



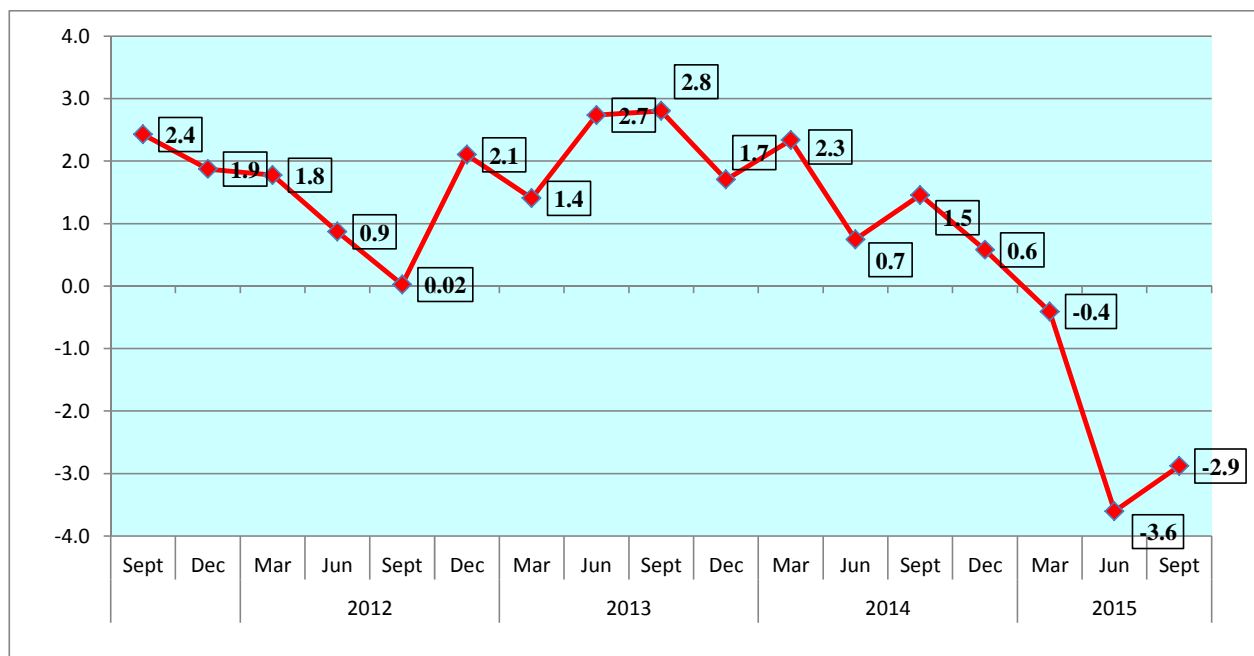
## THE CAYMAN ISLANDS' CONSUMER PRICE INDEX REPORT: SEPTEMBER 2015

(Date of release: November 16, 2015)

### CPI Falls by 2.9% in the Third Quarter of 2015

The overall Consumer Price Index (CPI) in the third quarter of 2015 was **102.1**, lower by 2.9 percent when compared to the third quarter in 2014. However, a comparison with the previous quarter ending June 2015 indicates an increase of 1.0 percent.

**Figure 1: Inflation Rates (September 2011 – September 2015)**  
(% Change in CPI of Current Quarter over Same Quarter a Year Ago)



### Annual changes: September 2014 over September 2015

The overall **2.9** percent decline in September 2015 in comparison to September 2014 is mainly due to the following divisions:

- **Housing and utilities:** the price index registered a decline of **8.8** percent year on year. Prices for electricity, gas and other fuels fell by 18.4 percent, coinciding with the decline in international oil prices. Water supply and miscellaneous services declined by 10.7 percent due to reduced electricity costs for pumping water. Imputed rentals for owner-occupied housing and actual rentals for housing fell by 8.4 and 6.3 percent respectively.

- **Transport:** the price index for the division recorded a decline of **5.3** percent as costs associated with the operation of personal transport equipment such as petrol fell by 8.7 percent. Purchase of vehicles also recorded a fall of 1.6 percent. However, the index for transport services rose by 0.5 percent.
- **Miscellaneous goods and services:** this division's price index moved downward by **0.8** percent as average insurance fees fell by 3.9 percent. The decline in this division was moderated by dual increases of 4.7 percent in personal care and personal effects not elsewhere classified. Upward movements were also recorded in the cost of social protection (4.5%) and other services not elsewhere classified (1.2).
- **Household equipment:** this division decreased by **0.2** percent, largely the result of a fall in the index for glassware, tableware and household utensils by 7.6 percent. Price decreases were also recorded in the household textiles index by 1.0 percent and in goods and services for routine household maintenance by 0.1 percent. The division's decline was curbed by a rise in prices of tools and equipment for house and garden (2.7%); furniture and furnishings (2.0%); and household appliances (0.4%).

Meanwhile, the following divisions recorded increases in September 2015 compared to September 2014:

- **Education:** there was a **5.4** percent rise above the September 2014 level due to increases in the average school fees for pre-primary and primary education (8.2%) and secondary education (7.0%). Tertiary education recorded no movement in its index for the period under review.
- **Clothing and footwear:** this division's index rose by **3.9** percent as clothing prices moved up by an average of 3.9 percent and footwear by 3.6 percent.
- **Communication:** there was a **3.3** percent rise in the price index as all sub-groups except telephone and telefax equipment registered at higher levels. Telephone and telefax services prices rose by 3.3 percent along with postal services (0.2%). However, telephone and telefax equipment prices were generally stable.
- **Recreation and culture:** the inflation rate for this division was **1.7** percent, coming mainly from: newspapers, books and stationery (7.2%); other recreational items and equipment, gardens and pets (3.1%); other major durables for recreation and culture (0.4%); and recreational and cultural services (0.2%). This division was moderated by a decline in the prices for audio-visual, photographic and information processing equipment (-1.9%).
- **Food and non-alcoholic beverages:** this index rose by **1.5** percent as the average cost of most groups increased, led by vegetables (7.7%); meat and meat products (6.1%); and

coffee, tea and cocoa (5.6%). Price declines were recorded for fruits; mineral water, soft drinks, fruit and vegetable juices; fish and seafood; and milk, cheese and egg.

- **Alcohol and tobacco:** the index for this division moved upward by **0.5** percent as a result of the 0.7 percent price increase for alcoholic beverages. On average, tobacco prices were stable.
- **Restaurants and hotels:** the division's price index increased by **0.4** percent as the catering services price index rose by 0.8 percent. However, there was a 2.5 percent decline in the price index for accommodation services.
- **Health:** there was a **0.3** percent increase in this division's price index largely traced to medical products, appliances, and equipment (2.0%) and hospital services (1.4%). However, a 0.3 percent decline was recorded for the outpatient services index.

### Quarterly changes: September 2015 compared to June 2015

Ten out of the twelve divisions contributed to the **1.0** percent CPI increase over the second quarter of 2015, while one division (household equipment and minor repairs) was stable. The main contributors to the quarterly increase were:

- **Transport:** this recorded a **2.5** percent increase, as all groups except purchase of vehicles recorded higher average prices, led by transport services (6.1%) and operation of personal transport equipment (0.8%). There was a decline in prices in the purchases of vehicles by 0.1 percent.
- **Housing and utilities:** this index, which accounts for almost 2/5 of the entire CPI basket, rose by **1.4** percent, traced mainly to a rebound in electricity, gas and other fuel prices (11.1%). Water supply and miscellaneous services also had a 1.2 percent rise. The only component that registered a price decline was maintenance and repair of dwelling (-1.1%). Actual rentals for housing and imputed rentals for owner-occupied housing indices were stable.
- **Clothing and footwear:** the division's index went up by **1.4** percent as clothing prices rose by 1.5 percent and footwear by 1.0 percent.
- **Education:** there was a **0.8** percent rise in the index for this division, resulting from a 1.4 percent increase in the index for secondary education, and a 1.1 percent incline in pre-primary and primary education costs.
- **Food and non-alcoholic beverages:** the index had an upward movement of **0.8** percent for the quarter. The main contributors were: vegetables (4.0%); milk, cheese and egg

(3.6%); coffee, tea, and cocoa (3.6%); meat and meat products (1.3%); and, fish and seafood (1.3%).

**Recreation and culture** was the only division that recorded a downward movement (-0.2%) in its index when compared to the quarter ending September 2015, attributed solely to the 9.3 percent decline in the index for audio-visual, photographic and information processing equipment. However, there were notable price increases in other recreational items and equipment, gardens and pets (1.8%) and newspapers, books and stationery (0.5%).

**Table 1: Quarterly Consumer Price Index and Inflation Rates**
**JUNE 2008 = 100**

Year	Quarter Ending	INDEX	Percentage change in CPI:	
			3 months ago	1 year ago
2008	March	99.2	3.5	3.4
	June	100.0	0.8	3.8
	September	101.8	1.8	5.3
	December	99.5	-2.3	3.9
2009	March	98.8	-0.8	-0.4
	June	98.8	0.1	-1.2
	September	98.7	-0.2	-3.1
	December	98.2	-0.5	-1.3
2010	March	99.1	0.9	0.4
	June	99.5	0.4	0.7
	September	98.4	-1.1	-0.3
	December	98.5	0.1	0.3
2011	March	99.2	0.7	0.03
	June	100.5	1.4	1.0
	September	100.8	0.3	2.4
	December	100.4	-0.4	1.9
2012	March	100.9	0.6	1.8
	June	101.4	0.5	0.9
	September	100.8	-0.6	0.02
	December	102.5	1.6	2.1
2013	March	102.3	-0.1	1.4
	June	104.2	1.8	2.7
	September	103.7	-0.5	2.8
	December	104.2	0.5	1.7
2014	March	104.7	0.5	2.3
	June	104.9	0.2	0.7
	September	105.2	0.2	1.5
	December	104.8	-0.3	0.6
2015	March	104.3	-0.5	-0.4
	June	101.2	-3.0	-3.6
	<b>September</b>	<b>102.1</b>	<b>1.0</b>	<b>-2.9</b>

**Table 2**  
**CAYMAN ISLANDS CONSUMER PRICE INDEX**  
 ANNUAL AVERAGES 1995 TO 2014  
 (June 2008 = 100)

YEAR	INDEX	Percentage change from a year ago
1995	66.7	
1996	68.4	2.5
1997	70.3	2.7
1998	72.4	3.0
1999	77.3	6.9
2000	79.4	2.7
2001	80.3	1.1
2002	82.3	2.5
2003	82.8	0.5
2004	86.5	4.5
2005	92.8	7.3
2006	93.5	0.8
2007	96.2	2.9
2008	100.1	4.1
2009	98.6	-1.5
2010	98.9	0.3
2011	100.2	1.3
2012	101.4	1.2
2013	103.6	2.2
2014	104.9	1.3

**TABLE 3: CONSUMER PRICE INDICES AND INFLATION BY DIVISIONS AND GROUPS - THIRD QUARTER 2015**

Major Group	Weight	Index			Percentage Change	
		Sept-15	Jun- 15	Sept-14	3 months Ago	1 year ago
<b>All Divisions - All items</b>	<b>1,000.0</b>	<b>102.1</b>	<b>101.2</b>	<b>105.2</b>	<b>1.0</b>	<b>-2.9</b>
<b>01 Food &amp; Non Alcoholic Beverage</b>	<b>79.6</b>	<b>126.3</b>	<b>125.3</b>	<b>124.4</b>	<b>0.8</b>	<b>1.5</b>
Bread & cereals	9.9	123.8	123.3	122.6	0.5	1.1
Meat & meat products	10.4	138.2	136.5	130.2	1.3	6.1
Fish & seafood	4.2	127.2	125.5	128.1	1.3	-0.7
Milk, cheese & egg	8.3	123.8	119.5	124.7	3.6	-0.7
Oils & fats	2.0	109.3	110.4	108.4	-1.0	0.8
Fruits	6.7	135.1	138.4	137.8	-2.3	-1.9
Vegetables	8.6	139.9	134.5	129.9	4.0	7.7
Sugars, jam, honey, chocolate & confectionery	5.5	127.2	127.8	124.9	-0.5	1.8
Food products n.e.c.	5.6	121.0	120.6	119.4	0.3	1.3
Coffee, tea & cocoa	1.6	119.5	115.3	113.1	3.6	5.6
Mineral water, soft drinks, fruit & vegetable juices	16.9	115.2	116.0	117.2	-0.7	-1.7
<b>02 Alcohol and Tobacco</b>	<b>6.5</b>	<b>132.6</b>	<b>132.4</b>	<b>131.9</b>	<b>0.1</b>	<b>0.5</b>
Alcohol	5.6	115.1	114.9	114.3	0.1	0.7
Tobacco	0.9	246.0	246.0	246.0	0.0	0.0
<b>03 Clothing and Footwear</b>	<b>34.3</b>	<b>116.6</b>	<b>115.0</b>	<b>112.3</b>	<b>1.4</b>	<b>3.9</b>
Clothing	29.5	115.1	113.3	110.7	1.5	3.9
Footwear	4.8	126.4	125.1	122.0	1.0	3.6
<b>04 Housing and Utilities</b>	<b>394.4</b>	<b>81.7</b>	<b>80.6</b>	<b>89.6</b>	<b>1.4</b>	<b>-8.8</b>
Actual rentals for housing	78.7	75.8	75.8	80.9	0.0	-6.3
Imputed rentals for owner-occupied housing	223.4	73.8	73.8	80.6	0.0	-8.4
Maintenance and repair of dwelling	28.5	122.8	124.2	121.8	-1.1	0.8
Water supply and miscellaneous services	16.4	103.9	102.7	116.3	1.2	-10.7
Electricity, gas and other fuels	47.3	96.0	86.4	117.5	11.1	-18.4
<b>05 Household Equipment</b>	<b>56.4</b>	<b>118.3</b>	<b>118.3</b>	<b>118.6</b>	<b>0.0</b>	<b>-0.2</b>
Furniture and furnishings	5.7	108.8	108.4	106.7	0.4	2.0
Household textiles	1.1	132.9	132.1	134.2	0.6	-1.0
Household appliances	2.8	103.6	103.0	103.2	0.6	0.4
Glassware, tableware and household utensils	2.8	124.2	126.3	134.4	-1.7	-7.6
Tools and equipment for house and garden	1.5	95.5	95.1	93.1	0.4	2.7
Goods and services for routine household maintenance	42.4	120.6	120.6	120.7	0.0	-0.1
<b>06 Health</b>	<b>24.2</b>	<b>102.1</b>	<b>102.0</b>	<b>101.9</b>	<b>0.1</b>	<b>0.3</b>
Medical products, appliances and equipment	5.0	110.5	110.1	108.3	0.3	2.0
Outpatient services	17.9	98.8	98.8	99.2	0.1	-0.3
Hospital services	1.4	114.6	114.6	113.1	0.0	1.4
<b>07 Transport</b>	<b>96.1</b>	<b>112.1</b>	<b>109.3</b>	<b>118.3</b>	<b>2.5</b>	<b>-5.3</b>
Purchase of vehicles	6.1	118.5	118.7	120.4	-0.1	-1.6
Operations of personal transport equipment	57.4	111.0	110.0	121.5	0.8	-8.7
Transport services	32.6	112.9	106.4	112.3	6.1	0.5
<b>08 Communication</b>	<b>69.7</b>	<b>109.7</b>	<b>109.6</b>	<b>106.2</b>	<b>0.1</b>	<b>3.3</b>
Postal services	0.5	96.6	96.6	96.4	-0.1	0.2
Telephone & telefax equipment	0.3	107.6	107.6	107.6	0.0	0.0
Telephone & telefax services	68.9	109.8	109.7	106.3	0.1	3.3
<b>09 Recreation and Culture</b>	<b>40.5</b>	<b>100.1</b>	<b>100.3</b>	<b>98.4</b>	<b>-0.2</b>	<b>1.7</b>
Audio-visual, photographic and information processing equipment	4.2	71.2	78.6	72.6	-9.3	-1.9
Other major durables for recreation and culture	3.4	91.6	91.6	91.3	0.0	0.4
Other recreational items and equipment, gardens and pets	10.5	115.5	113.5	112.0	1.8	3.1
Recreational & cultural services	17.6	98.6	98.5	98.3	0.0	0.2
Newspapers, books and stationery	4.8	103.5	103.0	96.6	0.5	7.2
<b>10 Education</b>	<b>27.9</b>	<b>119.1</b>	<b>118.1</b>	<b>113.0</b>	<b>0.8</b>	<b>5.4</b>
Pre-primary and primary education	16.1	121.8	120.4	112.5	1.1	8.2
Secondary education	2.41	126.69	124.89	118.36	1.4	7.0
Tertiary education	9.4	112.5	112.5	112.5	0.0	0.0
<b>11 Restaurants and Hotels</b>	<b>40.2</b>	<b>117.4</b>	<b>117.3</b>	<b>116.9</b>	<b>0.1</b>	<b>0.4</b>
Catering Services	33.8	123.1	122.9	122.0	0.1	0.8
Accommodation Services	6.4	87.2	87.4	89.4	-0.2	-2.5
<b>12 Miscellaneous Goods and Services</b>	<b>130.2</b>	<b>117.9</b>	<b>117.1</b>	<b>118.8</b>	<b>0.7</b>	<b>-0.8</b>
Personal care	26.5	118.2	117.9	112.9	0.2	4.7
Personal effects n.e.c.	7.7	133.7	120.3	127.7	11.1	4.7
Social protection	8.4	109.5	109.5	104.8	0.0	4.5
Insurance	74.8	118.1	118.1	123.0	0.0	-3.9
Financial services n.e.c.	0.5	91.8	91.8	91.8	0.0	0.0
Other services n.e.c.	12.2	113.0	113.0	111.7	0.0	1.2



**Table 4: Consumer Price Index, Averages by Major Groups**  
(JUNE 2008 = 100)

PERIOD / DIVISION	Food & Non-alcoholic beverages	Alcoholic Beverages & Tobacco	Clothing & Footwear	Housing and Utilities	Household Equipment	Health	Transport	Communication	Recreation & Culture	Education	Restaurants & Hotels	Miscellaneous Goods & Services	ALL ITEMS
WEIGHT	79.6	6.5	34.3	394.4	56.4	24.2	96.1	69.7	40.5	27.9	40.2	130.2	1000
2009													
MARCH	105.9	104.4	102.4	96.2	101.8	95.6	89.3	98.4	98.3	101.8	108.8	104.1	98.8
JUNE	106.9	104.6	102.4	95.2	101.6	96.3	90.8	101.6	98.5	102.0	107.1	104.3	98.8
SEPTEMBER	105.6	104.1	100.3	94.9	100.9	97.2	92.7	99.5	97.6	103.5	109.7	104.5	98.7
DECEMBER	105.1	104.7	99.9	93.8	100.5	97.1	93.2	102.7	96.7	103.5	109.2	103.1	98.2
ANNUAL AVERAGE 2009	105.9	104.5	101.2	95.0	101.2	96.6	91.5	100.5	97.7	102.7	108.7	104.0	98.6
2010													
MARCH	107.5	114.5	99.8	93.5	100.8	97.4	96.1	102.8	98.1	103.5	116.4	104.1	99.1
JUNE	110.6	115.3	102.1	93.1	102.9	97.7	97.4	102.7	97.5	103.5	113.6	105.0	99.5
SEPTEMBER	109.3	115.6	101.1	89.1	101.8	97.8	100.5	102.9	100.1	105.4	113.4	106.4	98.4
DECEMBER	108.6	115.1	101.1	89.2	101.7	97.8	101.8	102.1	99.7	105.4	113.3	107.1	98.5
ANNUAL AVERAGE 2010	109.0	115.1	101.0	91.2	101.8	97.7	98.9	102.6	98.9	104.5	114.2	105.6	98.9
2011													
MARCH	110.4	115.0	100.2	89.2	102.5	97.9	105.0	102.1	99.5	105.4	117.5	107.2	99.2
JUNE	112.4	115.7	100.9	90.4	102.2	99.1	110.3	105.4	99.4	105.4	115.5	107.4	100.5
SEPTEMBER	113.6	115.5	101.0	91.2	103.5	98.9	111.5	104.1	99.2	105.4	115.7	105.6	100.8
DECEMBER	114.7	115.7	102.2	90.1	103.3	98.9	110.7	104.4	99.3	105.4	112.8	106.0	100.4
ANNUAL AVERAGE 2011	112.8	115.5	101.1	90.3	102.8	98.7	109.4	104.0	99.3	105.4	115.4	106.5	100.2
2012													
MARCH	116.3	115.6	103.8	90.0	102.9	100.5	111.8	104.4	98.1	105.4	117.8	107.3	100.9
JUNE	116.7	116.2	106.4	90.5	103.1	100.4	114.0	103.6	98.6	105.4	114.5	107.7	101.4
SEPTEMBER	118.3	116.2	110.0	89.7	104.6	101.8	110.4	103.6	96.9	106.4	108.0	108.3	100.8
DECEMBER	119.0	131.6	110.6	91.5	104.3	101.9	114.2	104.0	96.4	106.4	110.1	110.6	102.5
ANNUAL AVERAGE 2012	117.6	119.9	107.7	90.4	103.7	101.2	112.6	103.9	97.5	105.9	112.6	108.5	101.4
2013													
MARCH	120.1	131.8	112.5	89.4	110.2	102.1	113.1	104.0	96.6	106.4	116.9	110.8	102.3
JUNE	121.0	131.6	111.2	90.2	109.8	102.1	114.4	104.9	96.6	110.6	109.7	122.3	104.2
SEPTEMBER	121.9	131.5	114.5	88.4	110.0	102.4	115.3	104.8	96.8	113.0	116.1	119.2	103.7
DECEMBER	122.7	131.6	113.3	88.8	110.4	101.8	117.8	104.7	96.1	113.0	121.9	118.5	104.2
ANNUAL AVERAGE 2013	121.4	131.6	112.9	89.2	110.1	102.1	115.2	104.6	96.5	110.8	116.2	117.7	103.6
2014													
MARCH	123.1	131.7	111.3	87.9	117.6	102.0	117.3	104.7	98.4	113.0	130.5	119.3	104.7
JUNE	123.8	131.4	112.0	88.9	118.0	101.8	118.4	106.4	98.5	113.0	118.9	119.0	104.9
SEPTEMBER	124.4	131.9	112.3	89.6	118.6	101.9	118.3	106.2	98.4	113.0	116.9	118.8	105.2
DECEMBER	125.6	131.9	112.6	88.9	118.5	101.8	117.6	105.1	99.4	116.0	119.2	116.9	104.8
ANNUAL AVERAGE 2014	124.2	131.7	112.0	88.8	118.2	101.9	117.9	105.6	98.7	113.8	121.4	118.5	104.9
2015													
MARCH	126.6	132.0	113.2	86.9	118.6	102.3	117.3	107.3	100.2	116.0	119.8	116.5	104.3
JUNE	125.3	132.4	115.0	80.6	118.3	102.0	109.3	109.6	100.3	118.1	117.3	117.1	101.2
SEPTEMBER	126.3	132.6	116.6	81.7	118.3	102.1	112.1	109.7	100.1	119.1	117.4	117.9	102.1
% CHANGE PREV YEAR	1.5	0.5	3.9	-8.8	-0.2	0.3	-5.3	3.3	1.7	5.4	0.4	-0.8	-2.9
% CHANGE PREV QTR	0.8	0.1	1.4	1.4	0.0	0.1	2.5	0.1	-0.2	0.8	0.1	0.7	1.0



**TABLE 5: AVERAGE PRICES OF SELECTED ITEMS**  
**Quarter Ending September 2015**

Item	Quantity	Average Prices (CIS)		
		Sept-14	June-15	Sept-15
Loaf - Harddough	2 lb	3.94	3.90	3.90
Long Grain Rice	5 lb	2.46	2.46	2.46
Cornflakes (original)	24 oz	5.16	5.22	5.22
Stew Beef	per lb	4.84	5.26	5.01
Bacon	12 oz	6.66	5.99	5.66
Snapper Fillets (frozen)	per lb	9.47	10.80	10.70
Canned Tuna in water	6 oz	1.80	1.79	1.79
Eggs (Grade A Large)	1 doz	3.12	3.42	4.46
Margarine -Shedds Spread	45 oz	5.79	5.86	5.79
Fresh Milk (McArthur - Regular Vitamin D)	1 gal	6.72	6.61	6.51
Evaporated milk (Nestle Carnation)	14 oz	1.69	1.52	1.52
Vegetable Oil	24 oz	4.66	4.46	4.52
Plantain	per lb	1.01	1.12	1.18
Potatoes - Irish	per lb	1.09	0.99	0.99
Lettuce - Iceburg	each	2.30	2.49	2.78
Sweet Potatoes	per lb	2.67	2.71	3.44
Tomatoes - Slicing	per lb	2.68	2.80	2.88
Bananas - Ripe	per lb	0.93	0.91	0.91
Apple - Golden Delicious	per lb	2.47	2.28	2.21
Grapes - Red Seedless	per lb	4.02	4.47	3.95
Tea (Lipton Decaffeinated)	48 bags	4.02	4.32	4.56
Coffee - Instant -Classic Roast - Bottle	8 oz	6.86	6.86	6.82
Soda	12 oz	0.78	0.78	0.78
Sugar - Light Brown (Bag)	2 lb	2.09	3.24	3.30
Corned Beef - regular	340 g	3.97	4.15	4.15
Iodized Salt	26 oz	0.92	1.09	0.99
Petrol - Regular Full Service	per gal	5.64	4.49	4.71
Petrol - Premium Full Service	per gal	5.77	4.62	4.77
Diesel - Full Service	per gal	5.71	4.55	4.60

## NOTES ON THE INDEX COMPILATION

### 1. Data collection

This report uses the 2008 CPI basket based on the results of the 2007 Survey of Living Conditions/Household Budget Survey (HBS) as updated in June 2008. The goods and services in the basket are classified into twelve (12) divisions using the United Nations' Classification of Individual Consumption According to Purpose (COICOP). In all, there are 1,393 items (7th-digit COICOP level) included in the basket collected from 147 providers/outlets in Grand Cayman, classified as follows:

#### Number of Items in the 2008 CPI Basket

##### Division

1	Food and non-alcoholic beverages	47
2	Alcoholic beverages and tobacco	5
3	Clothing and footwear	13
4	Housing, utilities and fuels	6
5	Furnishings, household equipment and routine household maintenance.	19
6	Health	4
7	Transport	7
8	Communication	4
9	Recreation and Culture	6
1	Education	1
1	Restaurants and hotels	13
1	Miscellaneous goods and services	9

**Total**

**1,393**

ESO also adopted new collection periods and price averaging methodologies in accordance with updated international standards and as advised by the Caribbean Technical Assistance Centre (CARTAC). Beginning in the fourth quarter of 2009, price data for all items are collected every second month of the quarter (whereas they were previously collected every third month). Prices of selected items that are vulnerable to monthly changes such as vegetables and fruits, fish and meat, and gas are now also collected on a monthly basis. Prices across outlets are averaged using the geometric mean formula to reduce the impact of extreme or outlier prices (please see below).

### 2. CPI formula

The CPI is computed using Lowe's formula. The Lowe indices is one of the widest and popular class of price indices which is obtained by defining the index as the percentage change, between the periods

compared, in the total cost of purchasing a given set of quantities, generally described as a “basket”.<sup>1</sup> The Lowe index, P<sub>Lo</sub>, is defined as follows<sup>2</sup>:

$$P_{Lo} = \frac{\sum_{i=1}^n p_i^t q_i}{\sum_{i=1}^n p_i^0 q_i}$$

Where n = number of products in the basket with prices p<sub>i</sub> and quantities q<sub>i</sub>

0 = base period

t = later period being compared

### Geometric mean

The price p = [p<sub>1</sub>, p<sub>2</sub>, . . . , p<sub>n</sub>] for each item from different outlets is the average of prices of the outlets using geometric mean or the formula:

$$p = \left( \prod_{i=1}^n p_i \right)^{1/n} = \sqrt[n]{p_1, p_2, \dots, p_n}$$

**Inflation:** this refers to the percentage change in the Consumer Price Index from one period to another. Typically, this period would be a year or a quarter.

**Annual Inflation Rate:** the percentage change of the CPI in the quarter under review over the CPI of the same quarter a year ago. This is also known as **year-on-year inflation rate**.

**Quarterly Inflation Rate:** the percentage change of the CPI in the quarter under review over the immediate previous quarter. This is also known as **quarter-on-quarter inflation rate**.

<sup>1</sup> ILO (2004, p. 2). Consumer price index manual

<sup>2</sup> Ibid, p.3