SAIPAN - Department of Commerce/Statistics Division

CNMI Government
Department of Commerce/Statistic Division
Saipan, MP 96950

Phone: (670) 664-3023 Fax: (670) 664-3067 Email: csd@pticom.com

GENERAL INFORMATION

Saipan Consumer Price Index (CPI) is designed to measure changes in prices of commodities and services normally purchased by the consuming community. Like the U.S. CPI, it is based on the concept of representative "market basket," a sample of goods and services that the consumer purchases. The CPI was first developed during the early part of 1977 and was rebased in 2003 & 2008. The selection of weight distribution was based on household expenditure patterns derived from a household income and expenditure survey conducted by Central Statistics Division in conjuncton with the U.S. Census Bureau.

A total of 1176 items are divided into 9 major groups and sub-groups, and indices are computed at different levels of aggregations.

CPI GROUPS AND INDEX

| Food | 648 | 101.6 |
|-----------------------|------|-------|
| Alcoholic Beverages | 18 | 100.0 |
| Housing & Utilities | 176 | 101.3 |
| Apparel | 106 | 100.8 |
| Transportation | 17 | 103.4 |
| Medical Care | 20 | 100.0 |
| Recreation | 74 | 102.1 |
| Educ. & Communication | 25 | 99.7 |
| Other Goods & Svs. | 92 | 100.0 |
| All Items Index | 1176 | 101.5 |

Calculating the Consumer Price Index

As with most CPI's around the world, the CSD will continue to use the Laspeyres method to calculate the CPI. This is the most widely-used and internationally-accepted method of calculating price changes for a CPI. The Laspeyres formula is shown below:

$$I_{n} = \left(\sum_{i=1}^{n} p_{i}q_{0} / \sum_{i=1}^{n} p_{0}q_{0}\right) \quad x \quad 100$$

Close to 1,200 price quotations are collected during the middle month of each quarter for computing the CPI. The total number of business and government outlets included in the collection and construction of the CPI is approximately 280, ranging from major retail outlets and grocery stores to a variety of services, establishments such as LPG gas distributors, restaurants and government utility offices.

Interpreting index changes,

In compiling the CPI, price movements for the different component items are combined using WEIGHTS, which represent the relative importance of each of the components to total expenditure of the population.

In determining price relatives, average prices of the selected market basket are matched to previous prices to get actual movements. These price relatives are then multiplied by the previous expenditure weights to derive new expenditure weights. These weights are then combined into composite expenditure groups and sub-groups.

Table 1

Consumer Price Indexes and Percent Changes for the 2nd Quarter 2009

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

4th Quarter 2008 = 100

| Groups | 2nd Qtr 2009 | 1st Qtr 2009 | 2nd Qtr 2008 | To 2nd Qtr09 fm 1st Qtr09 | To 2nd Qtr09 fm 2nd Qtr 08 |
|-----------------------------|-----------------|-----------------|-----------------|------------------------------|-------------------------------|
| | | | | | |
| All Items | 101.5 | 100.2 | 100.3 | 1.3 | 1.2 |
| Food | 101.6 | 100.6 | 94.6 | 1.0 | 6.9 |
| Alcoholic Beverages | 106.5 | 106.5 | 102.8 | 0.0 | 3.5 |
| Housing and Utilities | 101.3 | 99.8 | 105.8 | 1.5 | -4.5 |
| Apparel | 100.8 | 99.8 | 99.9 | 1.0 | 0.9 |
| Transportation | 103.4 | 100.5 | 98.8 | 2.9 | 4.5 |
| Medical Care | 102.8 | 102.8 | 99.8 | 0.0 | 2.9 |
| Recreation | 102.1 | 100.2 | 101.7 | 1.9 | 0.4 |
| Education and Communication | 99.7 | 96.4 | 99.2 | 3.5 | 0.5 |
| Other Goods and Services | 101.7 | 101.7 | 92.9 | 0.0 | 8.7 |

Source: Department of Commerce, Central Statistics Division

Table 2 HISTORICAL CPIS FOR SELECTED GROUPS COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS 1st Quarter 2003 / 4th Quarter 2008 = 100

| Year & | | Alcoholic | Housing | | | Medical | | Education | Other Goods | All |
|---------|-------|-----------|-----------|---------|----------------|---------|------------|---------------|-------------|-------|
| Quarter | Food | Beverages | Utilities | Apparel | Transportation | Care | Recreation | Communication | & Services | Items |
| Wgts | 19.02 | 1.72 | 27.73 | 2.24 | 33.52 | 2.36 | 2.44 | 5.68 | 5.30 | 100.0 |
| 2000.1 | 93.7 | | 67.5 | 107.0 | 92.8 | 78.0 | | | | 82.4 |
| 2000.2 | 92.6 | | 67.8 | 105.9 | 94.9 | 85.6 | | | | 84.5 |
| 2000.3 | 94.4 | | 68.6 | 106.4 | 97.0 | 86.1 | | | | 85.7 |
| 2000.4 | 91.7 | | 66.0 | 106.5 | 97.1 | 85.7 | | | | 84.1 |
| 2001.1 | 88.2 | | 66.4 | 106.5 | 96.8 | 85.3 | | | | 83.2 |
| 2001.2 | 90.4 | | 66.3 | 106.0 | 96.3 | 85.3 | | | | 83.5 |
| 2001.3 | 89.9 | | 68.2 | 106.0 | 95.9 | 85.2 | | | | 83.6 |
| 2001.4 | 90.7 | | 67.0 | 106.9 | 94.5 | 85.0 | | | | 83.6 |
| 2002.1 | 89.2 | | 67.3 | 105.7 | 95.2 | 90.6 | | | | 84.8 |
| 2002.2 | 87.3 | | 64.4 | 106.4 | 96.6 | 90.3 | | | | 83.7 |
| 2002.3 | 86.1 | | 66.3 | 106.2 | 96.6 | 90.4 | | | | 83.7 |
| 2002.4 | 83.8 | | 65.7 | 100.1 | 96.9 | 90.4 | | | | 82.5 |
| 2003.1 | 84.2 | 95.9 | 65.5 | 98.6 | 95.7 | 92.5 | 101.9 | 98.7 | 92.9 | 83.0 |
| 2003.2 | 84.4 | 96.1 | 65.5 | 98.8 | 95.4 | 92.5 | 101.2 | 98.5 | 92.9 | 82.9 |
| 2003.3 | 84.7 | 95.9 | 65.0 | 99.6 | 95.4 | 92.5 | 101.0 | 98.9 | 92.9 | 82.8 |
| 2003.4 | 84.6 | 95.8 | 64.1 | 99.1 | 96.2 | 92.5 | 98.2 | 98.3 | 92.9 | 82.6 |
| 2004.1 | 86.8 | 95.8 | 64.4 | 99.5 | 96.2 | 92.5 | 97.5 | 98.2 | 92.9 | 83.2 |
| 2004.2 | 87.6 | 95.6 | 64.0 | 98.4 | 96.6 | 92.5 | 103.5 | 98.3 | 100.6 | 83.7 |
| 2004.3 | 88.6 | 96.0 | 63.8 | 94.2 | 95.7 | 92.5 | 100.8 | 97.4 | 100.6 | 83.4 |
| 2004.4 | 90.4 | 95.8 | 64.2 | 91.3 | 95.9 | 92.5 | 100.5 | 99.6 | 100.6 | 84.0 |
| 2005.1 | 90.0 | 95.9 | 64.3 | 96.6 | 96.3 | 92.5 | 100.7 | 96.7 | 100.6 | 84.1 |
| 2005.2 | 85.5 | 103.3 | 66.3 | 96.9 | 92.4 | 93.2 | 101.9 | 100.2 | 91.4 | 89.9 |
| 2005.3 | 84.3 | 96.3 | 65.7 | 98.7 | 92.2 | 92.8 | 102.0 | 98.3 | 94.2 | 83.0 |
| 2005.4 | 84.7 | 95.5 | 65.6 | 100.8 | 95.2 | 92.5 | 101.7 | 99.5 | 93.9 | 83.0 |
| 2006.1 | 85.3 | 96.8 | 65.7 | 100.1 | 109.1 | 92.8 | 108.6 | 101.7 | 93.6 | 83.0 |
| 2006.2 | 84.4 | 96.1 | 65.5 | 99.6 | 96.2 | 92.5 | 101.9 | 99.4 | 92.9 | 83.0 |
| 2006.3 | 93.7 | 97.1 | 65.5 | 137.8 | 96.2 | 92.5 | 101.9 | 100.9 | 92.9 | 83.0 |
| 2006.4 | 94.0 | 98.1 | 65.5 | 138.6 | 96.0 | 92.5 | 101.9 | 97.8 | 93.3 | 83.0 |
| 2007.1 | 88.3 | 99.6 | 92.3 | 100.4 | 95.7 | 92.5 | 102.2 | 99.5 | 92.9 | 93.3 |
| 2007.2 | 89.4 | 99.6 | 94.6 | 100.7 | 95.7 | 93.5 | 102.3 | 99.3 | 92.9 | 94.4 |
| Year & | | Alcoholic | Housing | | | Medical | | Education | Other Goods | All |
| Quarter | Food | Beverages | Utilities | Apparel | Transportation | Care | Recreation | Communication | & Services | Items |
| Wgts | 19.02 | 1.72 | 27.73 | 2.24 | 33.52 | 2.36 | 2.44 | 5.68 | 5.30 | 100.0 |
| 2007.3 | 89.6 | 99.6 | 94.7 | 100.9 | 95.7 | 93.5 | 102.8 | 99.3 | 92.9 | 94.4 |
| 2007.4 | 90.4 | 100.0 | 94.9 | 100.9 | 95.7 | 93.5 | 103.0 | 99.3 | 92.9 | 94.7 |
| 2008.1 | 94.3 | 102.0 | 92.3 | 101.0 | 95.7 | 99.8 | 104.4 | 99.2 | 92.9 | 94.7 |
| 2008.2 | 94.6 | 102.8 | 105.8 | 99.9 | 98.8 | 99.8 | 101.7 | 99.2 | 92.9 | 100.3 |
| 2008.3 | 97.7 | 99.2 | 104.3 | 99.4 | 92.3 | 96.7 | 100.0 | 99.5 | 100.0 | 99.8 |
| 2008.4 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2009.1 | 100.6 | 106.5 | 99.8 | 99.8 | 100.5 | 102.8 | 100.2 | 96.4 | 101.7 | 100.2 |
| 2009.2 | 101.6 | 106.5 | 101.3 | 100.8 | 103.4 | 102.8 | 102.1 | 99.7 | 101.7 | 101.5 |

¹ The previous Consumer Price Index had only 5 major groups rather than the 9 that are in the revised CPI. Nevertheless, these historical CPIs will provide users with some indication of historical price movement of the CPI.

Source: Central Statistics Division, Department of Commerce

Table 3

CONSUMER PRICE INDEX FOR 9 SELECTED GROUPS
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
1st Quarter 2003 / 4th Quarter 2008 = 100

| Year & | All | | Alcoholic | Housing | | | Medical | | Education and | Other Goods |
|---------|-------|-------|-----------|-----------|---------|----------------|---------|------------|---------------|-------------|
| Quarter | Items | Food | Beverages | Utilities | Apparel | Transportation | Care | Recreation | Communication | & Services |
| | | | | | | | | | | |
| 2003.1 | 83.0 | 84.2 | 95.9 | 65.5 | 98.6 | 95.7 | 92.5 | 101.9 | 98.7 | 92.9 |
| 2003.2 | 82.9 | 84.4 | 96.1 | 65.5 | 98.8 | 95.4 | 92.5 | 101.2 | 98.5 | 92.9 |
| 2003.3 | 82.8 | 84.7 | 95.9 | 65.0 | 99.6 | 95.4 | 92.5 | 101.0 | 98.9 | 92.9 |
| 2003.4 | 82.6 | 84.6 | 95.8 | 64.1 | 99.1 | 96.2 | 92.5 | 98.2 | 98.3 | 92.9 |
| 2004.1 | 83.2 | 86.8 | 95.8 | 64.4 | 99.5 | 96.2 | 92.5 | 97.5 | 98.2 | 92.9 |
| 2004.2 | 83.7 | 87.6 | 95.6 | 64.0 | 98.4 | 96.6 | 92.5 | 103.5 | 98.3 | 100.6 |
| 2004.3 | 83.4 | 88.6 | 96.0 | 63.8 | 94.2 | 95.7 | 92.5 | 100.8 | 97.4 | 100.6 |
| 2004.4 | 84.0 | 90.4 | 95.8 | 64.2 | 91.3 | 95.9 | 92.5 | 100.5 | 99.6 | 100.6 |
| 2005.1 | 84.1 | 90.0 | 95.9 | 64.3 | 96.6 | 96.3 | 92.5 | 100.7 | 96.7 | 100.6 |
| 2005.2 | 89.9 | 85.5 | 103.3 | 66.3 | 96.9 | 92.4 | 93.2 | 101.9 | 100.2 | 91.4 |
| 2005.3 | 83.0 | 84.3 | 96.3 | 65.7 | 98.7 | 92.2 | 92.8 | 102.0 | 98.3 | 94.2 |
| 2005.4 | 83.0 | 84.7 | 95.5 | 65.6 | 100.8 | 95.2 | 92.5 | 101.7 | 99.5 | 93.9 |
| 2006.1 | 83.0 | 85.3 | 96.8 | 65.7 | 100.1 | 109.1 | 92.8 | 108.6 | 101.7 | 93.6 |
| 2006.2 | 83.0 | 84.4 | 96.1 | 65.5 | 99.6 | 96.2 | 92.5 | 101.9 | 99.4 | 92.9 |
| 2006.3 | 83.0 | 93.7 | 97.1 | 65.5 | 137.8 | 96.2 | 92.5 | 101.9 | 100.9 | 92.9 |
| 2006.4 | 83.0 | 94.0 | 98.1 | 65.5 | 138.6 | 96.0 | 92.5 | 101.9 | 97.8 | 93.3 |
| 2007.1 | 93.3 | 88.3 | 99.6 | 92.3 | 100.4 | 95.7 | 92.5 | 102.2 | 99.5 | 92.9 |
| 2007.2 | 94.4 | 89.4 | 99.6 | 94.6 | 100.7 | 95.7 | 93.5 | 102.3 | 99.3 | 92.9 |
| 2007.3 | 94.4 | 89.6 | 99.6 | 94.7 | 100.9 | 95.7 | 93.5 | 102.8 | 99.3 | 92.9 |
| 2007.4 | 94.7 | 90.4 | 100.0 | 94.9 | 100.9 | 95.7 | 93.5 | 103.0 | 99.3 | 92.9 |
| 2008.1 | 94.7 | 94.3 | 102.0 | 92.3 | 101.0 | 95.7 | 99.8 | 104.4 | 99.2 | 92.9 |
| 2008.2 | 100.3 | 94.6 | 102.8 | 105.8 | 99.9 | 98.8 | 99.8 | 101.7 | 99.2 | 92.9 |
| 2008.3 | 99.8 | 97.7 | 99.2 | 104.3 | 99.4 | 92.3 | 96.7 | 100.0 | 99.5 | 100.0 |
| 2008.4 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2009.1 | 100.2 | 100.6 | 106.5 | 99.8 | 99.8 | 100.5 | 102.8 | 100.2 | 96.4 | 101.7 |
| 2009.2 | 101.5 | 101.6 | 106.5 | 101.3 | 100.8 | 103.4 | 102.8 | 102.1 | 99.7 | 101.7 |

Source: Central Statistics Division, Department of Commerce