# GUAM CPI

# CONSUMER PRICE INDEX REPORT

2nd Quarter 2025 VOL. MMXXV, No. 2 V2.



THE BUREAU OF STATISTICS AND PLANS BUSINESS AND ECONOMIC STATISTICS



# **DEFINITION OF THE CONSUMER PRICE INDEX**



The Consumer Price Index (CPI) is a measure of the average change in prices over time of goods and services purchased by households, both families and single person living alone. The Guam 2025 CPI is based on the concept of a representative "market basket", a sample of all goods and services that consumers purchase, as determined by the 2024 Household Income and Expenditure Survey (HIES) funded by the U.S. Dept. of Interior to the U.S. Census Bureau, and a similar in design with the U.S. CPI.

The CPI is measured from a total of **170 items** from **8 major groups, and indices** are computed at two different levels of aggregation. More than **1,080 price quotations** are collected during the middle month of each quarter either by phone or on-site survey by qualified price enumerators. There are approximately 186 business outlets included in the construction of the CPI, ranging from grocery, department and hardware stores to a variety of service establishments. This report provides average price changes for all items, groups, subgroups and special indexes from consecutive quarters to one year earlier. An annual average and annualized inflation rate are also reported. Indexes are subject to revision.

### **HOW TO INTERPRET INDEX CHANGES**

A price change can be expressed as a percentage change between two periods, as a difference in index points between a given period and a base period assigned an index of **100.0**. Thus, an index of **110.7** for a given period means the price level has increase by **10.7%** from the base period of 100.0. It does not mean a **10.7%** change from the immediately preceding period as shown in example I.:

### Example I.:

Period:	1st. Qtr.	2nd Qtr.	3rd Qtr
	(base period)		
Index:	100	108.4	110.7
		change2.1% c	•

Any period, such as the 2nd Quarter in the next example, can be converted to a base period by dividing all indices individually by the periods' index, then multiplying the results by 100.

### Example II:

Period:	1st. Qtr.	2nd Qtr.	3rd Qtr
	(base period)		
Index:	100	108.4	110.7
Index Period:		2nd Qtr.	3rd Qtr
		(base period)	
Index:		100.0 <b>2</b> % ch	ange

# **DEFINITION OF THE CONSUMER PRICE INDEX**



In example II, we dealt with a change in price index from a given quarter to the quarter immediately succeeding it -a 2.1% change from the second to the third quarter. However, many economic statistics, such as personal income, government revenues, and expenditure, are reported on an annual basis. The equivalent annual rate is used to determine what the index would be if a price change during a three-month period continues at the same rate for four quarters, a twelve-month period. The annual rate is often used to achieve uniformity in statistical expression. Thus, a quarterly change of 1.0% is equivalent to an annual rate of 4.1%. If prices were to increase 1.0% each quarter for four quarters, the annual increase would be 4.1%. Derivation of this figure is shown in the Example III.

### Example III:

$$P_n = P_o(1+i)^n$$
 Where  $P_n =$  equivalent annual rate 
$$P_o = base index (100.0)$$
 
$$i = current rate (1.0\%)$$
 
$$n = number of periods (4)$$
 
$$Thus, 104.1 = 100.0 (1 + .01)^4$$

However, the equivalent annual rate should not be interpreted as a projection or price forecast. It is only a standard form for showing price changes that have occurred. The CPI only reports what has happened, while annual projections must be based on factors which determine future price

# **GUAM CONSUMER PRICE INDEX**



### 1. Base Period: 4th Quarter 2024 = 100.0

### 2. Group Weights

		2007-2024	2025-		
Category	Old Group Weights	No. Of Items Allocated - Old	New Group Weights	No. Of Items Allocated - New	
Food	15.59	69	23.42	69	
Housing	32.11	42	38.38	43	
Apparel & Upkeep	7.61	23	6.38	23	
Transportation	8.60	4	12.89	4	
Medical Care	20.42	5	6.32	5	
Recreation	2.97	5	3.05	5	
Education & Communication	2.77	6	7.28	7	
Other Goods & Services	9.92	14	2.29	14	
Total	100.00	168	100.00	170	

### 3. Formula:

The index is computed by using base-weighted arithmetic average of prices. The formula used is either in the weighted aggregated form,

$$I_{oi} = \frac{\sum p i q o}{\sum p o q o} x 100$$

or its equivalent, the weighted average of price relatives

$$\Sigma p \circ q \circ \left(\frac{P_i}{P_o}\right)$$

$$I_{oi} = \frac{100}{\sum p \circ q \circ q} 100$$

Where,

 $p_1$  = the price of the commodity in the reporting period.

po = the price of the commodity in the base period, and

 $q_o$  = the quantity of commodity sold in the base period.

### 4. Weights:

Based on the 2024 Household Income and Expenditure Survey (HIES)



# TABLE A CONSUMER PRICE INDEX (4th Qtr 2024 = 100.00)

GROUP	CY 2024 QUARTERS					CY 2025 QUARTERS			
	New				Rebase				
	Weight	1st	2nd	3rd	4th	1st	2nd	3rd	4th
ALL ITEMS					100.00	101.00	101.35		
FOOD	23.42				100.00	191.22	193.07		
HOUSING	38.38				100.00	147.92	148.02		
APPAREL & UPKEEP	6.38				100.00	91.55	92.87		
TRANSPORTATION	12.89				100.00	134.63	135.38		
MEDICAL CARE	6.32				100.00	273.75	275.70		
RECREATION	3.05				100.00	145.40	146.71		
EDUCATION & COMMUNICATION	7.28				100.00	124.48	125.44		
OTHER GOODS & SERVICES	2.29				100.00	142.73	145.12		
SPECIAL INDEXES									
ALL ITEMS LESS FOOD	76.58				100.00	101.08	101.65		
ENERGY 1	25.98				100.00	100.44	100.64		
ALL ITEMS LESS FOOD AND ENERGY	50.60				100.00	101.41	102.17		
COMMODITIES LESS FOOD	27.80				100.00	100.62	100.86		
SERVICES	49.39				100.00	100.09	100.85		
Purchase Power of Consumer									
Dollar (4th Qtr. 2007 = 100.00)					0.58	0.57	0.57		
Dollar (4th Qtr. 2024 = 100.00)					1.00	0.99	0.99		

# TABLE A1 CONSUMER PRICE INDEX (4th Qtr 2024 = 100.00) Rebased CPI

GROUP	Relative	Index for 4th. Qtr.	Index for 1st. Qtr.	Index for 2nd. Qtr.	% Chan 2nd. Qtr. fron	2025
	Importance	CY 2024	CY 2025	CY 2025	Previous Quarter	Q4 Base Period
All Items	100.00	100.00	101.00	101.35	0.35%	1.35%
All Items Less Food	76.58	100.00	101.08	101.65	0.57%	1.65%
Energy	25.98	100.00	100.44	100.64	0.20%	0.64%
All Items Less Food and Energy	50.60	100.00	101.41	102.17	0.76%	2.17%
Commodities Less Food	27.80	100.00	100.62	100.86	0.24%	0.86%
Services	49.39	100.00	100.09	100.85	0.76%	0.85%



# TABLE B CONSUMER PRICE INDEX (4th Qtr 2024 = 100.00) Rebased CPI

	710	Index	Index	Index	% Chang	e to	
		for	for	for	2nd. Qtr. 2025		
GROUP	Relative	4th. Qtr.	1st. Qtr.	2nd. Qtr.	from		
	Importance	CY	CY	CY	Previous	Q4 Base	
		2024	2025	2025	Quarter	Period	
FOOD	23.42	100.00	100.70	101.26	0.56%	2.25%	
Cereals and Cereal Products	1.03	100.00	100.00	101.97	1.97%	2.87%	
Bakery Products	1.18	100.00	100.00	101.11	1.11%	2.45%	
Beef	0.86	100.00	102.24	103.92	1.64%	4.71%	
Pork	1.04	100.00	100.10	100.10	0.00%	0.09%	
Other Meats	0.96	100.00	100.00	100.00	0.00%	0.00%	
Poultry	0.79	100.00	100.63	101.32	0.69%	2.66%	
Fish and Seafood	1.12	100.00	100.98	100.98	0.00%	1.07%	
Eggs	0.24	100.00	94.60	92.31	-2.42%	8.62%	
Dairy Products	1.07	100.00	100.59	100.13	-0.46%	-0.16%	
Fresh Fruits	0.93	100.00	100.03	99.77	-0.26%	0.01%	
Fresh Vegetables	1.02	100.00	100.00	100.02	0.02%	0.03%	
Juice and Non-Alcoholic Drinks	2.29	100.00	100.00	101.70	1.70%	2.30%	
Sugar and Sweets	0.62	100.00	100.00	100.00	0.00%	0.00%	
Fats and Oils	0.28	100.00	100.00	100.00	0.00%	0.00%	
Other Foods	2.19	100.00	100.78	101.36	0.58%	0.99%	
Meals Away from Home	5.83	100.00	101.99	102.68	0.67%	10.62%	
Alcoholic Beverages	1.96	100.00	100.00	100.00	0.00%	-0.02%	
EDUCATION & COMMUNICATION	7.28	100.00	100.14	1 100.39	0.24%	0.39%	
Educational Books & Supplies	0.06						
Tuition & Other School Fees	1.07						
Mobil Voice and Data Services	3.99						
Computers	0.59						
Internet Services	1.57						
		400.00	400.04			0.000	
OTHER GOODS & SERVICES	2.29						
Tobacco Products	0.21						
Personal Care Products	0.33						
Personal Care Services	0.33						
Miscellaneous Personal Services	0.18						
Funeral Expenses	0.25						
Financial Services	0.62						
Other Special Occasions	0.98	100.00	100.00	100.00	0.00%	0.00%	



TABLE B (continued) Rebased CPI

GROUP	Relative	Index for 4th. Qtr.	Index for 1st. Qtr.	Index for 2nd. Qtr.	% Chan 2nd. Qtr. fron	2025
	Importance	CY 2024	CY 2025	CY 2025	Previous Quarter	Q4 Base Period
TRANSPORTATION	12.89	100.00	101.12	101.13	0.01%	1.13%
New Cars	6.30	100.00	102.59	104.83	2.18%	4.83%
Motor Fuel	3.56	100.00	97.41	95.42	-2.04%	-4.58%
Car Maintenance	1.42	100.00	100.00	100.00	0.00%	0.00%
Car Insurance	1.61	100.00	102.59	102.59	0.00%	2.59%

	R	ebased CPI				
GROUP	Index for Relative 4th. Qtr.		Index for 1st. Qtr.	Index for 2nd. Qtr.	% Change to 2nd. Qtr. 2025 from	
	Importance	CY 2024	CY 2025	CY 2025	Previous Quarter	Q4 Base Period
MEDICAL CARE	6.32	100.00	100.00	103.50	3.50%	3.50%
Prescription Drugs	0.67	100.00	100.00	100.00	0.00%	0.00%
Physician Services	2.07	100.00	100.00	100.00	0.00%	0.00%
Other Medical Practitioner Costs	0.47	100.00	100.00	100.00	0.00%	0.00%
Hospital and Related Services	17.22	100.00	100.00	105.90	5.90%	5.90%

	R	Rebased CPI				
GROUP	Relative	Index for Relative 4th. Qtr.		Index for 2nd. Qtr.	% Change to 2nd. Qtr. 2025 from	
	Importance	CY 2024	CY 2025	CY 2025	Previous Quarter	Q4 Base Period
RECREATION	2.96	100.00	99.88	100.54	0.66%	0.54%
Audio and Video	2.63	100.00	99.58	100.12	0.54%	0.12%
Pet and Pet Products	0.19	100.00	101.54	101.54	0.00%	1.54%
Sporting Goods	0.14	100.00	100.00	101.80	1.80%	1.80%



TABLE B (continued) Rebased CPI

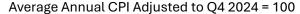
		Index	Index	Index	% Chan		
GROUP	Relative	for 4th. Qtr.	for 1st. Qtr.	for 2nd. Qtr.	2nd. Qtr. 2025 from		
	Importance	CY	CY	CY	Previous	Q4 Base	
		2024	2025	2025	Quarter	Period	
HOUSING	38.38	100.00	100.17	100.65	0.48%	0.65%	
Rent and Lodging	17.15	100.00	100.00	100.82	0.82%	0.82%	
Home Fuel	2.13	100.00	100.38	100.36	-0.02%	0.36%	
Electricity	7.66	100.00	100.00	100.00	0.00%	0.00%	
Water, Sewer and Trash	3.15	100.00	100.17	100.17	0.00%	0.17%	
Building Materials	0.08	100.00	103.40	103.40	0.00%	3.40%	
Furniture and Bedding	0.83	100.00	100.58	100.58	0.00%	0.58%	
Appliances	2.18	100.00	100.00	101.55	1.55%	1.55%	
Tools, Hardware, Outdoor Equip.	1.20	100.00	100.88	100.88	0.01%	0.88%	
Housekeeping Supplies	2.46	100.00	101.00	101.07	0.08%	1.07%	
Housekeeping Operations	1.54	100.00	100.58	101.18	0.60%	1.18%	
APPAREL & UPKEEP	6.38	100.00	100.05	101.48	1.43%	1.48%	
Men's Apparel	1.70	100.00	100.00	100.12	0.12%	0.12%	
Boy's Apparel	0.35	100.00	100.00	100.40	0.40%	0.40%	
Women's Apparel	1.61	100.00	100.00	101.35	1.35%	1.35%	
Girl's Apparel	0.66	100.00	100.00	103.26	3.26%	3.26%	
Footwear	1.42	100.00	100.00	100.00	0.00%	0.00%	
Infant's & Toddler's Apparel	0.13	100.00	102.48	103.92	1.41%	3.92%	
Jewelry	0.51	100.00	100.00	108.33	8.33%	8.33%	

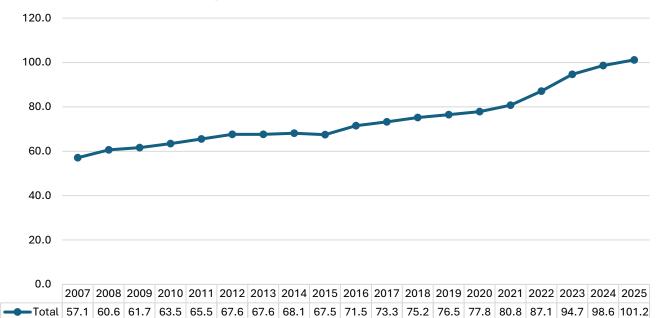
TABLE C
CONSUMER PRICE INDEX (CPI)
(4th Qtr. 2024 = 100.00)

Rebased Indexes<sup>2</sup>, Average Annual Percent Change

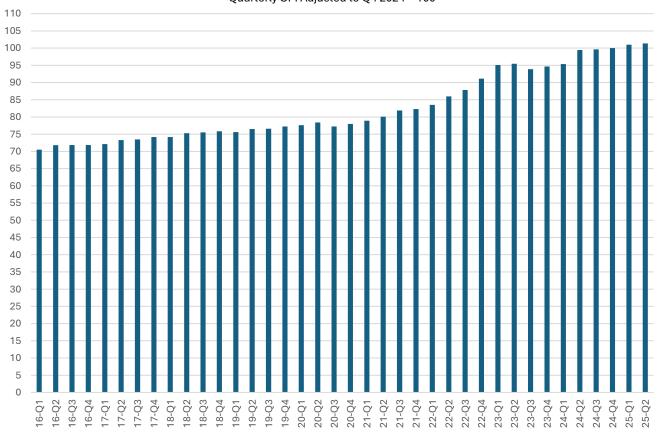
Calendar Year	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Annual Average	Annual Average % Change
2007	56.50	57.01	56.72	58.12	57.09	6.77%
2008	58.76	60.50	61.61	61.67	60.63	6.21%
2009	61.37	61.26	62.13	61.90	61.67	1.70%
2010	62.65	63.29	63.58	64.28	63.45	2.90%
2011	63.82	65.62	65.85	66.84	65.53	3.27%
2012	67.42	67.65	67.77	67.59	67.61	3.17%
2013	67.88	68.00	67.13	67.30	67.58	-0.04%
2014	67.65	68.06	68.12	68.52	68.09	0.75%
2015	67.42	67.71	67.65	67.07	67.46	-0.92%
2016	70.50	71.78	71.84	71.84	71.49	5.97%
2017	72.13	73.29	73.46	74.16	73.26	2.48%
2018	74.16	75.15	75.50	75.85	75.16	2.60%
2019	75.62	76.49	76.59	77.27	76.49	1.76%
2020	77.61	78.40	77.25	78.00	77.82	1.73%
2021	78.93	80.09	81.89	82.12	80.76	3.78%
2022	83.52	85.97	87.83	91.14	87.11	7.87%
2023	95.07	95.47	93.65	94.50	94.67	8.68%
2024	95.32	99.43	99.62	100.00	98.59	4.14%
2025	100.99	101.35			101.17	2.62%

CPI between Q1 07- Q3 24 have been adjusted to Q4 24 = 100.





### Quarterly CPI Adjusted to Q4 2024 = 100





# **LOLA E. LEON GUERRERO**

Director

# **MATTHEW C. SANTOS**

**Deputy Director** 

P.O. Box 2950 Hagatna, Guam 96932

Tel: (671) 475-9661/9670, (671) 300-9683

Fax: (671) 477-1812

Website: <a href="http://www.bsp.guam.gov">http://www.bsp.guam.gov</a>

For Questions or Comments Contact Matthew Santos

Email: matthew.santos@bsp.guam.gov