Prepared by the North Dakota Legislative Council
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CONSUMER PRICE INDEX

NORTH DAKOTA-RELATED INDICES

The consumer price index (CPI) is calculated by the United States Department of Labor Bureau of Labor Statistics. The index is the measure of the average change over time in prices paid by consumers for goods and services in 87 urban areas in the United States. The consumer price index for all urban consumers (CPI-U) is the most widely used index. The Bureau of Labor Statistics also generates more specific consumer price indexes, including the consumer price index for urban wage earners and clerical workers (CPI-W). The CPI-U represents about 87 percent of the total United States population. It is based on the expenditures of residents of urban or metropolitan areas, including professionals, wage earners, clerical workers, and self-employed, unemployed, and retired persons. The CPI-U does not include the spending of persons living in rural nonmetropolitan areas or farm families. According to representatives of the North Dakota State Data Center in Fargo, there is no organization that calculates inflation or consumer price increases specific for North Dakota. The Bureau of Labor Statistics, as part of the CPI, does publish an index for nonmetropolitan urban areas with populations of less than 50,000 for the Midwest Region which includes North Dakota. This index would be the nearest representative index for North Dakota. However, in discussions with representatives of the Bureau of Labor Statistics, none of the data used to calculate any of the CPI indexes is collected from North Dakota.

Consumer Price Index - History

Calculation of the CPI began during World War I. Initially, the Bureau of Labor Statistics published separate indexes for 32 cities. The national index began in 1921.

Consumer Price Index - Methodology

The Bureau of Labor Statistics currently uses a "market basket" process for calculating the CPI. Goods and services included in the "market basket" were developed from detailed expenditure information provided by surveys of families and individuals on what they actually bought in 2001 and 2002. The bureau used the survey information to determine the relative importance of the more than 200 categories included in the consumer price index structure. The index represents all goods and services purchased for consumption and classifies these items into more than 200 categories arranged into 8 major groups. The major groups and examples of categories in each are:

- Food and beverages - Breakfast cereal, milk, coffee, chicken, wine, service meals, and snacks.
- Housing - Rent of primary residence, owners' equivalent rent, fuel oil, and bedroom furniture.
- Apparel - Men's shirts and sweaters, women's dresses, and jewelry.
- Transportation - New vehicles, airline fares, gasoline, and motor vehicle insurance.
- Medical care - Prescription drugs and medical supplies, physicians' services, eyeglasses and eye care, and hospital services.
- Recreation - Televisions, pets and pet products, sports equipment, and admissions.
- Education and communication - College tuition, postage, telephone services, computer software, and accessories.
- Other goods and services - Tobacco and smoking products, haircuts and other personal services, and funeral expenses.

Also included within these major groups are various government charges or user fees, such as water and sewer charges, vehicle registration fees, and vehicle tolls. In addition, the CPI includes taxes, such as sales and excise taxes, directly associated with the prices of goods and services.

Within each of the more than 200 item categories, using statistical procedures, the bureau has chosen samples of several hundred specific items within selected business establishments frequented by consumers to represent the thousands of varieties available in the marketplace. For example, in a given grocery store, the bureau may choose a bag of Golden Delicious apples weighing 4.4 pounds to represent the apples category.

Each month, Bureau of Labor Statistics' economic assistants visit or call thousands of retail stores, service establishments, rental units, and professional offices all over the United States to obtain information on the prices of the items and services included in the CPI. The information gathered by these economic assistants is forwarded to the Bureau of Labor Statistics' national office where commodities specialists review the data for accuracy and consistency. Once approved, the information is input into the bureau's formula for calculating the consumer price index.

Consumer Price Index - Published Data

The bureau publishes:

- National data.
- Information specific to the four census regions--Northeast, Midwest, South, and West.
- Urban areas classified by population size all metropolitan areas of 1.5 million or more,

metropolitan areas smaller than 1.5 million, and nonmetropolitan areas.

- Data for 27 local metropolitan areas, the closest of which to North Dakota is Minneapolis-St. Paul, Minnesota.

The four census regions consist of:

- Northeast - Connecticut, Maine, Massachusetts, New Hampshire, New York, New Jersey, Pennsylvania, Rhode Island, and Vermont
- Midwest - Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.
- South - Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia.
- West - Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Appendix A is a listing of the 2006 CPI by detailed expenditure categories.

Appendix B is the July 2007 CPI for selected regions by population size.

Study of the Consumer Price Index

The United States Senate Finance Committee in 1995 appointed a commission to study the consumer price index's ability to estimate inflation. The commission determined that the index overestimates cost-of-living by between .8 and 1.6 percentage points. The study identified that much of the overestimation was from slow adjustments in the index to new products and to product quality changes. Because the index categories and weighting factors are adjusted only once every 10 years, the index does not reflect new technologies being used by consumers quickly, such as cell phone use. Also, the index does not adjust for consumer substitutions due to increasing prices of one commodity versus another.

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