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# **PERSONAL EXPENDITURES OF AMERICANS ON TRANSPORTATION: 2016 VERSUS 1989**

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**SUSTAINABLE WORLDWIDE  
TRANSPORTATION**

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PERSONAL EXPENDITURES OF AMERICANS ON TRANSPORTATION:  
2016 VERSUS 1989

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## Introduction

This study was designed to examine recent changes in personal expenditures of Americans on transportation. The data came from the Consumer Expenditure Survey (Bureau of Labor Statistics, 2017), performed by the Census Bureau for the Bureau of Labor Statistics. The comparison years were 2016 and 1989 (the earliest year with available compatible data). Expenditures for all households were examined, as well as those for households at the two extremes of income.

## Method

The data for this analysis were annual expenditures by U.S. households, formally identified by the Bureau of Labor Statistics (2017) as *consumer units*. Consumer units are defined as follows:

*A consumer unit consists of any of the following: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who use their incomes to make joint expenditure decisions. (Bureau of Labor Statistics, 2017)*

The analysis examined expenditures for two years (1989 and 2016), and for three groups of consumer units (all income levels, the lowest quintile [the lowest 20%] of income before taxes, and the highest quintile).

Of interest in this study were expenditures for transportation as a percentage of total expenditures within each respective group of consumer units.<sup>1</sup> In addition to total transportation expenditures, the analysis also examined changes in expenditures for transportation subcategories such as vehicle purchases, and gasoline and motor oil. Finally, transportation expenditures were also compared to expenditures for other major budget categories like housing and food.

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<sup>1</sup> The percentages for 2016 were included in the original Bureau of Labor Statistics data, while the percentages for 1989 were calculated for this report from the information provided in the original data.

## Results

The results are shown in Table 1. The entries below transportation expenditures are listed in descending order of percentages of expenditures for all income levels in 2016 (except that *Miscellaneous* expenditures were placed last).

Table 1  
Shares of annual expenditures for all income levels, and for the lowest and highest quintiles of income before taxes in 1989 and 2016. (The entries are percentages.)

Budget category	1989			2016		
	All income levels	Lowest 20% by income	Highest 20% by income	All income levels	Lowest 20% by income	Highest 20% by income
Transportation	18.9	16.7	18.0	15.8	15.0	14.4
<i>Vehicle purchases</i>	8.4	7.0	7.9	6.3	5.3	5.7
<i>Gasoline &amp; motor oil</i>	3.5	3.9	3.0	3.3	3.6	2.6
<i>Other expenses</i>	6.0	4.8	5.9	5.0	5.2	4.6
<i>Public transportation*</i>	1.0	1.1	1.2	1.1	0.9	1.5
Housing	30.7	35.8	29.9	33.0	40.8	30.0
Food	14.0	17.3	12.1	12.6	15.4	11.2
Insurance & pensions	9.9	2.7	13.4	11.9	2.6	17.2
Health care	5.0	7.2	3.9	8.0	8.6	6.8
Entertainment	5.1	4.3	6.0	5.1	4.6	5.2
Cash contributions	3.3	2.0	4.2	3.6	2.2	4.7
Apparel & services	5.5	5.0	5.6	3.1	3.4	3.1
Education	1.2	2.3	1.5	2.3	2.7	3.2
Personal care	1.3	1.3	1.2	1.2	1.3	1.2
Alcoholic beverages	1.0	1.0	0.9	0.8	0.6	1.0
Tobacco & smoking	1.0	1.6	0.5	0.6	1.2	0.3
Reading	0.6	0.6	0.6	0.2	0.3	0.2
Miscellaneous	2.4	2.4	2.4	1.7	1.3	1.6

\* The 2016 entry is labeled *Public and other transportation*.

## Discussion

### **Transportation expenditures: 2016 vs. 1989**

The percentage of expenditures devoted to transportation for all consumer units declined from 18.9% in 1989 to 15.8% in 2016. Substantial decreases were also observed for vehicle purchases (8.4% vs. 6.3%) and other transportation expenses (6.0% vs. 5.0%).

### **Transportation expenditures: Effects of income**

Total transportation expenditures in 2016 for the lowest quintile of income were proportionally higher than for the highest quintile (15.0% vs. 14.4%), as were the expenditures for gasoline and motor oil (3.6% vs. 2.6%).

### **Transportation expenditures compared to other expenditures: 2016 vs. 1989**

Overall, transportation accounted for the second largest budget category in both 2016 and 1989, with only housing having larger expenditures. Transportation expenditures for all consumer units were 47.9% of the housing expenditures in 2016, down from 61.6% in 1989. On the other hand, transportation expenditures dropped from being 35.0% greater than expenditures for food (the third largest budget category) in 1989 to being 25.4% greater in 2016.

### **Transportation expenditures compared to other expenditures: Effects of income**

For those in the lowest quintile of income, transportation expenditures in 2016 corresponded to a lower percentage of housing expenditures than for those in the highest quintile of income (36.8% vs. 48.0%), and both percentages were down from the corresponding percentages in 1989 (46.6% vs. 60.2%).

Transportation expenditures for the lowest quintile of income were *lower* than food expenditures in both 2016 and 1989 (2.6% lower in 2016, and 3.5% lower in 1989). In contrast, transportation expenditures for the highest quintile of income were *higher* than food expenditures in both examined years (28.6% higher in 2016, and 48.8% higher in 1989).

### **Absolute expenditures for transportation**

The focus of this study was on recent changes in transportation expenditures *relative* to other household expenditures. Indeed, one of the main findings was that transportation expenditures accounted for a smaller percentage of total expenditures in 2016 than in 1989. However, the analysis in Table 2 indicates that the *absolute* expenditures for transportation (adjusted for inflation; Federal Reserve Bank of Minneapolis, 2017) also declined during this period (by 11.3%).

Table 2  
Absolute expenditures for transportation per consumer unit in 1989 and 2016.

Measure	1989	2016
Mean transportation expenditures per consumer unit	\$5,268	\$9,049
Consumer Price Index	124.0	240.0
Mean transportation expenditures per consumer unit, adjusted for Consumer Price Index relative to 1989	\$5,268	\$4,675

## Key findings

The following are the key findings of this study:

- (1) In 2016, total transportation expenditures corresponded to 15.8% of all personal expenditures, down from 18.9% in 1989. Analogous trends were present for the lowest and highest quintiles of income.
- (2) Relative expenditures for gasoline and motor oil were higher for the lowest quintile of income than for the highest quintile of income.
- (3) Overall, transportation accounted for the second largest budget category in both 2016 and 1989, with only housing having larger expenditures.
- (4) Transportation expenditures relative to the expenditures for housing and food decreased from 1989 to 2016.
- (5) Transportation expenditures for the lowest quintile of income were *lower* than food expenditures in both 2016 and 1989. In contrast, transportation expenditures for the highest quintile of income were *higher* than food expenditures in both years.
- (6) Absolute expenditures for transportation, adjusted for inflation, decreased by 11.3% from 1989 to 2016.

## References

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