How Not to Save Money on Gasoline

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It would seem intuitive that with the high price of gasoline (close to $4.00 per gallon at this writing), that now it is more important than ever to shop around for the cheapest gas. But, intuition without calculation is often wrong as illustrated below.

Suppose you need to buy 12 gallons of gas and your car gets 25 mpg. You have the choice of a local station that sells gas at $3.95 or a station 4 miles out of your way that sells gas at the low price of $3.85. How much money will you save by making the trip? The round trip is 8 miles which will use 8/25 = 0.320 gallons. Thus, you will need to buy 12.32 gallons which will cost 12.32 x 3.85 = $47.43. The local option would cost 12 x 3.95 = $47.40. For this example it cost 3 cents more to save 10 cents per gallon and this does not include the wear on your car or the value of your time. Situations vary and the above method can be used to determine whether it is worthwhile to make a detour to save on gas.

Interestingly, if one runs the above example with gas at $1.60 and $1.50 respectively the savings by making the trip is 72 cents which may or may not be worth it. The conclusion is that the higher the price of gas the less you will save by going out of your way to buy the cheapest gas unless the distance is very short or the price difference is significant.