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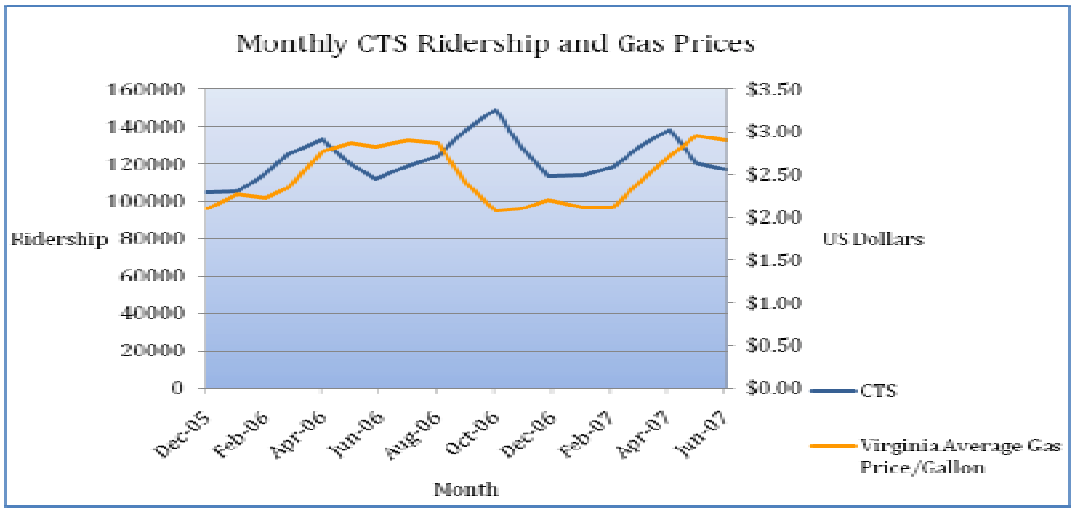
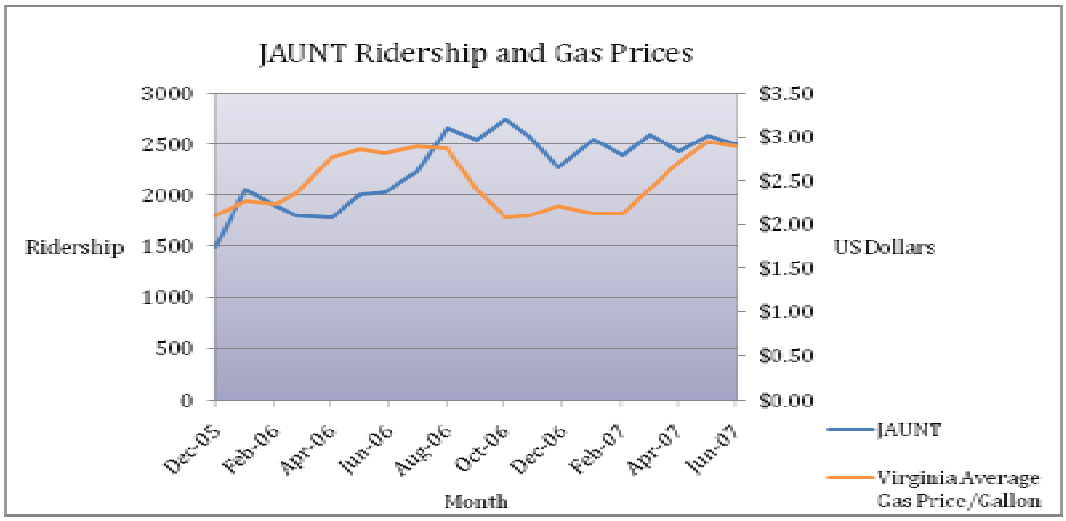
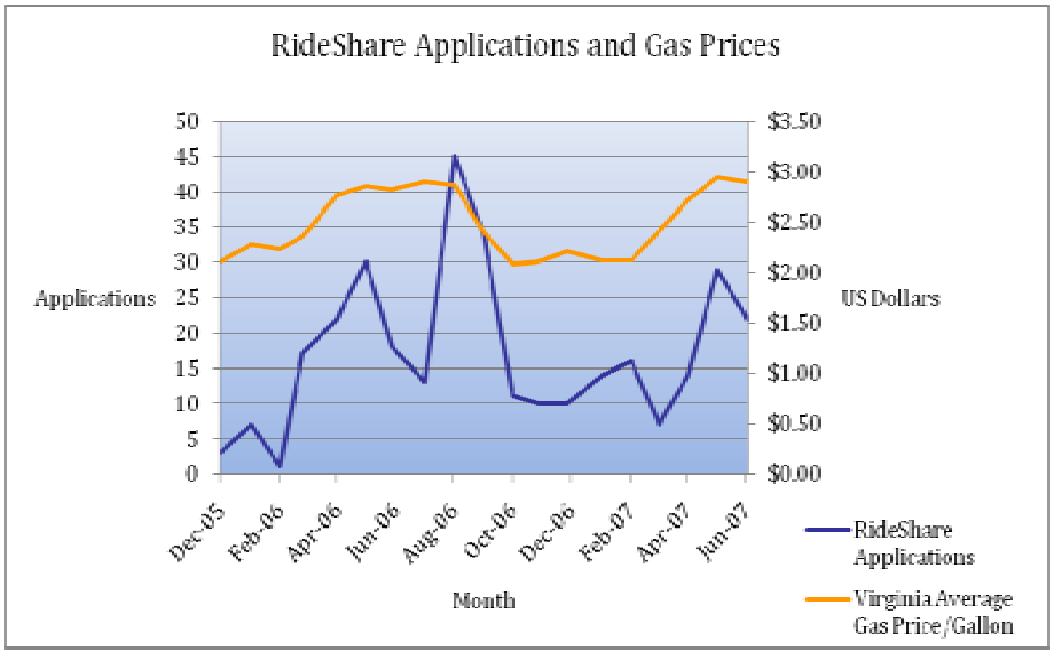
Fuel Price and Transit Ridership Actual Data

In an effort to understand how fuel price changes may influence local travelers, recent travel trends were reviewed in the context of fuel price changes (increases) since Hurricane Katrina in August, 2005. Average monthly gas price and ridership data for transit services in the Charlottesville-Albemarle MPO reveals how the price of fuel may influence mode choice for TJPDC residents.

If the price of fuel continues to rise, it will become increasingly important to invest in a diversified transportation system with a variety of transportation modes and alternative fuel stocks. A diversified transportation system can provide travelers with choices, especially during times of increasing transportation costs. Transportation costs include not only the price of fuel, but also time spent commuting, congestion, and decreased air quality.




JAUNT Ridership and Gas Prices
Ridership
3000
2500
2000
1500
1000
500
0
$3.50
$3.00
$2.50
$2.00
$1.50
$1.00
$0.50
$0.00
US Dollars
Dec-05
Feb-06
Apr-06
Jun-06
Aug-06
Oct-06
Dec-06
Feb-07
Apr-07
Jun-07
Month
JAUNT
Virginia Average Gas Price/Gallon


RideShare Applications and Gas Prices
Applications
50
45
40
35
30
25
20
15
10
5
0
$3.50
$3.00
$2.50
$2.00
$1.50
$1.00
$0.50
$0.00
US Dollars
Dec-05
Feb-06
Apr-06
Jun-06
Aug-06
Oct-06
Dec-06
Feb-07
Apr-07
Jun-07
Month
RideShare Applications
Virginia Average Gas Price/Gallon

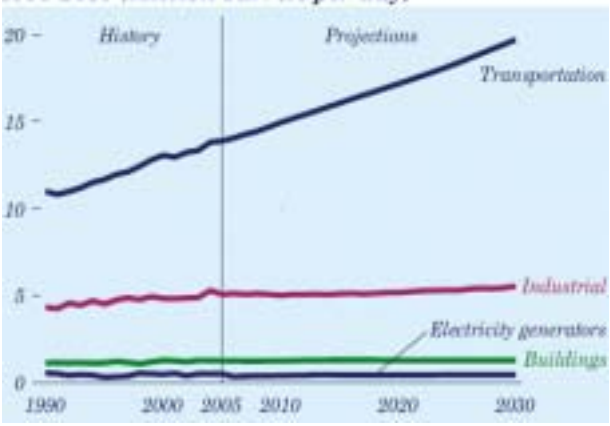
Fuel Pricing and Consumption Projections

The following background information was provided by the U.S. Department of Energy's Energy Information Administration (*http://www.eia.doe.gov/oiaf/aeo/gas.htm)l*:

"Transportation Uses Lead Growth in Liquid Fuels Consumption

U.S. consumption of liquid fuels—including fuels from petroleum-based sources and, increasingly, those derived from such nonpetroleum primary fuels as coal, biomass, and natural gas—is projected to total 26.9 million barrels per day in 2030, an increase of 6.2 million barrels per day over the 2005 total. Most of the increase is in the transportation sector, which is projected to account for 73 percent of total liquid fuels consumption in 2030, up from 67 percent in 2005 (Figure 82). Liquid fuels use for transportation increases by 5.8 million barrels per day from 2005 to 2030 in the AEO2007 reference case, by 7.8 million barrels per day in the high economic growth case, and by 3.8 million barrels per day in the high price case. Gasoline, ULSD, and jet fuel are the main transportation fuels. The reference case includes the effects of technology improvements that are expected to increase the efficiency of motor vehicles and aircraft, but the projected growth in demand for each mode outpaces those improvements as the demand for transportation services grows in proportion to increases in population and GDP. Consumption of liquid fuels from nonpetroleum sources increases substantially over the projection period. Ethanol, which made up 3 percent of the motor gasoline pool in 2005, increases to approximately 8 percent of the total motor gasoline pool in 2030. Total production of liquid fuels from CTL plants, which are expected to commence operation in 2011, increases in the reference case to 440,000 barrels per day—equivalent to 7 percent of the total pool of distillate fuel—in 2030."

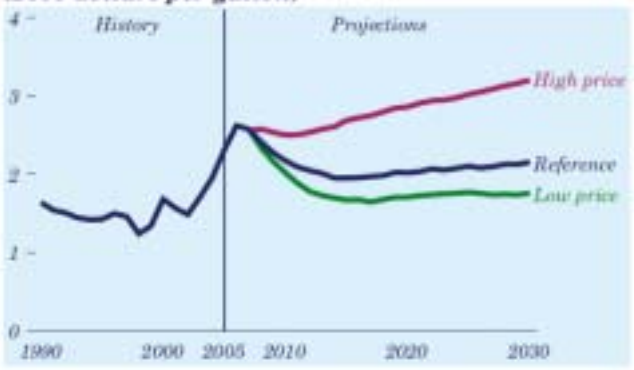
Figure 82. Liquid fuels consumption by sector, 1990-2030 (million barrels per day)



U.S. Motor Gasoline Prices Rise and Fall With Changes in World Oil Price

The retail prices of petroleum products largely follow changes in crude oil prices. In the reference case, the world oil price path reaches a low of about $50 per barrel in 2014, then increases slowly to about $59 in 2030 (2005 dollars). The reference case projections for average U.S. average motor gasoline prices follow the same trend, rising from $1.95 per gallon in 2014 to $2.15 in 2030.
In the high price case, with the price of imported crude oil projected to rise to more

Figure 84. Average U.S. delivered prices for motor gasoline, 1990-2030 (2005 dollars per gallon)



than $100 per barrel in 2030, the average price of U.S. motor gasoline follows the higher price path of world oil prices, increasing from $2.61 per gallon in 2014 to a high of $3.20 per gallon in 2030. In the low price case, gasoline prices decline to a low of $1.64 per gallon in 2017, increase slowly through the early 2020s, and level off at about $1.76 per gallon through 2030 (Figure 84). Because changes from the reference case assumptions for economic growth rates have less pronounced effects on projected motor gasoline prices than do changes in oil price assumptions, the projected average prices for U.S. motor gasoline in the high and low economic growth cases are close to those in the reference case. In the high growth case, the average gasoline price falls to a low of $2.00 per gallon in 2016, then rises to $2.21 per gallon in 2030. In the low growth case, the average price reaches a low of $1.92 per gallon in 2014, then rises to $2.08 per gallon in 2030."