RENEWABLE FUELS ASSOCIATION

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Ethanol Is Making Gasoline More Affordable as the Summer Driving Season Begins

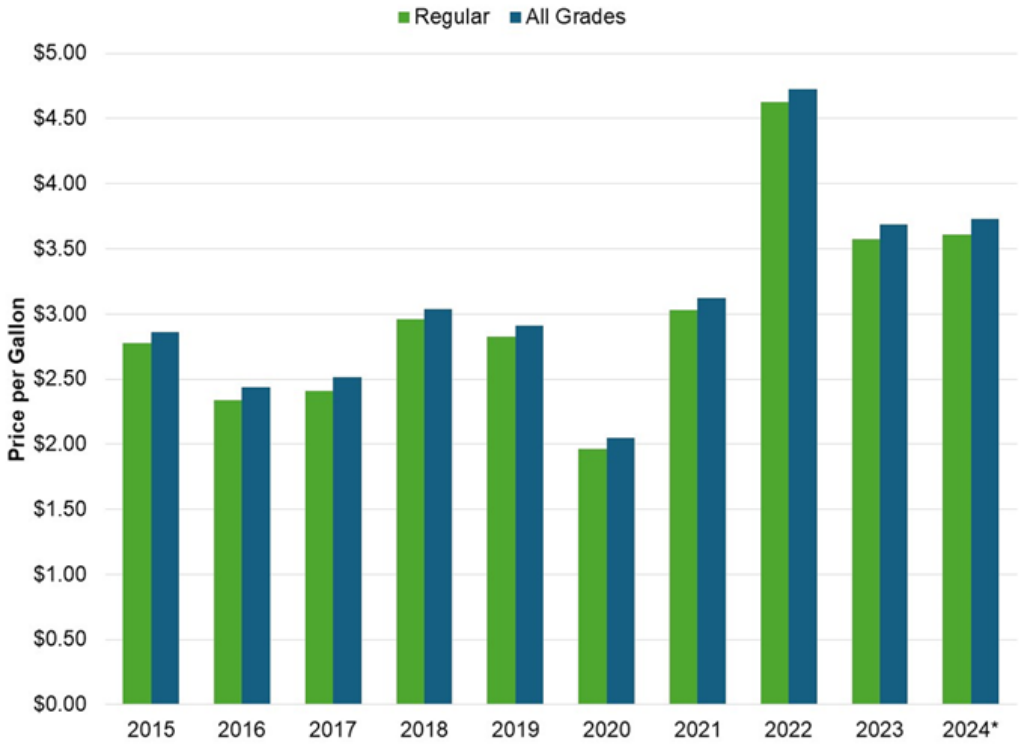
Drivers Are Expected to Save $112 Million Over Memorial Day Weekend

By Scott Richman, Chief Economist

Memorial Day is the unofficial start of summer, which is the busiest time of year for travel by automobile. According to AAA, "38.4 million people will travel by car over Memorial Day weekend, the highest number for that holiday since AAA began tracking in 2000."[1] This is 4% higher than last year and exceeds pre-pandemic levels.

Consumers are proving to be resilient despite high prices for many basic necessities, including gasoline. Retail gas prices are at their second-highest level for any Memorial Day for at least a decade, behind only 2022, when Russia invaded Ukraine (Figure 1). Importantly, prices would be even higher if not for the presence of ethanol in almost all gasoline sold in the U.S.

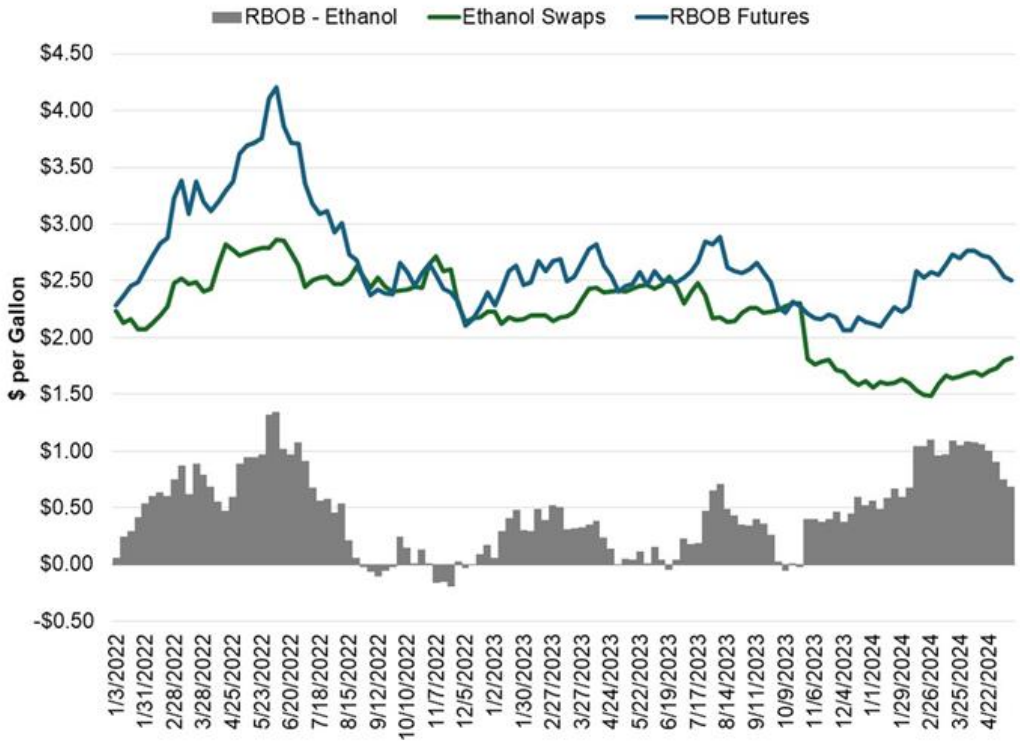
Figure 1: Retail Gasoline Prices During the Week of Memorial Day



Source: U.S. Energy Information Administration
* As of May 13, 2024

Over the last month, the national average wholesale price of ethanol has been as much as **$1.20 per gallon lower** than that of petroleum gasoline blendstock, according to OPIS, mirroring trends in the price relationship between ethanol swaps and gasoline blendstock (RBOB) futures traded on commodities exchanges (Figure 2). This translates to a lower cost of finished motor gasoline (i.e., blendstock plus ethanol) at the fuel distribution terminal.

Figure 2: Prices of Ethanol Swaps and RBOB Gasoline Futures



Source: CME via Barchart

According to a Renewable Fuels Association analysis of terminal "rack" prices published by the Nebraska Energy Office, in April the cost of E10 (a blend of 10% ethanol and 90% gasoline) was $0.33 per gallon less than gasoline that did not contain ethanol.[2] Assuming a similar retail gasoline price discount over Memorial Day weekend, ethanol will save drivers $112 million in fuel costs.[3]

The discount for E15 relative to ethanol-free gasoline was $0.40 per gallon in April. If all gasoline sold in the U.S. over Memorial Day weekend were E15, consumers would save an additional $12 million compared to E10, even after accounting for E15's slightly lower fuel economy.[4]

Moreover, the RFA analysis of Nebraska Energy Office data indicates that the discount for E10 versus ethanol-free gasoline has averaged $0.37 per gallon, or 13%, over the last 12 months. At the national level, this translates to annual consumer savings of $49 billion, or $377 per household. The E15 discount has been $0.44 per gallon over the same period, implying that consumers would have saved an additional $9 billion, or $70 per household, if all the gasoline sold in the U.S. had been E15.

Additionally, the estimates above reflect only the direct savings associated with ethanol. In other words, the estimates do not include additional savings associated with ethanol's displacement of crude oil, refined gasoline, and more expensive octane boosters. (Lower demand for these petroleum products leads to lower prices in aggregate.) A 2023 study by energy economists from the University of California-Berkeley and leading universities in Brazil and the Czech Republic determined that the use of ethanol in the U.S. fuel supply "decreases the price paid by U.S. drivers at the pump. We estimate the average discount per gallon to be $0.77 between 2019 and 2022 and averaged across our models."[5]

Likewise, ethanol helps make America more energy secure. Virtually all the ethanol used in the U.S. is produced domestically, and in 2023 the average ethanol content in the nation's gasoline pool hit a record 10.4 percent.

As consumers fill up their vehicles over the holiday, it's worth keeping these benefits in mind. More importantly, even as Americans enjoy the long weekend, they should take time to remember the meaning of Memorial Day.[6]

[1] **https://newsroom.aaa.com/2024/05/memorial-day/**
[2] RFA analysis of Nebraska Energy Office rack price **data** for Omaha. Takes into account the value of Renewable Fuel Standard RINs.
[3] Assumes 38.4 million travelers by automobile; 200 miles per trip (**Bureau of Transportation Statistics** and **The Vacationer**); average fuel economy of 22.8 miles per gallon (**Federal Highway Administration**); and $0.33/gal savings attributable to ethanol (RFA analysis of Nebraska Energy Office data).
[4] E15 had a 1.28% lower fuel efficiency than E10, on average, in tests of 20 vehicles conducted by the University of California, Riverside
[5] **https://ethanolrfa.org/media-and-news/category/news-releases/article/2023/02/new-university-study-ethanol-cuts-gas-prices-by-77-cents-per-gallon**
[6] **https://www.cem.va.gov/history/Memorial-Day-History.asp**