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## ❖ A Look at Long Term Changes in Consumer Prices

We are all familiar with rising prices, especially gasoline prices in recent years. The U.S. consumer price index (CPI) is an index number designed to compare relative price changes over time for typical consumers. This article provides some background on the index, discusses some long term trends in components of the index, and concludes by pointing out the impact of these trends on current sales tax policy.

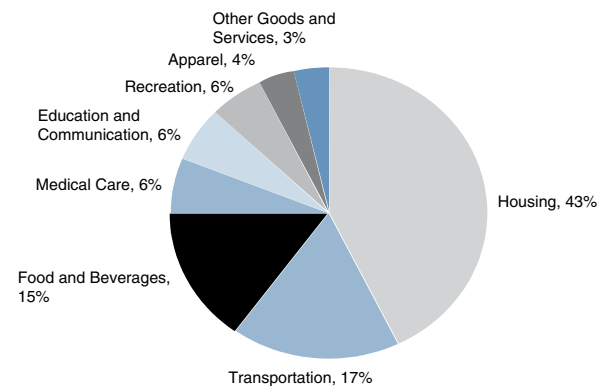
### Market Basket Represents a Typical Consumer

To calculate the index, the Bureau of Labor Statistics (BLS) first compiles a list of goods and services, called a market basket, purchased by a typical consumer. The current market basket is based on actual consumption patterns in 2001 and 2002 for about 30,000 households and covers more than 200 categories of goods and services. Major expenditure categories include such items as food, clothing, shelter, transportation, and medical care. These groups are then assigned proportional weights, according to typical quantities purchased, to compile a weighted average index. For example, the BLS currently assigns a weight of approximately 15 percent to food and beverages, reflecting a typical consumer that spends 15 percent of all expenditures on these items. The index is a weighted average of the prices of goods and services in this market basket.

### Housing the Largest Category

As shown in the pie chart, average households spend far more on housing than any other spending category in the market basket, resulting in a large proportion of influence in the overall CPI. About 43 percent of spending by consumers is for housing, which includes owner-occupied homes, rented homes, rented vacation homes, college dormitories, hotels, motels, and bed and breakfasts. Housing is broadly defined to include fuel and utilities, household furnishings, household operations (such as lawn care), taxes, and insurance.

Major U.S. Consumer Spending Categories



### Transportation and Food

Transportation includes acquisition and financing costs of new and used vehicles, fuel, maintenance, insurance, airline travel, and bus travel. Food and beverages include meals consumed at home and away from home as well as alcoholic beverages. The top three major groups combined (housing, transportation, and food and beverages) account for about 75 percent of spending by typical consumers.

## Consumer Prices Double Since Early 1980s

The CPI, which is issued monthly, compares current prices to a three-year average base period of 1982 through 1984. From this base period through July of 2007, overall consumer prices have approximately doubled, increasing an average of about 3 percent per year over the past 24 years.

## Changes in Components of Index Vary

Much of the focus of the media is to report monthly or yearly changes in the overall index. However, components of the index, viewed individually prior to calculating the weighted overall average, reveal some interesting trends. The accompanying chart compares July 2007 index levels of major expenditure categories with the overall index value for all items of the CPI.<sup>1</sup> Each of these expenditure categories has an index value of 1.00 for the 1982-1984 base period.

### Medical Care Fastest Growing

As shown in the chart, medical care prices have risen the fastest of any other major component of the index, with a value of 3.52. Typical medical care prices are more than three and a half times what they were in 1982-1984. The next fastest-rising group is the catch-all category, "other goods and services." This group includes such diverse goods and services as cigarettes, hair cuts, dry cleaning, and financial planning.

### Transportation Growing Slower Than Average

The group of goods with prices increasing the slowest was apparel. With an index level of 1.14, apparel prices in July 2007

were just 14 percent higher than those of the early 1980's base period. Despite the increasing gasoline prices of recent years, transportation spending was the next slowest-growing category, with an index level of 1.88. Motor fuel accounts for 4.3 percent of all spending by the typical consumer, about a quarter of the total spending on all transportation. Motor fuel prices for consumers have increased about 2.5 times since the 1982-1984 base period, faster than overall consumer prices, but much less than medical care and "other goods and services."

### Prices of Taxable Goods Rose Less Than Average

These long-term trends in consumer prices also have important implications for sales tax policy. The BLS does not calculate an index for taxable and nontaxable goods and services since exempt goods and services vary for states that have general sales taxes. However, the BLS calculates indices for special groups of categories, and some of these approximate the California sales tax base. The BLS special index for commodities excluding food represents a large part of the California retail sales tax base. This index stood at 1.50 in mid-2007, well below the overall level of 2.08. In contrast, the special index for services was at 2.48. One general implication of these trends is that sales taxes California consumers are paying probably have risen more slowly than they would have if more services were included in the tax base.

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<sup>1</sup>Two major groups ("recreation" and "education and communication") are not included in the chart because the BLS redefined items in these major groups several years ago and does not have data for these categories before 1993.

## ❖ U.S. Economic Developments

### Slowing Growth in Recent Quarters

Turning to recent trends, U.S. economic growth has slowed during the first three quarters of 2007. Real gross domestic product (GDP) rose at an average rate of 2.0 percent over the first three quarters of 2007. This is well below the ten-year average growth of 3.1 percent per year. According to many economists, real GDP growth is expected to remain below its long-term average for the rest of 2007 before improving in 2008. The most recent survey of about 50 professional forecasters polled by the Federal Reserve Bank of Philadelphia calls for real GDP to increase 2.1 percent in 2007 and 2.5 percent in 2008.

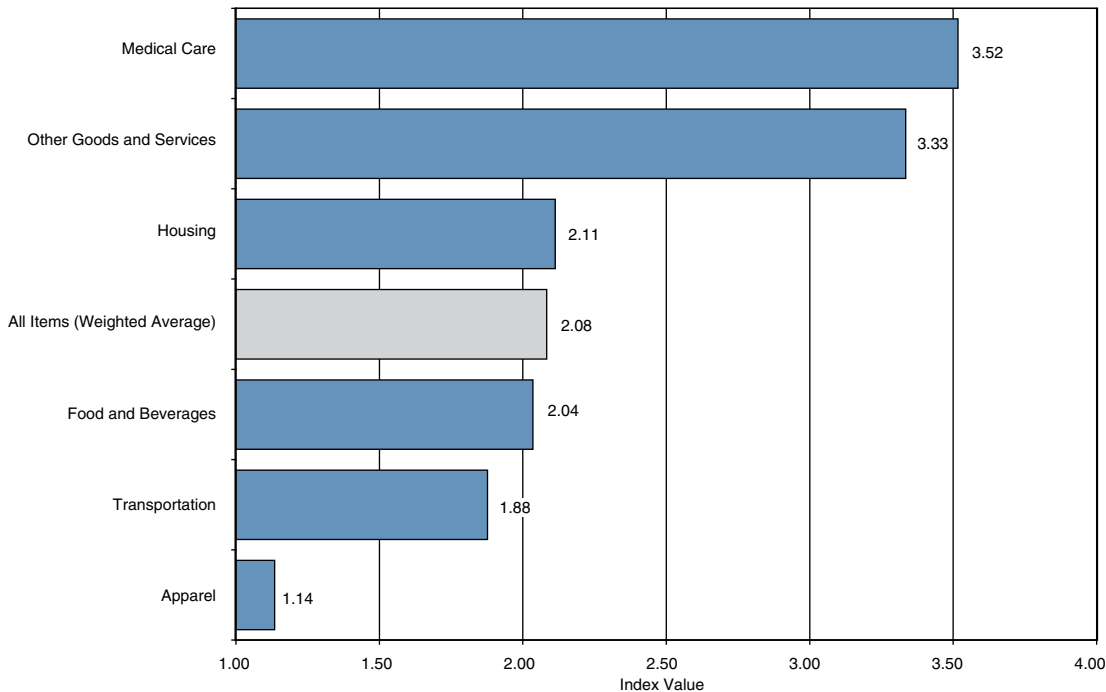
## ❖ California Economic Developments

### GDP Now Available for Metropolitan Areas

For the first time ever the U.S. Bureau of Economic Analysis (BEA) has released estimates of GDP for metropolitan areas. The GDP estimates (which are still “experimental”) are annual, and include data by major industry for 2001 through 2005 for metropolitan statistical areas (MSAs) of at least 50,000 people. The GDP figures were released in September, and the BEA plans an update next fall.

The data includes 25 metropolitan areas in California. Real GDP growth ranged from a low of 1.3 percent for the Yuba City MSA to a high of 7.1 percent growth for the Napa MSA. To put these figures in perspective, California real GDP increased 3.8 percent in 2005. Four very large MSAs accounted for

July 2007 Consumer Price Indices for Major Expenditure Groups  
(1982-1984 = 1.00)



74 percent of total 2005 real GDP in the 25 California MSAs in 2005. Growth of these four was strongest in San Jose (5.1 percent) and San Francisco (3.7 percent). The other two (Los Angeles and San Diego) each had real GDP growth of 3.3 percent.

### U.S. and California Growth Slow in 2007

State and metropolitan real GDP data are not yet available for 2007. However, other measures of economic activity have been released. One of the most comprehensive indicators of economic well being available for states on a timely basis is nonagricultural payroll employment. Based on this measure, growth in both the U.S. and California economies have slowed in 2007 compared to 2006. California payroll employment in the first three quarters of 2007 increased 1.4 percent compared to the first three quarters of 2006, equal to U.S. payroll employment growth of 1.4 percent. In 2006, California payroll employment rose 1.9 percent, while U.S. payrolls increased 1.8 percent.

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Taxpayers' Rights Advocate: 888-324-2798

To contact your Board Member, see [www.boe.ca.gov/submenus/boardmembers.htm](http://www.boe.ca.gov/submenus/boardmembers.htm)

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## Online Resources

**California Department of Finance**  
[www.dof.ca.gov](http://www.dof.ca.gov)

**California Employment Development Department (EDD), Labor Market Conditions in California**  
[www.labormarketinfo.edd.ca.gov](http://www.labormarketinfo.edd.ca.gov)

**Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters**  
[www.phil.frb.org/econ/spf/index.html](http://www.phil.frb.org/econ/spf/index.html)

**National Association for Business Economists**  
[www.nabe.com](http://www.nabe.com)

**U.S. Bureau of Economic Analysis**  
[www.bea.gov](http://www.bea.gov)

**U.S. Bureau of Labor Statistics, Consumer Price Indexes**  
[www.bls.gov/cpi/](http://www.bls.gov/cpi/)