first by commodity type. They are then divided into subcomponents and assigned to a major expenditure group. The Bermuda CPI is structured into nine expenditure groups or sectors:

- Food
- Rent
- Clothing & Footwear
- Tobacco & Liquor
- Fuel & Power
- Transport & Foreign Travel
- Household Goods, Services & Supplies
- Education, Recreation, Entertainment & Reading
- Health & Personal Care

#### **CONCEPTS AND DEFINITIONS**

#### **Base Period**

The time period which is used as a reference point for measuring the price change of goods and services. The base period for the Bermuda CPI is April 2015.

# **Price Index Number**

A single figure that shows how a set of prices has changed over a specified period of time. An index number on its own means nothing. It must be compared with an index number from another period to have meaning. For example, a comparison of the index number 97.2 for January 2014 with 100.4 for January 2016, reveals that prices have increased by 3.3 percent.

# **Laspeyres Equation**

The CPI is computed using this statistical equation. This formula calculates the total amount of money a household needs today to purchase the same basket of goods and services that it bought in the base period, April 2015.

#### **WEIGHTED AVERAGE**

A mathematical formula that takes into account the relative importance of an item's price change compared to the overall change in the sector or CPI.

#### Inflation

Inflation is the process of rising prices, resulting in diminishing purchasing power of a given sum of money.

# **Cost of Living Index**

Many individuals refer to the CPI as a cost-of-living index. The CPI is an index of pure price change only. A cost-of-living index reflects the changes in buying or consumption patterns that consumers would ordinarily make to adjust to any change in the price of a good or service.

# A COMPARISON OF RATES OF INFLATION (%) Selected Countries & Bermuda

	2013	2014	2015	2016	Oct 17
Bermuda	1.8	2.0	1.5	1.5	+1.4
United States <sup>1</sup>	1.5	8.0	0.7	2.1	+2.0
Canada <sup>2</sup>	0.9	2.0	1.1	1.4	+1.4
United Kingdom <sup>3</sup>	3.0	2.4	1.0r	1.8	+4.0

#### Sources:

- 1. US Bureau of Labour Statistics
- 2. Statistics Canada
- 3. UK Office of National Statistics

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