

# News

U.S. Department of Labor  
Bureau of Labor Statistics  
PO Box 193766  
San Francisco, CA 94119-3766



## CONTACT:

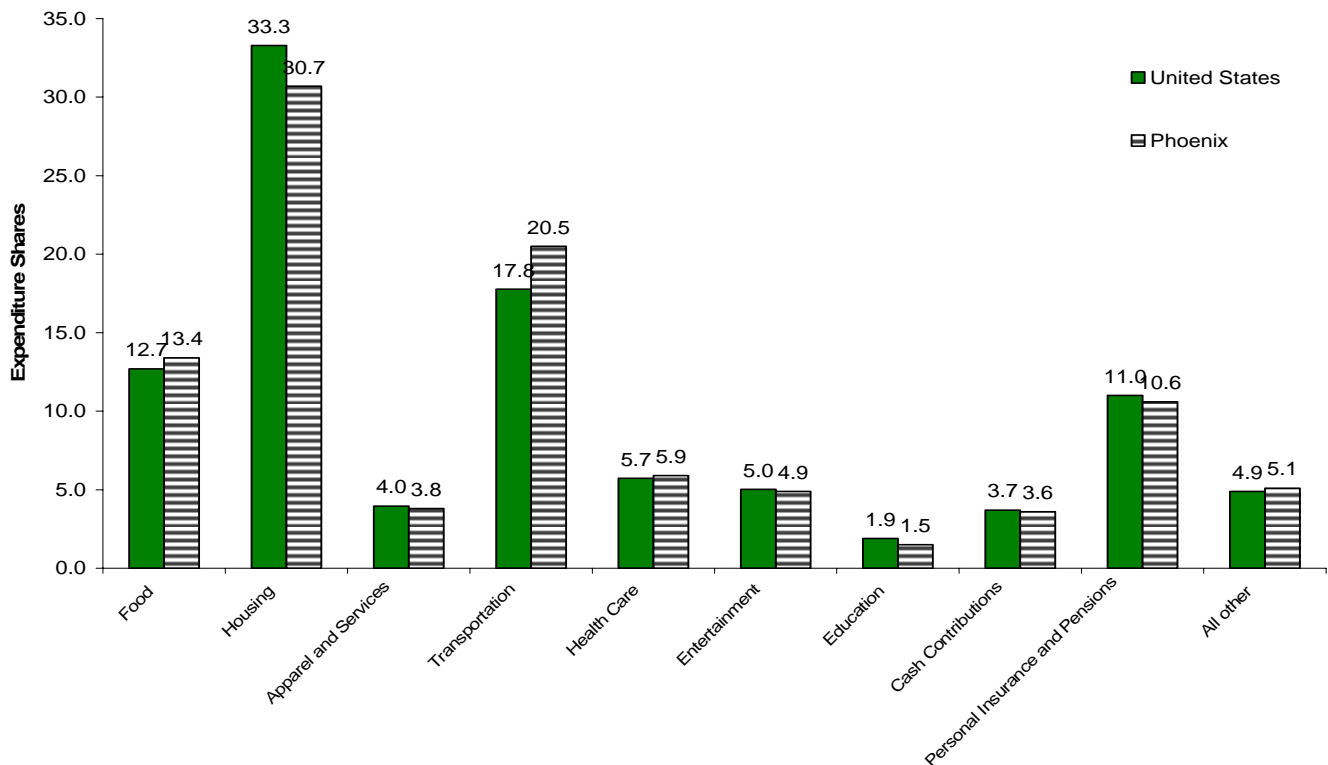
Richard J. Holden (415) 625-2270  
Tony Nunes (415) 625-2282  
Public Information Line (415) 625-2270  
Internet address: <http://www.bls.gov/ro9/ro9news.htm>

**BLS 08-58**  
**FOR RELEASE:**  
**Wednesday, August 13, 2008**

## CONSUMER SPENDING PATTERNS IN THE PHOENIX METROPOLITAN AREA, 2005-2006

Consumer units<sup>1</sup> in the Phoenix-Mesa-Scottsdale, Arizona metropolitan area spent an average of \$53,570 per year in 2005-2006, according to the latest figures from the Bureau of Labor Statistics' Consumer Expenditure Survey. Regional Commissioner Richard Holden noted that this figure was 13.0 percent higher than the \$47,421 average expenditure level for a typical household in the United States. Not only did Phoenix residents spend more than the U.S. average, but residents allocated their dollars in ways that were unique to the Phoenix metropolitan area. When compared to the rest of the country, Phoenix households showed statistically significant differences<sup>2</sup> in the proportions of their total budget spent on several major expenditure categories, including a smaller-than-average share for housing. (See chart A.)

**Chart A. Percent distribution of average annual expenditures for selected categories in the United States and Phoenix metropolitan area, 2005-2006**



<sup>1</sup> See the Technical Note for the definition of a consumer unit. The terms consumer unit and household are used interchangeably throughout the text for convenience.

<sup>2</sup> Statistical significance tests were introduced for metropolitan area expenditure shares beginning with 2004-2005 data. See the Technical Note for further discussion of Consumer Expenditure significance testing.

This report contains annual data averaged over a two-year period, 2005 and 2006. The data are from the Consumer Expenditure Survey (CE), which is collected on an ongoing basis by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS). The CE Survey is the only national survey that provides both complete data on household expenditures and the demographic characteristics of those households. CE data are available for the nation, the 4 geographic regions of the country, and 18 metropolitan areas. Survey data cannot be used to make cost of living comparisons between areas. Expenditures vary among areas not only because of economic factors such as the prices of goods and services and family income, but also because of differences such as the age of the population, climate, consumer tastes, family size, etc. However, expenditure shares, or the percentage of a consumer unit's budget spent on a particular category, can be used to compare spending patterns across areas. The survey provides average expenditures for consumer units. An individual consumer unit may spend more or less than the average, depending on its particular characteristics.

Housing, the largest expenditure category, accounted for \$16,469 or 30.7 percent of a Phoenix area household's total budget. This share was significantly lower than the 33.3-percent national average. (See table 1.) In comparison, expenditure shares for housing in Los Angeles (36.3 percent) and San Francisco (39.8 percent) were higher than the national average; in Seattle (34.5 percent), the share was not significantly different from that for the nation. These areas were selected for comparison to Phoenix because they are large metropolitan areas in the same geographic region of the country. Overall, the expenditure share for housing in 11 of the 18 metropolitan published areas was significantly above that for the nation, in 2 others, it was significantly below, with the remaining areas close to the U.S. average. (See chart 1.)

The majority of housing expenditures in Phoenix went toward shelter, 56.3 percent, which includes mortgage interest, property taxes, repairs, and rent, among other items, compared to 58.6 percent spent nationally. Utilities, fuels, and public services expenses accounted for 20.3 percent of total housing expenditures in Phoenix; nationally, they made up 20.9 percent. The rate of homeownership in Phoenix, 68 percent, was close to the national average of 67 percent. Among the three areas chosen for comparison, the homeownership rate was on a par with that for the nation in Seattle (67 percent), but lower in San Francisco (58 percent) and Los Angeles (57 percent). (See table A.)

**Table A. Percent distribution of housing expenditures, United States and selected metropolitan areas, 2005-2006**

Category	United States	Phoenix	Los Angeles	San Francisco	Seattle
Total Housing	100	100	100	100	100
Shelter	58.6	56.3	67.5	71.4	64.1
Utilities, fuels and public services	20.9	20.3	14.1	11.1	15.9
Household operation	5.6	5.5	5.8	6	3.8
Housekeeping supplies	4	4.8	3	2.4	3.2
Household furnishings and equipment	11	13.1	9.5	9.2	12.9

Note: Columns may not add to 100 due to rounding

Transportation expenses accounted for 20.5 percent of the total budget and were the second largest expenditure category in the Phoenix area; this share was not significantly different than the national average of 17.8 percent. Of the three other areas in the West chosen for comparison, both Los Angeles (18.3 percent) and Seattle (18.2 percent) had shares that were not significantly different from the national average while San Francisco (15.2 percent) had a smaller-than-average share for transportation costs. Interestingly, among the 18 metropolitan areas nationwide for which data were published, only 1 area—name area—had an above-average transportation share and 6 had below-average shares. (See chart 2.)

Of the \$10,964 annual expenditures for transportation in Phoenix, 95.5 percent was spent buying and maintaining private vehicles compared to the national share of 94.4 percent. The remaining 4.5 percent of a Phoenix household's transportation budget was spent on public transit, which includes fares for taxis, buses, trains, and planes; this was less than the national average of 5.6 percent. (See table B for expenditure shares and table 2 for detailed expenditure levels.) In comparison, expenditure shares for public transportation in the other three areas in the West ranged

from 6.8 percent in Los Angeles to 10.1 percent in San Francisco. Interestingly, the average number of vehicles per household in Phoenix, Los Angeles, and San Francisco was the same as the national average, 1.9; only in Seattle, 2.4, was it higher.

**Table B. Percent distribution of transportation expenditures, United States and selected metropolitan areas, 2005-2006**

Category	United States	Phoenix	Los Angeles	San Francisco	Seattle
Transportation	100	100	100	100	100
Vehicle Purchases (net outlays)	41.3	49.5	41.5	34.6	40.9
Gasoline and motor oil	25.2	20.2	23.9	22.9	21.9
Other vehicle expenses	27.9	25.8	27.8	32.4	29.1
Public transportation	5.6	4.5	6.8	10.1	8

Note: Columns may not add to 100 due to rounding

Households in Phoenix spent an average of \$7,187 on food, or 13.4 percent of their budget, similar to the 12.7-percent share recorded nationally. (See table 2.) Among other metropolitan areas in the West, households in Los Angeles (12.4 percent), San Francisco (12.0 percent), and Seattle (12.4 percent) all had food expenditure shares that were not measurably different than the U.S. average.

Consumer units in Phoenix spent \$3,822, or 53.2 percent, of their food dollars on food prepared at home and the remaining \$3,365, or 46.8 percent, on food prepared away from home, which includes restaurants, carry-out, board at school meals, and catered affairs. In comparison, the average U.S. household spent 55.7 percent of its food budget on food prepared at home and 44.3 percent on food prepared away from home.

Payments for personal insurance and pensions averaged \$5,683 and accounted for 10.6 percent of the local household budget, close to the 11.0-percent share allocated nationally. Like Phoenix-area households, households in Los Angeles (10.9 percent) and Seattle (11.1 percent) also spent shares comparable to the rest of the nation for personal insurance and pensions. In contrast, San Francisco residents spent 11.7 percent of their budget on personal insurance and premiums, significantly greater than the national average.

Out-of-pocket health care expenses—which include health insurance premiums, medical services, drugs (prescription and nonprescription), and medical care supplies—averaged \$3,134 in Phoenix, 5.9 percent of a typical household’s total expenditures; this was not significantly different from the 5.7 percent allocated nationwide. Additionally, Seattle residents also spent close to the national average on health care at 5.2 percent. In contrast, consumer units in Los Angeles and San Francisco spent a significantly smaller share of their budget on health care at 4.0 and 4.3 percent, respectively.

Phoenix area households spent \$2,615 or 4.9 percent of their budgets on entertainment; this was close to the national average of 5.0 percent. Los Angeles and San Francisco households also spent close to the U.S. average, 4.7 and 4.6 percent, respectively, while those in Seattle allocated a significantly higher share, 5.8 percent, for entertainment expenditures.

Spending on apparel and services accounted for an average of 3.8 percent of total expenditures in Phoenix, comparable to the 4.0-percent share nationally. Similarly, residents of Los Angeles and San Francisco had expenditure shares close to the national average, while households in Seattle (2.8 percent) had shares below that for the nation for apparel and services.

Cash contributions accounted for \$1,910 or 3.6 percent of a typical consumer unit’s spending in Phoenix; this was comparable to the national average of 3.7 percent. This category consists of cash contributed to persons or organizations outside the consumer unit, including alimony and child support payments; care of students away from home; and contributions to religious, educational, charitable, or political organizations. Seattle households spent a portion of their budget (3.6 percent) on cash contributions that was close to that for the nation, while consumer units in Los Angeles (2.9 percent) and San Francisco (2.6 percent) both spent significantly less than the national average.

As noted, Phoenix is 1 of 18 metropolitan areas nationwide for which CE data are available. We encourage users interested in learning more about the Consumer Expenditure Survey to contact the Western Information Office at (415) 625-2270. Metropolitan area CE data and that for the four geographic regions and the United States are available on our Web site at <http://www.bls.gov/ro9/>.

### **Technical Note**

The current Consumer Expenditure Survey (CE) program began in 1980. Its principal objective is to collect information on the buying habits of American consumers. The consumer expenditure data are used in a wide variety of research by government, business, labor, and academic analysts. The data are also required for periodic revision of the Consumer Price Index (CPI).

The survey consists of two components, a diary or recordkeeping survey, and an interview survey. The Diary Survey, completed by participating consumer units for two consecutive 1-week periods, collects data on frequently-purchased smaller items. The Interview Survey, in which the expenditures of consumer units are obtained in five interviews conducted every 3 months, collects data for larger-cost items and expenditures that occur on a regular basis. The U.S. Census Bureau collects the survey data.

Each component of the survey queries an independent sample of consumer units which is representative of the U.S. population. Over the year, about 7,000 consumer units are sampled for the Diary Survey. The Interview Survey is conducted on a rotating panel basis, with about 7,000 consumer units participating each quarter. The data are collected on an ongoing basis in 91 areas of the country.

The integrated data from the BLS Diary and Interview Surveys provide a complete accounting of consumer expenditures and income, which neither survey component alone is designed to do. Due to changes in the survey sample frame, metropolitan area data in this release are not directly comparable to those prior to 1996.

The expenditure data in this release should be interpreted with care. The expenditures are averages for consumer units with the specified characteristics, regardless of whether or not a specific unit incurred an expense for that specific item during the recording period. The average expenditure may be considerably lower than the expenditure by those consumer units that purchased the item. This study is not intended as a comparative cost of living survey. Differences among areas may result from variations in characteristics such as consumer unit size, age, preferences, income levels, etc. Users should keep in mind that prices for many goods and services have risen since the survey was conducted.

In addition, sample surveys are subject to two types of errors. Sampling errors occur because the data are collected from a representative sample rather than the entire population. Nonsampling errors result from the inability or unwillingness of respondents to provide correct information, differences in interviewer ability, mistakes in recording or coding, or other processing errors. The year-to-year changes are volatile and should be interpreted carefully. Sample sizes for the metropolitan areas are much smaller than for the nation, so the U.S. estimates and year-to-year changes are more reliable than those for the metropolitan areas.

Some expenditure components are subject to large fluctuations from one year to the next because these components include expensive items that relatively few consumers purchase each year. Thus, shifts from year to year in the number of consumers making such purchases can have a large effect on average expenditures. Examples of these types of expenses are purchases of new cars and trucks in the transportation component, and spending on boats and recreational vehicles in the entertainment component.

The CE significance tests in this release compare expenditure shares for the 14 major expenditure categories in the United States to expenditure shares in selected metropolitan areas (areas in this release are listed below). Expenditure shares for housing and transportation that are above or below that for the nation after testing for significance at the 95-percent confidence interval are identified in charts 1 and 2 for the 18 metropolitan areas.

NOTE: A value that is statistically different from another does not necessarily mean that the difference has economic or practical significance. Statistical significance is concerned with the ability

to make confident statements about a universe based on a sample. It is entirely possible that a large difference between two values is not significantly different statistically, while a small difference is, since both the size and heterogeneity of the sample affect the relative error of the data being tested.

Metropolitan areas definitions are based on Core-Based Statistical Areas defined by the U.S. Office of Management and Budget. The metropolitan areas and their component counties and cities discussed in this release are:

**Los Angeles-Riverside-Orange Co., Calif.** -- includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties in California.

**Phoenix-Mesa, Arizona** -- includes Maricopa and Pima Counties in Arizona.

**San Francisco-San Jose-Oakland, Calif.** -- includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma Counties in California.

**Seattle-Tacoma-Bremerton, Wash.** -- includes Island, King, Kitsap, Pierce, Snohomish and Thurston Counties in Washington

### **Definitions**

**Consumer unit** - members of a household related by blood, marriage, adoption, or other legal arrangement; a single person living alone or sharing a household with others but who is financially independent; or two or more persons living together who share responsibility for at least 2 out of 3 major types of expenses - food, housing, and other expenses. The terms household or consumer unit are used interchangeably for convenience.

**Expenditures** - consist of the transaction costs, including excise and sales taxes, of goods and services acquired during the interview or recordkeeping period. Expenditure estimates include expenditures for gifts, but exclude purchases or portions of purchases directly assignable to business purposes. Also excluded are periodic credit or installment payments on goods or services already acquired. The full cost of each purchase is recorded even though full payment may not have been made at the date of purchase.

**Income before taxes** - the total money earnings and selected money receipts during the 12 months prior to the interview date.

**Table 1. Consumer unit characteristics and percent distribution of average annual expenditures, U.S. and selected metropolitan areas, Consumer Expenditure Survey, 2005-2006**

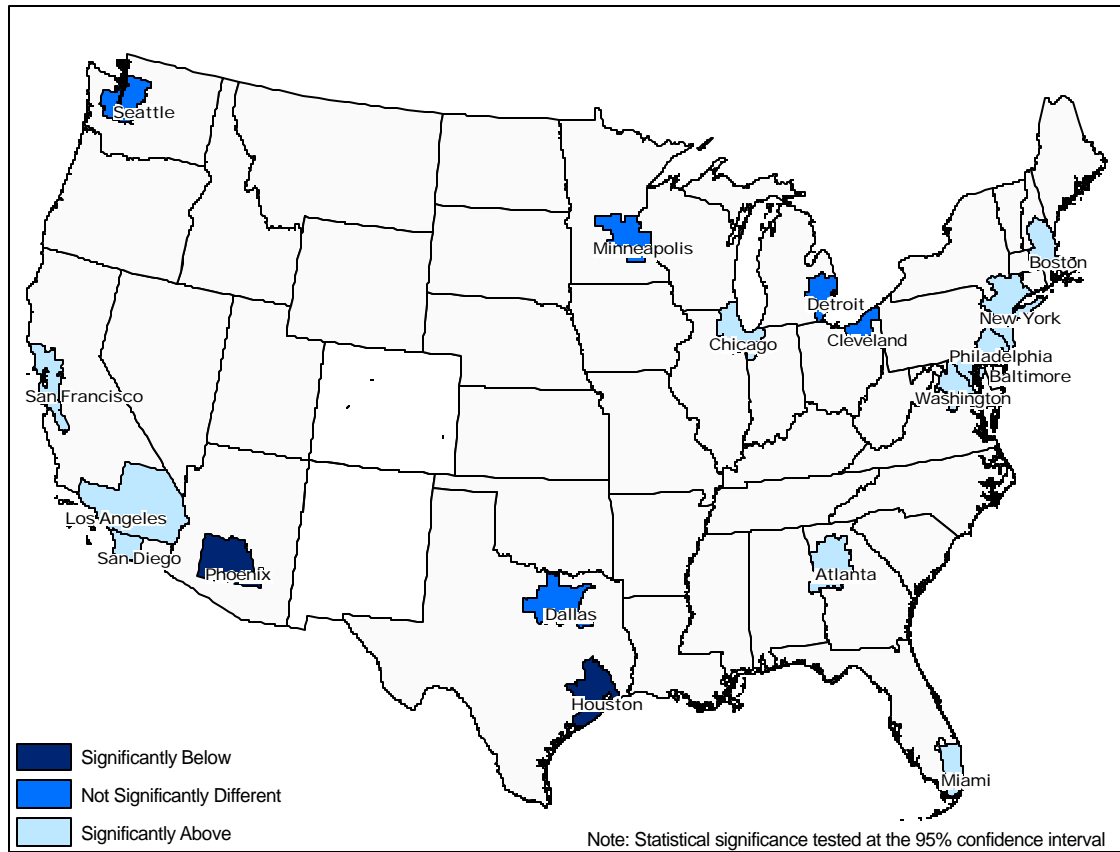
Category	United States	Phoenix	Los Angeles	San Francisco	Seattle
Consumer unit characteristics					
Income before taxes	\$59,628	\$65,520	\$70,847	\$90,781	\$65,672
Age of reference person	48.7	44.3	46.7	47.5	47.8
Average number in consumer unit	2.5				
Persons	.6	2.7	2.9	2.5	2.3
Children under 18	.3	.8	.8	.6	.5
Persons 65 and over	1.3	.2	.3	.3	.2
Earners	1.9	1.4	1.5	1.4	1.5
Vehicles		1.9	1.9	1.9	2.4
Percent homeowners	67	68	57	58	67
Average annual expenditures	\$47,421	\$53,570	\$58,404	\$66,344	\$55,544
Percent distribution	100.0	100.0	100.0	100.0	100.0
Food	12.7	13.4	12.4	12.0	12.4
Alcoholic beverages	1.0	<b>1.3</b>	<b>.8</b>	1.1	1.4
Housing	33.3	<b>30.7</b>	<b>36.3</b>	<b>39.8</b>	34.5
Apparel and services	4.0	3.8	4.1	3.8	<b>2.8</b>
Transportation	17.8	20.5	18.3	<b>15.2</b>	18.2
Healthcare	5.7	5.9	<b>4.0</b>	<b>4.3</b>	5.2
Entertainment	5.0	4.9	4.7	4.6	<b>5.8</b>
Personal care products and services	1.2	1.2	<b>1.4</b>	1.1	1.1
Reading	.3	<b>.2</b>	<b>.2</b>	<b>.3</b>	<b>.3</b>
Education	1.9	1.5	<b>1.9</b>	1.7	<b>1.5</b>
Tobacco products and smoking supplies	.7	.8	<b>.3</b>	<b>.2</b>	<b>.5</b>
Miscellaneous	1.7	1.7	<b>1.7</b>	1.6	1.7
Cash contributions	3.7	3.6	<b>2.9</b>	<b>2.6</b>	3.6
Personal insurance and pensions	11.0	10.6	10.9	<b>11.7</b>	11.1

Note: Columns may not add to 100 due to rounding.

**Table 2. Consumer unit characteristics and average annual expenditures, U.S. and selected metropolitan areas, Consumer Expenditure Survey, 2005-2006**

Category	United States	Phoenix	Los Angeles	San Francisco	Seattle
Average annual expenditures	\$47,421	\$53,570	\$58,404	\$66,344	\$55,544
Food	\$6,022	\$7,187	\$7,222	\$7,942	\$6,887
Food at home	\$3,357	\$3,822	\$3,873	\$4,173	\$3,778
Cereals and bakery products	\$446	\$482	\$470	\$527	\$479
Meats, poultry, fish, and eggs	\$781	\$894	\$914	\$965	\$743
Dairy products	\$373	\$433	\$395	\$443	\$417
Fruits and vegetables	\$572	\$672	\$795	\$839	\$662
Other foods at home	\$1,185	\$1,342	\$1,297	\$1,399	\$1,477
Food away from home	\$2,665	\$3,365	\$3,349	\$3,769	\$3,109
Alcoholic Beverage	\$462	\$693	\$475	\$757	\$752
Housing	\$15,782	\$16,469	\$21,190	\$26,382	\$19,142
Shelter	\$9,253	\$9,279	\$14,312	\$18,845	\$12,279
Owned dwellings	\$6,250	\$6,249	\$8,994	\$12,442	\$8,515
Rented dwellings	\$2,468	\$2,456	\$4,775	\$5,112	\$2,796
Other lodging	\$535	\$573	\$543	\$1,290	\$968
Utilities, fuels, and public services	\$3,291	\$3,348	\$2,996	\$2,925	\$3,046
Household operations	\$875	\$899	\$1,235	\$1,574	\$733
Housekeeping supplies	\$625	\$784	\$643	\$625	\$611
Household furnishings and equipment	\$1,737	\$2,158	\$2,004	\$2,414	\$2,473
Apparel and services	\$1,880	\$2,019	\$2,396	\$2,524	\$1,541
Transportation	\$8,427	\$10,964	\$10,716	\$10,080	\$10,127
Vehicle purchases (net outlay)	\$3,482	\$5,422	\$4,443	\$3,492	\$4,145
Gasoline and motor oil	\$2,121	\$2,217	\$2,566	\$2,309	\$2,221
Other vehicle expenses	\$2,347	\$2,832	\$2,980	\$3,261	\$2,950
Public transportation	\$476	\$493	\$727	\$1,017	\$810
Healthcare	\$2,716	\$3,134	\$2,316	\$2,820	\$2,889
Entertainment	\$2,382	\$2,615	\$2,743	\$3,080	\$3,196
Personal care products and services	\$563	\$657	\$815	\$734	\$626
Reading	\$122	\$115	\$141	\$205	\$179
Education	\$914	\$794	\$1,127	\$1,106	\$848
Tobacco products and smoking supplies	\$323	\$411	\$199	\$151	\$289
Miscellaneous	\$827	\$919	\$1,014	\$1,073	\$924
Cash contributions	\$1,767	\$1,910	\$1,710	\$1,741	\$1,995
Personal insurance and pensions	\$5,237	\$5,683	\$6,340	\$7,748	\$6,149
Life and other personal insurance	\$351	\$312	\$307	\$342	\$371
Pensions and Social Security	\$4,886	\$5,371	\$6,033	\$7,406	\$5,779

**Chart 1. Expenditure shares spent on housing in all 18 metropolitan statistical areas compared to the U.S. average, 2005-2006**



**Chart 2. Expenditure shares spent on transportation in all 18 metropolitan statistical areas compared to the U.S. average, 2005-2006**

