

Analysis of MPG

Running with Cruise Control set @ 70 mph

	Miles	MPG	Total Gallons
Uphill	200	3.00	66.67
Flat	600	6.00	100.00
Downhill	200	14.00	14.29
Totals	1000	5.53	180.95

Cost / Gallon \$ 4.00 \$ 723.81

"Free Footing" with target 61 mph

	Miles	MPG	Total Gallons
Uphill	200	4.00	50.00
Flat	600	7.00	85.71
Downhill	200	23.00	8.70
Totals	1000	6.92	144.41

Cost / Gallon \$ 4.00 \$ 577.64

Cost savings by "free footing" / M Miles \$ 146.17

Truck: 2003 Kenworth T2000 (1.1 million miles)

Engine: D15

Transmission: 13 speed

Max Boost: 28 lbs

At maximum boost in top gear mpg is 2.6 to 2.7.

The truck has enough power to climb most hills in top gear, sometimes it will require downshifting to 12th.

When "free footing" I allowed speed to decline to as little as 50 mph to top out on hills, with target mpg around 3.5 to 5.5 during the climbs (depending on the grade).

After topping out I would be very soft with acceleration or not apply any acceleration at all until there was a steep downgrade. Often I would simply coast. Acceleration would be kept at or above 6 mph.

The primary objective of free footing is to keep boost below 20 lbs at all times (about 3.5 mpg).