

# IMPACTS OF RISING GASOLINE PRICES

## A DISCUSSION AND POLICY FRAMEWORK

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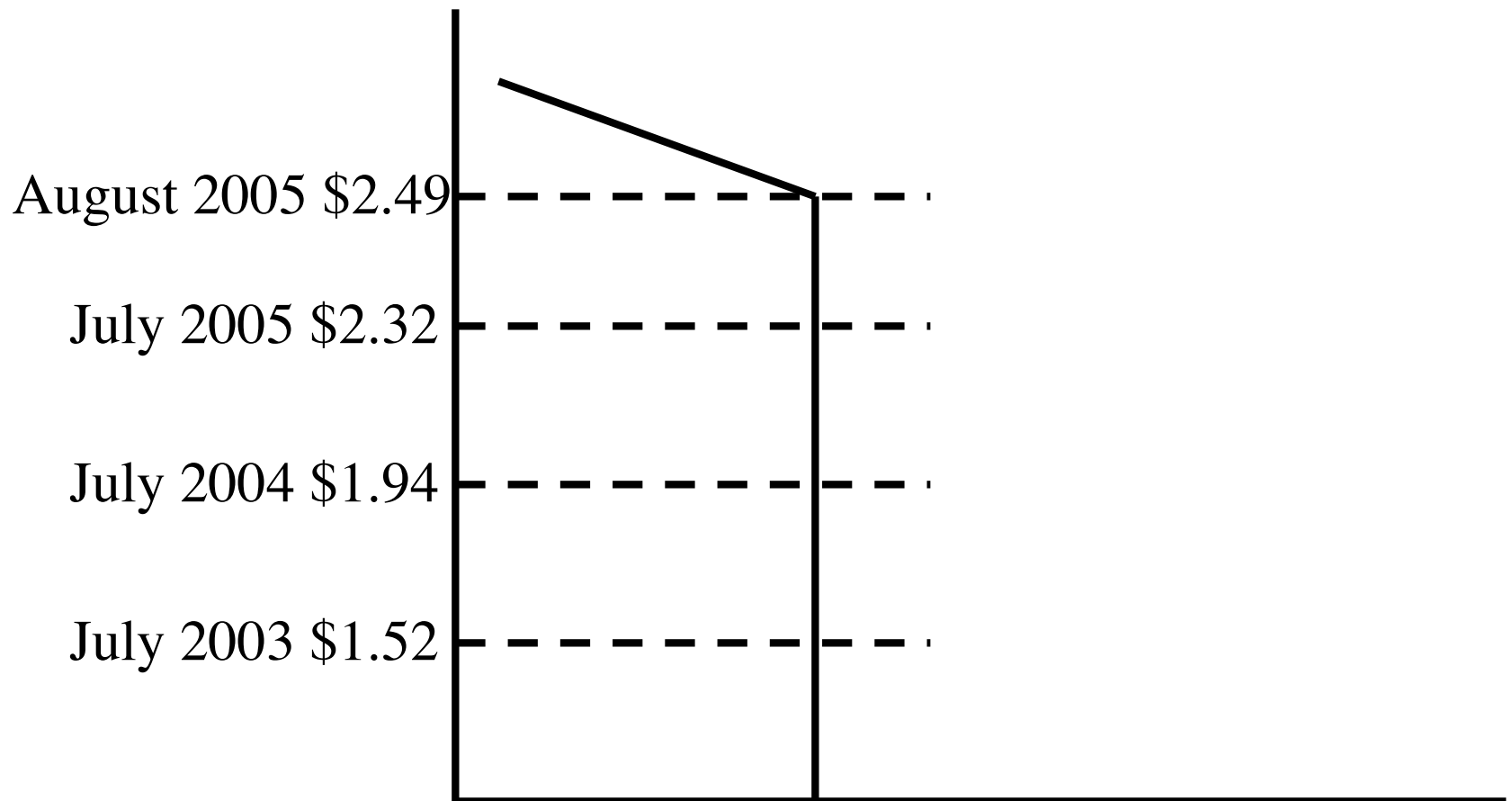
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Metropolitan Washington Council of Governments

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# Responsiveness to Price Changes

Price per Gallon Gasoline  
Unleaded Regular



Quantity Demanded of Energy

**THE ENIGMATIC EFFECTS OF RISING GASOLINE PRICES ON THE REGION OF METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS**

<p>Stylized Facts</p> <ol style="list-style-type: none"> <li>1. Gasoline prices have been increasing.</li> <li>2. Demand for gasoline has remained unchanged and in some cases has increased.</li> <li>3. Metro Ridership not up due to rising gasoline prices.</li> </ol>		
Major Economic Question	<p>If rising gasoline prices are not leading to a reduction in the quantity of gasoline consumed – total or average -- then what changes are taking place outside of the gasoline market to accommodate the increase in gasoline prices? In other words, what’s adjustment are taking place outside of the gasoline markets?</p>	
Key MWCOG Policy Enigma	<p>As long as gasoline supplies are adequate, policymakers will have to look to areas other than the reduction in demand for gasoline to understand the effects of rising gasoline prices on households, businesses, and governments in the region.</p>	
<p>If rising gasoline prices do not lead to a reduction in the demand for gasoline, then how are households and business adjusting to these higher prices?</p>	<p>Households are reducing their consumption of other goods &amp; services</p> <p>Businesses are reducing other costs – non-energy costs</p> <p>Business and households are replacing existing vehicles with more fuel-efficient vehicles.</p>	

<p>If rising gasoline prices do not lead to a reduction in the demand for gasoline, then where do regional policy makers look to find early warnings signals to respond to rising energy prices?</p>	<p>Declining sales and or sales tax receipts from small businesses.</p> <p>Negative effects on low-income consumers.</p> <p>Decreasing numbers of people working at individual businesses.</p> <p>Reduction in number of operating businesses that are dependent on gasoline.</p>	
<p>If rising gasoline prices do not lead to a reduction in the demand for gasoline, then what are the prospects of improving air quality through the reduction in the demand for gasoline?</p>	<p>Air quality improvements will not be realized because demand is not falling.</p>	

Trend	Economic Concept	Discussion	MWCOG Policy Challenge
<b>Gasoline Demand</b>			
<p>Rising gasoline does not lead to a reduction in the total or average miles driven.</p>	<p>Price Inelasticity of the Demand for Gasoline</p>	<p>Short Run: Rising prices of gasoline may not lead to a reduction in demand – in total or average miles driven. In such a situation, quantity demanded is considered to price inelastic. This may be particularly true in the short run. In the short-run, consumers may not be able to alter their “habits”, such as commuting patterns, the average miles per gallon of existing automobiles, or the location of services only available by car. So in the short-run there may be little responsiveness to rising gasoline prices.</p>	

Rising gasoline does not lead to a reduction in the total or average miles driven.	Price Inelasticity of the Demand for Gasoline	Long Run: Over time, there may be a change in “habits” – in consumption and driving patterns or in the types of vehicles purchased.. Over time consumers may be able to alter their “habits”, such as commuting patterns, the average miles per gallon of existing automobiles, or the location of services only available by car.	
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<b>Demand for Non-Gasoline Goods &amp; Services</b>				
Rising gasoline prices lead to a reduction in the demand for non-gasoline purchases.	<b>Substitution of Goods &amp; Services</b>	Rising gasoline prices may lead consumers to reduce their consumption of energy because of rising energy prices they may cut back on their spending on other items like food, entertainment or clothes.	This may be the major policy challenge, identifying the effects of rising gasoline on the reduction of consumption of other goods and services. In other words, the early warning signals for rising gasoline prices may show up in the non-gasoline sales.	
Rising gasoline prices do lead to a reduction in the gasoline because budgets can absorb significant increases prices.	<b>Substitution of Goods &amp; Services</b>	For the “average” household in the Southern Region, with an income of \$76,000 and spending \$1,400 a year on motor fuels,	The major policy challenge here is the effects of the rising gasoline on those with incomes below the average.	

Rising gasoline prices do lead to significant increases in overall inflation.	<b>Real income effects offset</b>	If energy prices are rising, but overall prices are relatively stable or falling, then the effects of rising prices may not have an effect on overall real purchasing power.	The policy challenge is to identify the areas of the economy where rising gasoline are having a negative effect.	
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<b>Non-Gasoline Company Prices, Costs &amp; Profits</b>				
Rising gasoline prices do lead to significant increases in overall inflation.	<b>Retail prices remain relatively constant causing internal company adjustments</b>		Due to globalization and other competitive forces, companies may not be able to raise prices, even if energy costs are increasing.	
<b>Overall Economic Activity</b>				
Rising gasoline prices do lead to reductions in economic output	<b>Energy efficiency/Energy Management</b>		With more housing, population, employment and sales. Economic growth is taking place without significant increases in energy, which suggests that rising gasoline prices may not have a dramatic effect on the economy as whole.	

<b>Overall Economic Activity</b>				
Rising gasoline prices have not lead to reductions in economic output	<b>Energy efficiency/Energy Management</b>		With more housing, population, employment and sales, economic growth is taking place without significant increases in energy consumption.	

Rising gasoline prices are causing increasing amount of money to flow out of the region	<b>Exporting Dollars from the Regional Economy</b>	With gasoline prices are rising and gasoline demand not falling, more and more money is exported out the local economy. Alternatively, more spending could be injected into the regional economy if spending were shifted away from gasoline purchases.	
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<b>POLICY RECOMMENDATIONS</b>	
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