



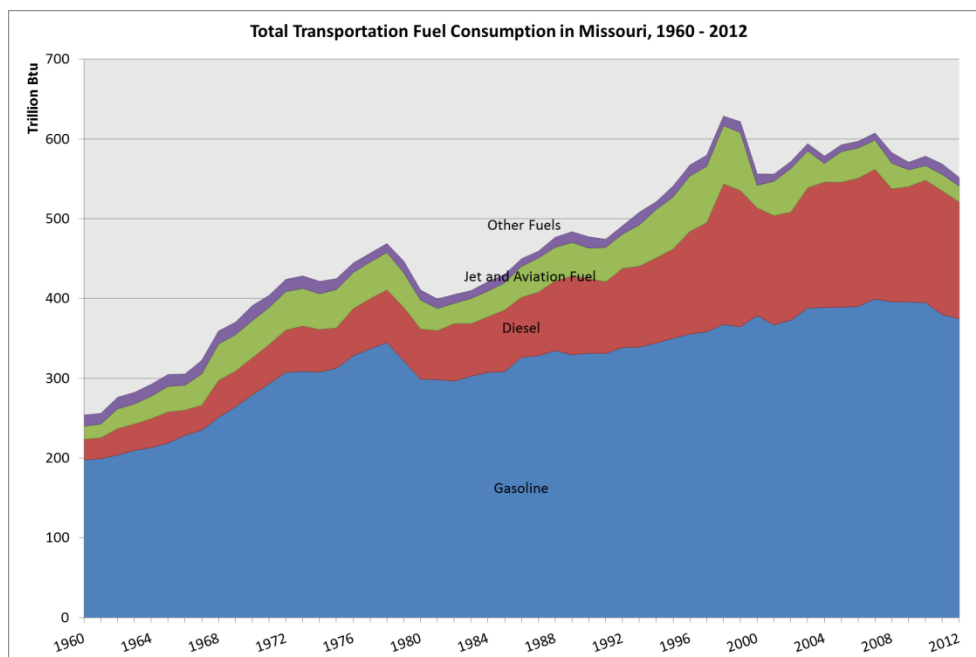
# Transportation Fuel Use in Missouri at a Glance<sup>1</sup>

Division of Energy  
December 2014

## Consumption of Transportation Fuels in Missouri, 1960 – 2012

Total transportation fuel consumption in Missouri ranged from 254 Trillion Btu (TBtu) in 1960 to 552 TBtu in 2012 (Figure 1); most of this fuel consisted of gasoline (198 TBtu in 1960 and 375 TBtu in 2012) and diesel (26 TBtu in 1960 and 146 TBtu in 2012).<sup>2</sup> In 2012, gasoline and diesel represented 68% and 27% of total consumption, respectively (Figure 2); jet and aviation fuel comprised 4% of consumption, while other fuels such as natural gas composed the remainder.<sup>3</sup>

Figure 1

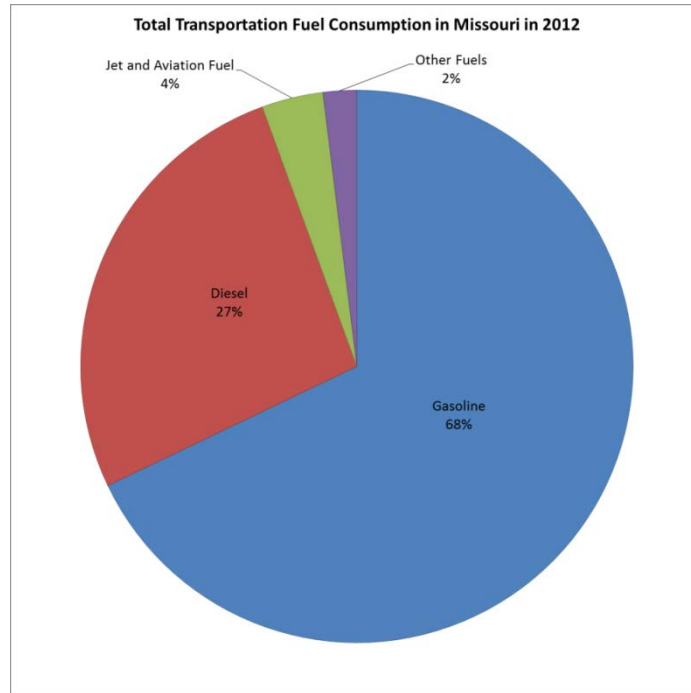


<sup>1</sup> The data supporting the information in this fact sheet are presented in "Transportation Fuel Use in Missouri at a Glance: Supporting Documentation." Sources for the information in this fact sheet, including the data in the charts, come from the U.S. Energy Information Administration's (EIA) State Energy Data System at <http://www.eia.gov/state/seds/seds-data-complete.cfm?sid=MO>, EIA's technical notes and documentation, and the survey data used to compile the Missouri Division of Energy's Energy Bulletins (<http://energy.mo.gov/energy/stay-informed/missouri-energy-bulletins>). Further information on the original data may be found on the EIA's and Division of Energy's respective websites.

<sup>2</sup> One British thermal unit (Btu) is the amount of heat required to raise the temperature of one pound of water at or near 39.2 degrees Fahrenheit by an additional degree.

<sup>3</sup> Percentages and totals may not add up as expected due to rounding or other errors.

**Figure 2**



Per capita, gasoline also remained the largest portion of transportation fuel consumption over time at 46 million Btu (MMBtu) per person in 1960 and 62 MMBtu per person in 2012 (Figure 3). Diesel ranked a distant second at 24 MMBtu per capita in 2012, followed by jet and aviation fuel at 3 MMBtu per capita and all other fuels at 2 MMBtu per capita. While the relative proportions were similar to the U.S. as a whole in 2012 (52 MMBtu per capita, 18 MMBtu per capita, 9 MMBtu per capita, and 5 MMBtu per capita, respectively), Missourians consumed more gasoline and diesel per capita (Figure 4).

**Figure 3**

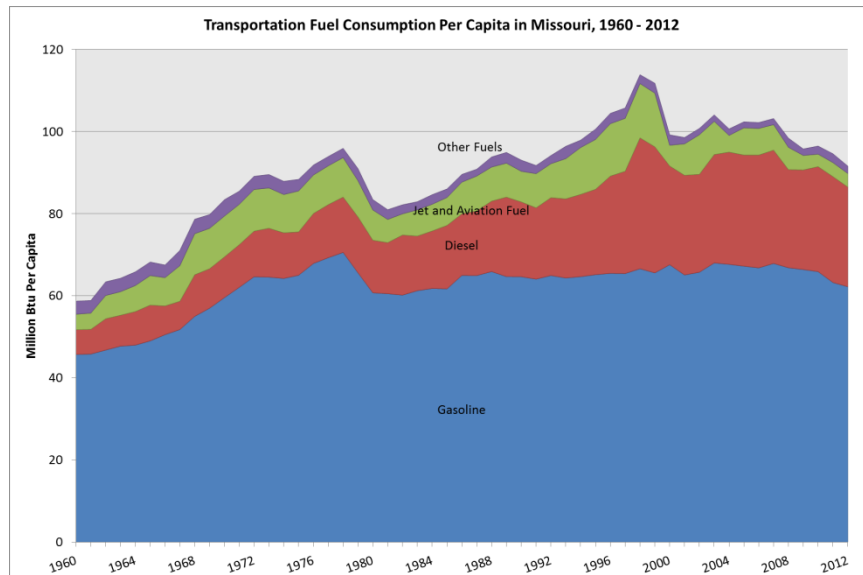
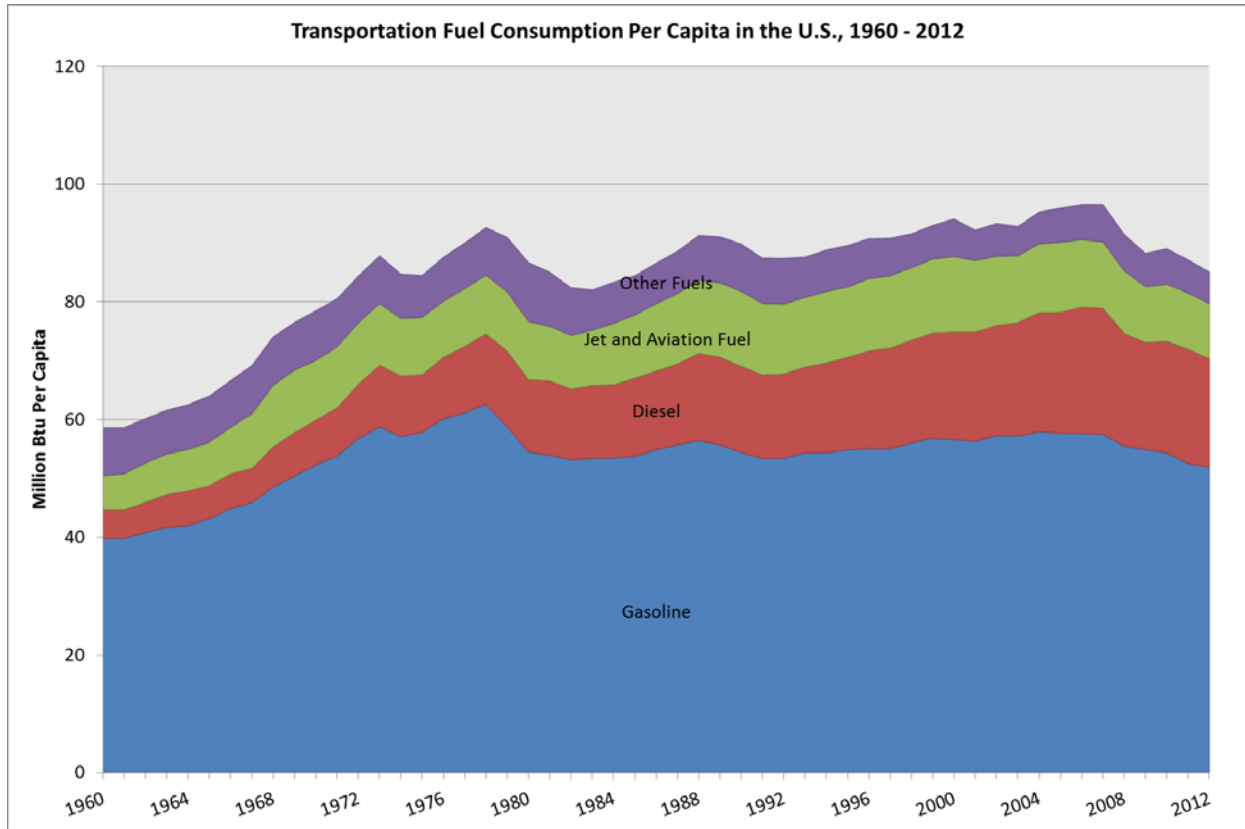


Figure 4



### Spending on Transportation Fuels in Missouri, 1970 – 2012<sup>4</sup>

Total nominal expenditures on transportation fuels in Missouri increased from \$878 million in 1970 to \$15.0 billion in 2012 (Figure 5). Gasoline accounted for \$10.2 billion of 2012 expenditures, followed by diesel (\$4.0 billion), jet and aviation fuel (\$459 million), and all other fuels (\$337 million). Gasoline and diesel therefore comprised 68% and 27% of overall expenditures that year, with jet and aviation fuel accounting for only 3% of expenditures and all other fuels comprising 2% (Figure 6). Per capita, gasoline overwhelmingly accounted for the majority of expenditures at \$1,696 per person in 2012, followed by diesel at \$669 per capita (Figure 7).

Total expenditures generally rose from year to year, with the exception of 10 years spanning 1982 – 2012 (Figure 8). Gasoline expenditures generally increased as well, with declines in two other years; diesel expenditures exhibited fewer annual declines compared to the other three data series.

<sup>4</sup> Expenditure data have not been converted into real dollar values.

Figure 5

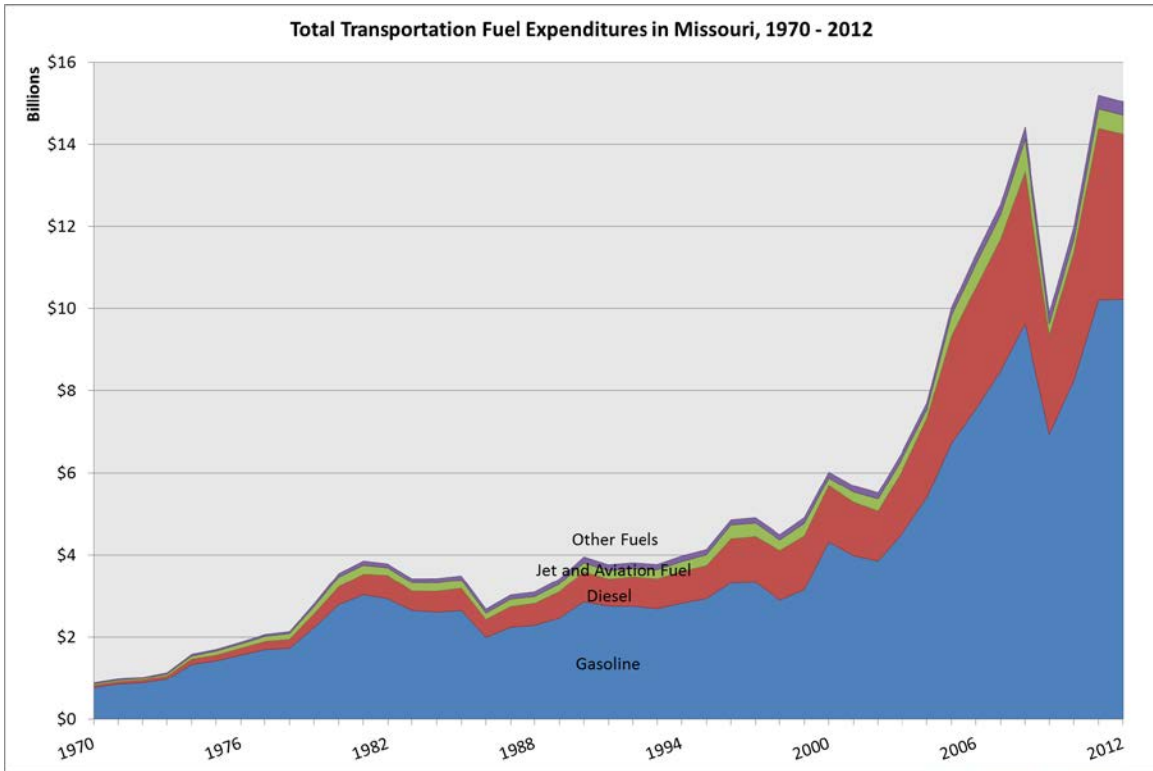


Figure 6

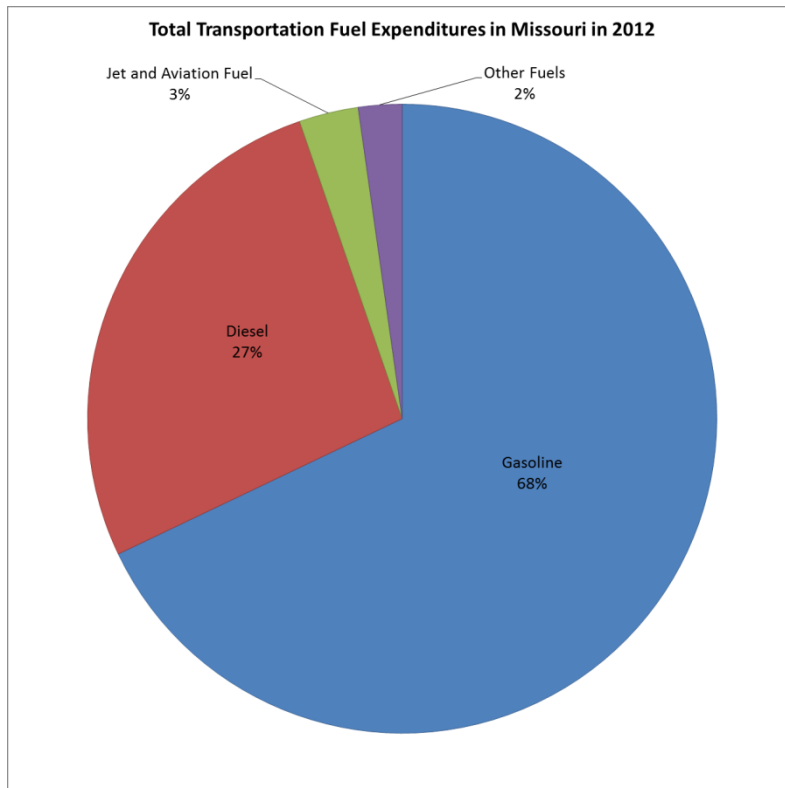


Figure 7

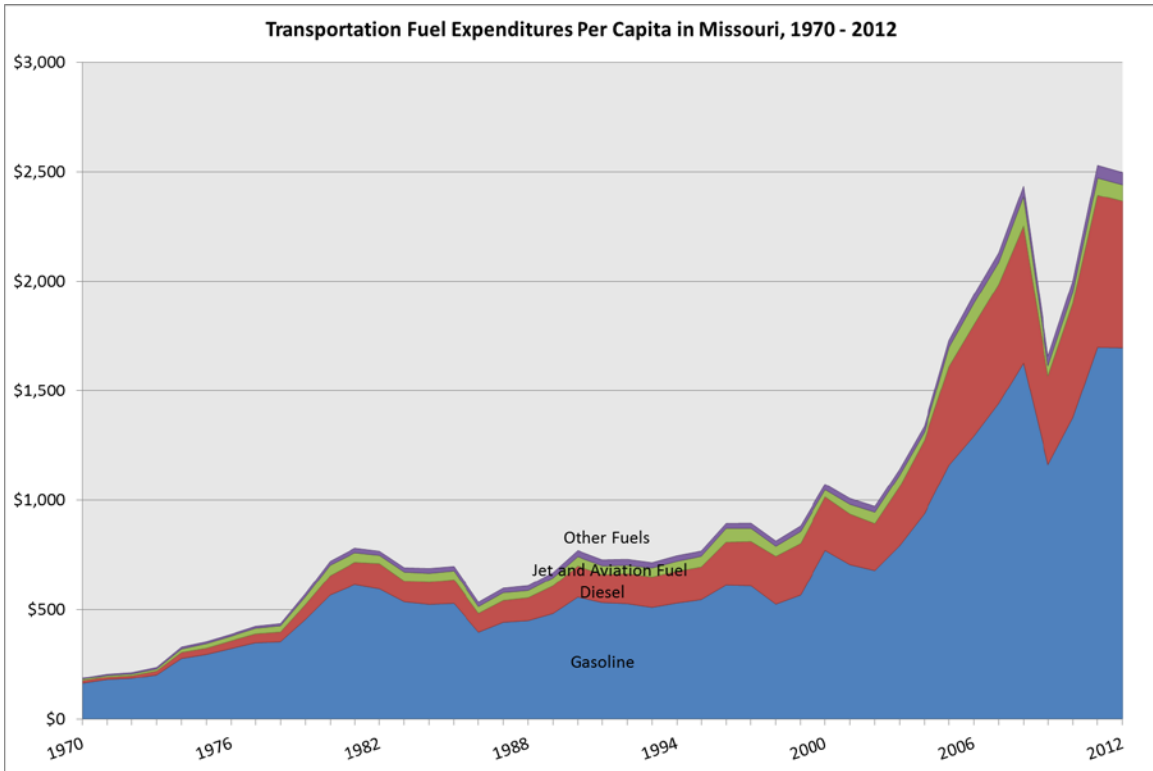
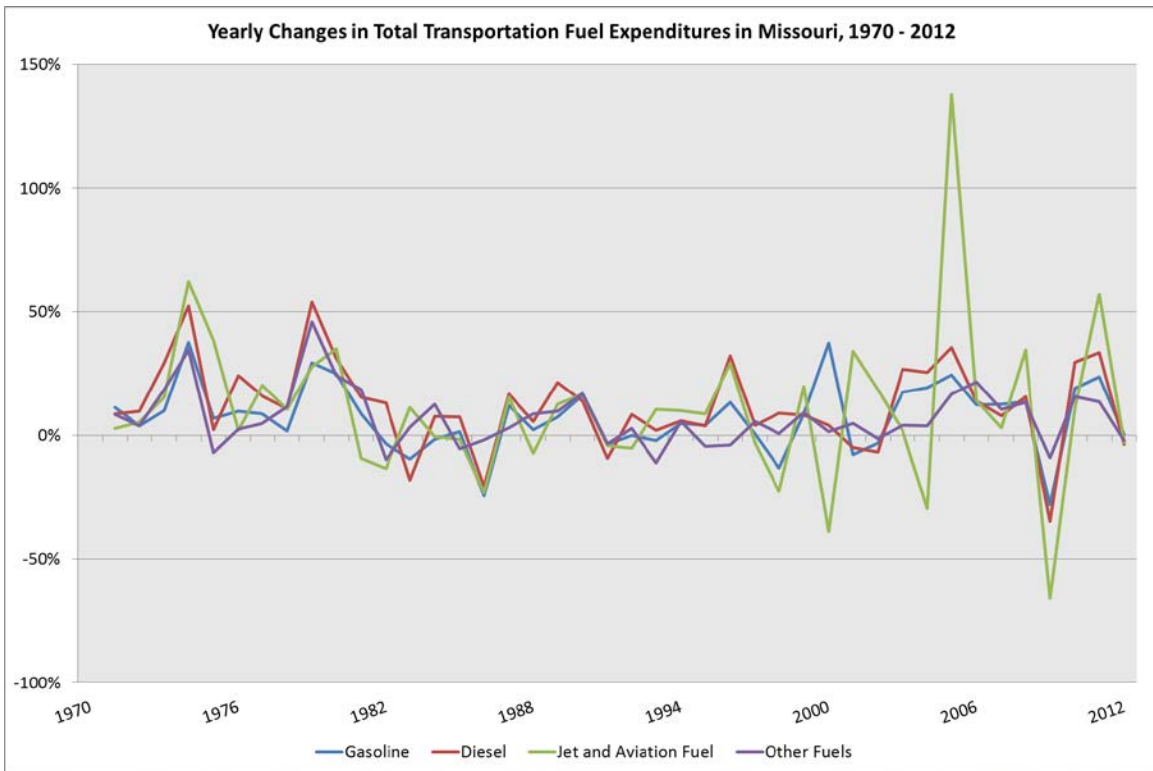
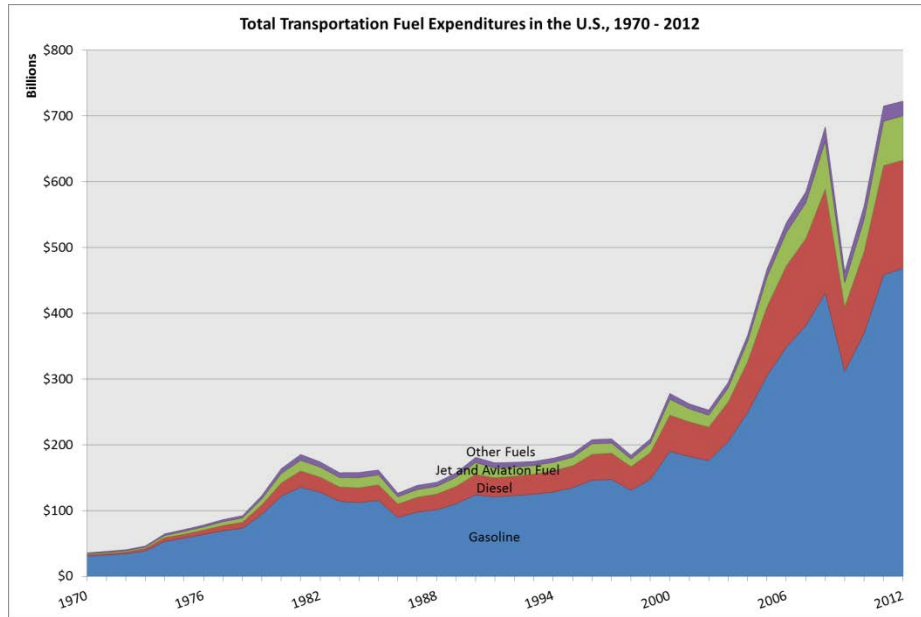


Figure 8

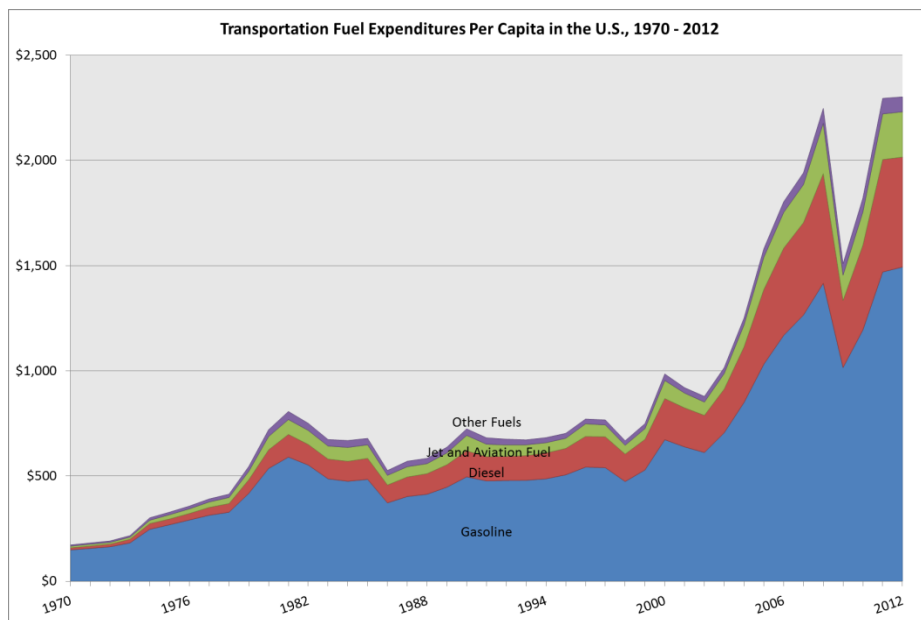


Missouri's expenditures represent a small fraction of total U.S. expenditures, which were \$35.4 billion in 1970 and \$723 billion in 2012 (Figure 9). However, as with consumption per capita, Missourians' expenditures per capita on gasoline and diesel were higher than those overall in the U.S. in 2012 (Figure 10); U.S. overall expenditures per capita in 2012 were \$1,493 per person on gasoline and \$523 per person on diesel. Total U.S. expenditures have decreased fewer times on a year-to-year basis than in Missouri, although expenditures on diesel and all other fuels have seen decreases in more years than in Missouri (Figure 11).

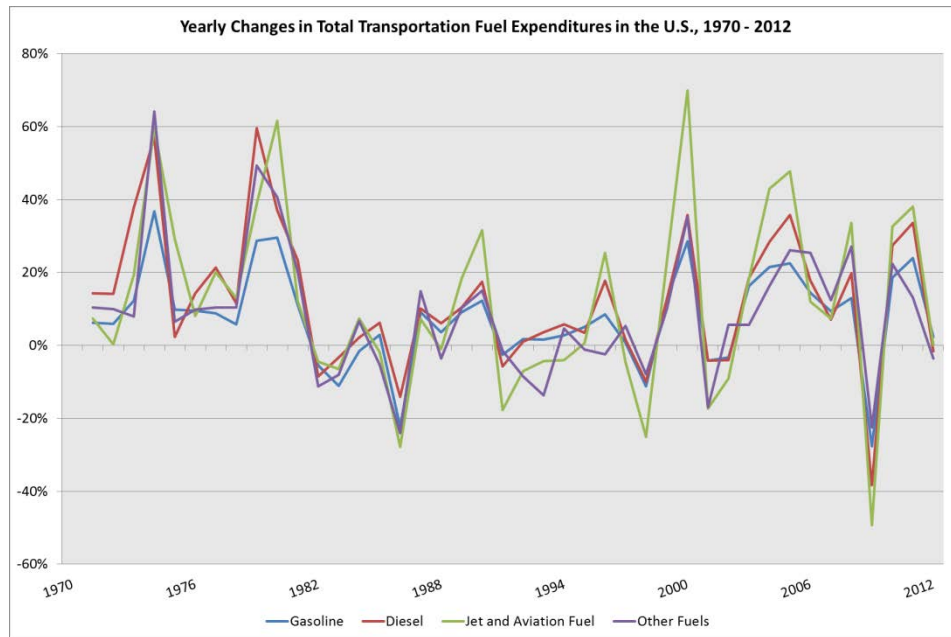
**Figure 9**



**Figure 10**



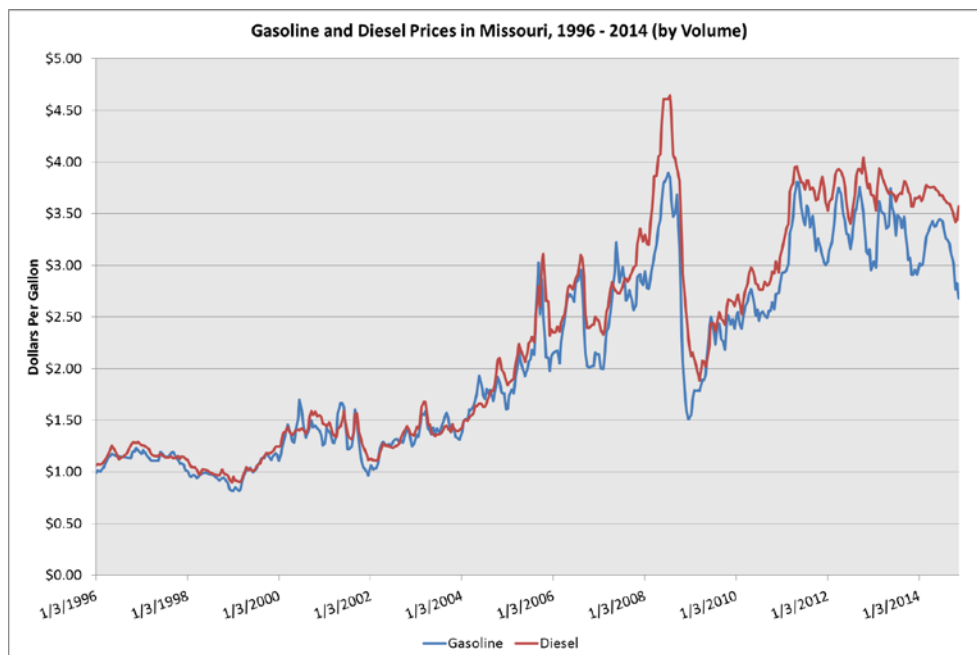
**Figure 11**



### Transportation Fuel Prices in Missouri, 1996 – 2014

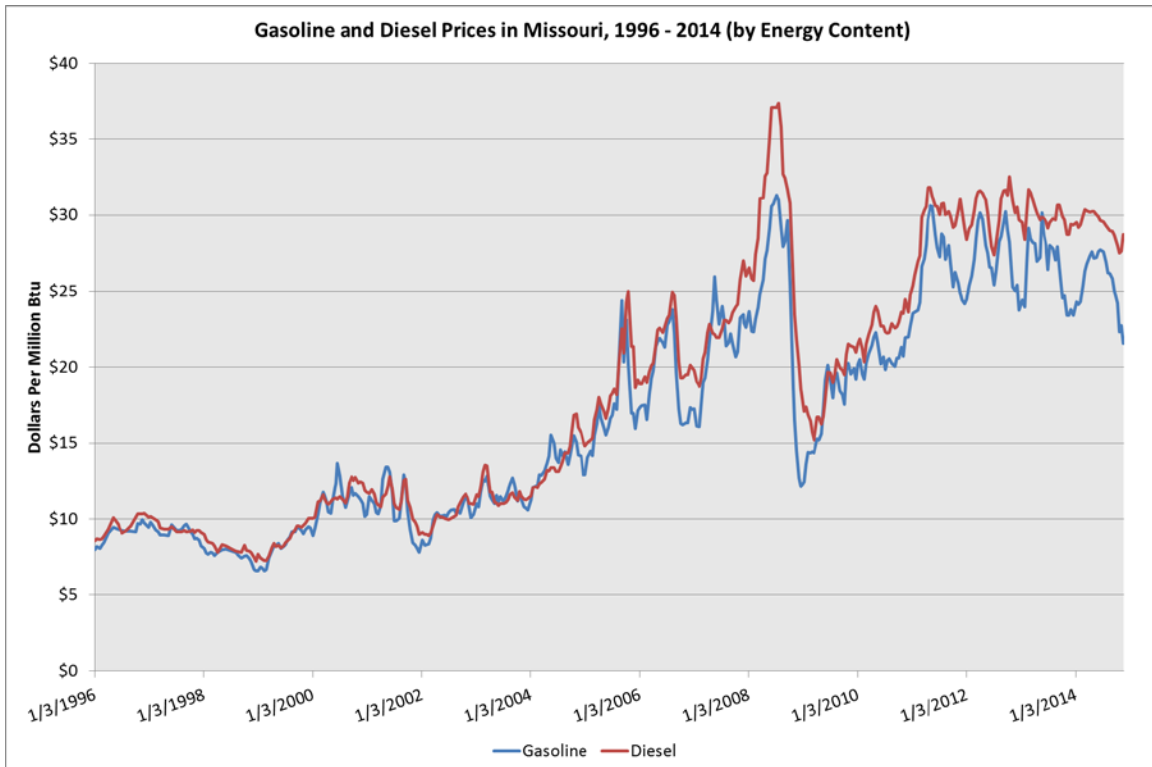
Nominal prices for gasoline and diesel peaked in July of 2008 at \$3.89/gal and \$4.64/gallon, respectively, followed by a long and steep decline in gasoline prices for nearly five months (with an even longer decline for diesel prices) (Figure 12). Prices peaked again in May of 2011 and remained relatively high until the beginning of a decline in 2014.

**Figure 12**



A comparison of gasoline and diesel prices on an energy-equivalent basis (i.e., by the relative number of Btu per gallon of each fuel) yields a similar set of trends (Figure 13). However, this analysis also allows for a fairer comparison of nominal expenditures per unit of energy over time, since burning gasoline and diesel yields different amounts of energy. Thus, a lower price per gallon of gasoline over diesel may or may not represent a lower price (and amount paid) per unit of energy gained from gasoline, depending on the relative energy contents of gasoline and diesel at that point in time.<sup>5</sup>

**Figure 13**



<sup>5</sup> A further complication involves the changing energy content of gasoline which EIA uses starting in 1994; this and other EIA energy content conversions are used in Figure 13.