

# THE ALTERNATIVE FUEL PRICE REPORT



This is the seventh issue of the Clean Cities Alternative Fuel Price Report, a quarterly newsletter keeping you up to date on the prices of alternative fuels in the U.S. and their relation to gasoline and diesel prices. This issue discusses prices that were gathered from Clean Cities coordinators and stakeholders during the weeks of July 15, July 22, and July 29, 2002, with comparisons to the prices in the previous Price Report, which were collected in April, 2002.

The prices contained within this report are meant to represent retail, at-the-pump sales prices for each fuel. In some cases, prices are collected from utilities or government facilities, where taxes are not included. In these instances, though government users may not be required to pay a tax on the fuel, standard federal and state taxes are added on and included in the prices presented herein.

## Gasoline and Diesel Prices

Regular grade gasoline averaged \$1.410 per gallon nationwide during the week of July 22, 2002, increasing only slightly since the previous Price Report (April 2002), as illustrated in the table to the right. Prices for the various regions of the country are also illustrated in this table. (A map of the regions is shown on the next page.) During the week of July 22, prices ranged from a low of \$1.315 in the Gulf Coast region to a high of \$1.541 on the West Coast. The price increased in four regions and decreased in three regions since April, 2002.

### Gasoline Price Trends

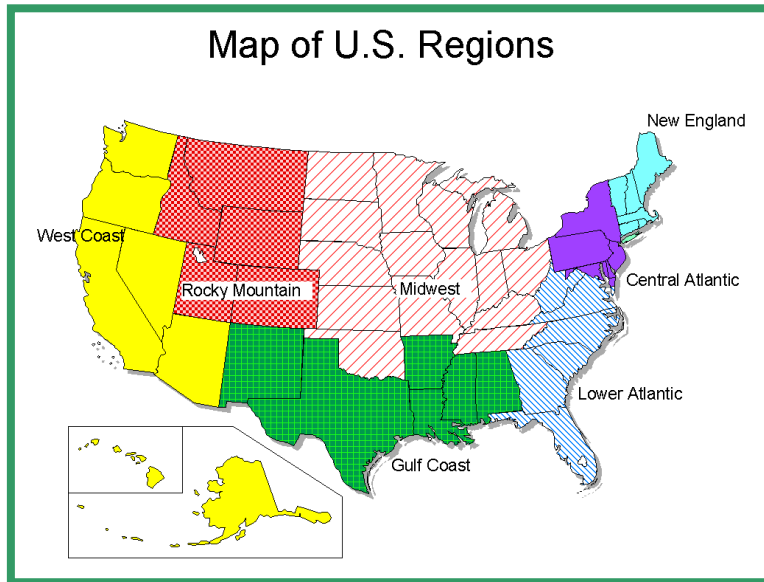
	Week of 4-15-02	Week of 7-22-02	Change in Price
New England	\$1.409	\$1.418	\$0.009
Central Atlantic	\$1.407	\$1.420	\$0.013
Lower Atlantic	\$1.358	\$1.319	(\$0.039)
Midwest	\$1.379	\$1.419	\$0.040
Gulf Coast	\$1.345	\$1.315	(\$0.030)
Rocky Mountain	\$1.390	\$1.455	\$0.065
West Coast	\$1.542	\$1.541	(\$0.001)
Nationwide Average	\$1.404	\$1.410	\$0.006

Diesel fuel averaged \$1.311 per gallon nationwide during the week of July 22, 2002. This represents a slight decrease of \$0.009 per gallon from the previous Price Report (April 2002). Prices for the various regions of the country are illustrated in the table to the right. During the week of July 22, diesel prices ranged from a low of \$1.273 in the Lower Atlantic region to a high of \$1.398 in the New England region. Between April and July, 2002, prices for diesel decreased in each region of the country except New England, where the price rose slightly.

### Diesel Price Trends

	Week of 4-15-02	Week of 7-22-02	Change in Price
New England	\$1.387	\$1.398	\$0.011
Central Atlantic	\$1.405	\$1.391	(\$0.014)
Lower Atlantic	\$1.278	\$1.273	(\$0.005)
Midwest	\$1.309	\$1.302	(\$0.007)
Gulf Coast	\$1.278	\$1.277	(\$0.001)
Rocky Mountain	\$1.357	\$1.334	(\$0.023)
West Coast	\$1.405	\$1.380	(\$0.025)
Nationwide Average	\$1.320	\$1.311	(\$0.009)

Gasoline and diesel prices shown are retail prices; they include federal, state, and local taxes. These prices were obtained from the Energy Information Administration.



### Natural Gas (CNG) Prices

Average natural gas (CNG) retail pump prices for the various regions of the country are illustrated in the accompanying table. Regional average CNG prices ranged from a low of \$0.93 per GGE in the Midwest region to a high of \$1.40 per GGE in New England during the week of July 22, 2002. Prices for CNG were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis.

**CNG Price Trends**

	Week of 4-15-02	Week of 7-22-02	Change in Price	Number of Respondents for 7-22-02	Approx. No. of Stations Represented
New England	\$1.21	\$1.40	\$0.19	1	1
Central Atlantic	\$1.10	\$1.04	(\$0.06)	4	17
Lower Atlantic	\$1.07	\$1.00	(\$0.07)	1	1
Midwest	\$1.05	\$0.93	(\$0.12)	3	4
Gulf Coast	\$0.88	\$1.20	\$0.32	2	2
Rocky Mountain	\$0.95	\$1.24	\$0.29	3	32
West Coast	\$1.32	\$1.22	(\$0.10)	9	26

### Propane Prices

Propane retail pump prices in the various regions of the country during the week of July 22, 2002 are illustrated in the accompanying table. Regional average propane prices ranged from a low of \$0.83 per gallon (\$1.11 per GGE) in the Lower Atlantic region to a high of \$1.93 per gallon (\$2.59 per GGE) in the West Coast region. Prices for propane were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis. (No prices were reported from the New England region.)

**Propane Price Trends**

	Week of 4-15-02	Week of 7-22-02	Change in Price	Number of Respondents for 7-22-02	Approx. No. of Stations Represented
New England	No Info	\$1.03	-	1	1
Central Atlantic	\$1.32	\$1.19	(\$0.13)	1	4
Lower Atlantic	\$1.60	\$0.83	(\$0.77)	2	13
Midwest	\$1.45	\$1.11	(\$0.34)	2	2
Gulf Coast	\$1.18	\$1.39	\$0.21	1	1
Rocky Mountain	\$1.11	\$1.16	\$0.05	3	8
West Coast	\$1.76	\$1.93*	\$0.17	8*	8*

\* Of the 8 propane stations on the West Coast represented in the average price above, 5 are in Hawaii. Thus, the average propane price in that region is strongly influenced by the price in Hawaii, which is higher than in most cities.

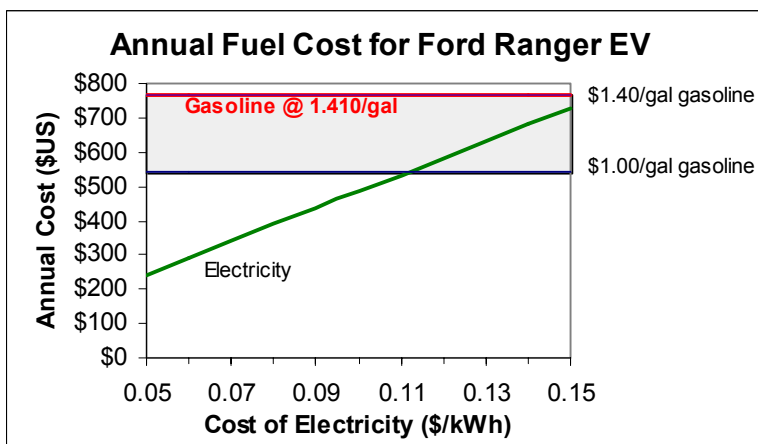
## Electricity Prices

Residential electricity prices in the United States ranged from 5¢ to 13¢ per kilowatt-hour in February 2002, according to the Energy Information Administration's Electric Power Monthly newsletter of May 2002. Commercial electricity rates ranged from 5¢ to 15¢ per kilowatt-hour. The Rocky Mountain region boasted the lowest electricity prices in both the residential and commercial sectors; the highest prices were in New England.

It is difficult to estimate regional fuel costs of electric vehicles with any precision because of the complexity of electricity pricing structures. However, one method for comparing electricity to conventional fuels is to calculate the fuel cost per year for sample vehicles. The table below illustrates three sample electric vehicles; the Ford Ranger, the Toyota RAV4, and the Nissan Altra<sup>1</sup>. Fuel costs per year were calculated based upon the EPA-published fuel economy ratings for gasoline vehicles (in MPG) and for electric vehicles (in kilowatt-hours per mile). Each vehicle was assumed to travel 12,000 miles per year. Fuel costs for electric vehicles were calculated from a range of prices, as shown below. The national average price of gasoline (\$1.410 per gallon) was used to calculate the annual fuel cost for gasoline vehicles. The gasoline counterpart to the Nissan Altra was the Nissan Altima, a midsize car that could serve the same fleet purpose as the midsize electric Altra.

**Annual Fuel Cost Comparison**

	Electric Vehicle (5¢/kWh)	Electric Vehicle (7.5¢/kWh)	Electric Vehicle (10¢/kWh)	Electric Vehicle (12.5¢/kWh)	Electric Vehicle (15¢/kWh)	Gasoline Vehicle
Ford Ranger	\$240	\$360	\$490	\$610	\$730	\$770
Toyota RAV4	\$180	\$270	\$360	\$450	\$540	\$650
Nissan Altra	\$170	\$250	\$330	\$410	\$500	\$680



The graph to the left shows the annual fuel cost of an electric Ford Ranger over a range of electricity prices from 5¢ to 15¢ per kilowatt-hour. At the national average gasoline price of \$1.410 per gallon, the fuel cost of an electric Ranger is less than that of its conventional counterpart for electricity price up to 15¢ per kilowatt-hour. If gasoline costs \$1.00 per gallon, the electric vehicle will not have a lower fuel cost than its conventional counterpart unless the electricity price is under 11¢ per kilowatt-hour.

## Ethanol (E85) Prices

For the week of July 22, 2002, E85 prices were obtained from the Lower Atlantic, Midwest, and Rocky Mountains regions. Regional average prices range from a low of \$1.29 per gallon (\$1.61 per GGE) in the Midwest region, to a high of \$1.47 per gallon (\$1.84 per GGE) in the Rocky Mountain region.<sup>2</sup> Prices for E85 were

**Ethanol Price Trends**

	Week of 4-15-02	Week of 7-22-02	Change in Price	Number of Respondents for 7-22-02	Approx. No. of Stations Represented
New England	No Info	No Info	-	0	0
Central Atlantic	\$1.49	No Info	-	0	0
Lower Atlantic	\$1.29	\$1.45	\$0.16	1	1
Midwest	\$1.37	\$1.29	(\$0.08)	2	9
Gulf Coast	No Info	No Info	-	0	0
Rocky Mountain	\$1.44	\$1.47	\$0.03	2	2
West Coast	No Info	No Info	-	0	0

<sup>1</sup> The 2002 Ford Ranger EV is compared to a 2002 Ford Ranger 2WD with 4 cylinders, 4-valve dual overhead cam, 2.3 liters, and automatic transmission. The 2002 Toyota RAV4 EV is compared to a 2002 Toyota RAV4 2WD with 4 cylinders, 2 liters, and automatic transmission. The 2000 Nissan Altra is compared to the 2002 Nissan Altima with 4 cylinders, 2.5 liters, and automatic transmission. Fuel economy data was not available for a 2002 Nissan Altra.

<sup>2</sup> Includes a 10% decrease in energy use per mile for E85 relative to gasoline.

collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis.

### Biodiesel (B20) Prices

Biodiesel prices for the week of July 22, 2002, are shown in the table to the right. The prices shown represent B20, a fuel composed of conventional diesel (80%) and biodiesel (20%). Regional average prices ranged from \$1.22 per gallon in the Lower Atlantic region to \$1.79 per gallon on the West Coast. Prices for biodiesel were collected from across the country by Clean Cities Coordinators, DOE Regional Office contacts, and fuel providers on a voluntary basis. (No prices were reported from areas in the Gulf Coast region.) Note that some biodiesel prices were given in terms of B100, a pure biodiesel fuel not blended with conventional diesel. In these cases, a representative diesel price from the corresponding region was assumed, and a B20 price was calculated.

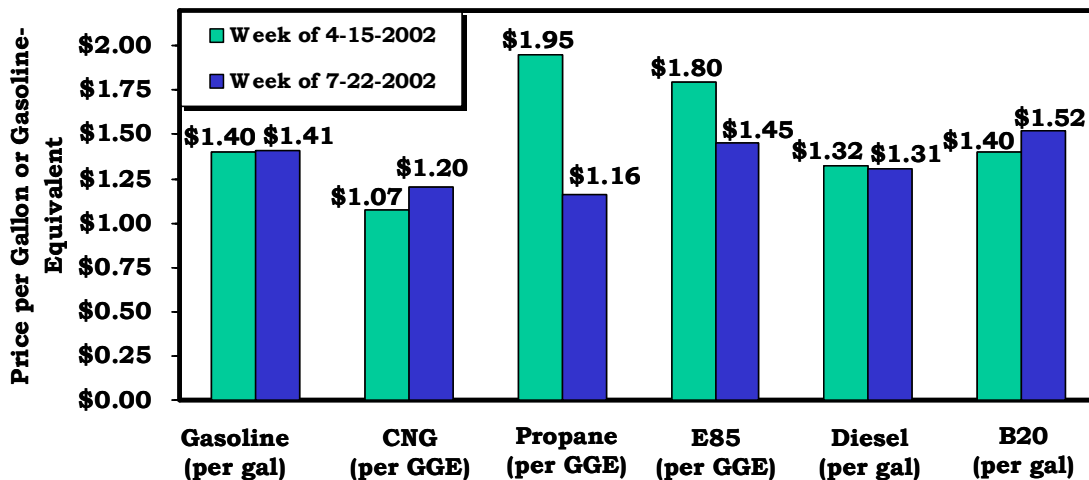
**Biodiesel Price Trends**

	Week of 4-15-02	Week of 7-22-02	Change in Price	Number of Respondents for 7-22-02	Approx. No. of Stations Represented
New England	No Info	\$1.58	-	1	1
Central Atlantic	No Info	\$1.39	-	1	1
Lower Atlantic	\$1.06	\$1.22	\$0.16	1	1
Midwest	\$1.25	\$1.23	(\$0.02)	3	3
Gulf Coast	No Info	No Info	-	0	0
Rocky Mountain	\$1.40	\$1.52	\$0.12	1	1
West Coast	\$1.66	\$1.79	\$0.13	2	2

### Summary

During the week of July 22, 2002, gasoline and diesel prices across the country were very similar to what they had been during April, 2002 (the time period of the previous Price Report). The reported prices of CNG decreased in four regions and increased in three regions. Propane prices also decreased in some regions and increased some regions. The graph below illustrates the relative prices of gasoline, diesel, CNG, propane, E85, and biodiesel.<sup>3</sup>

## Selected Fuel Prices in the U.S.



<sup>3</sup> Gasoline and diesel prices in the graph are national averages; CNG, propane, E85, and B20 prices are median values.



Do you have fuel prices you wish to share for inclusion in the next newsletter? To do so, contact:

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