

CO2
 Grams/ton
 CO2 emissions from a gallon of gasoline =
Carbon/mile, DMU 0.08 Both use EPA conversion #'s from fuel per brake-horsepower-hour
Carbon/mile, diesel truck 8.80 to fuel per mile -1.15
 DMU with same #'s

	Emissions per mile	0.28571429
	CO2 grams	Nox -- not done
DMU	0.05	0.00
Truck	1.26	0.00

	Emissions per Ton of Cargo, per Mile
	CO2 grams Nox -- not done
Truck	0.44 0.00
DMU	0.06 0.00

	Emissions per Ton of Cargo, per Mile
	CO2 grams NMHC+Nox grams
1 ton food	
LA to Denver, truck	726 0
Times Less Co2 by Dmu	50.1010714
Percentage	
San Luis to Denver, DMU	14.49



Denver LA = 1650 miles <http://www.hm-usa.com/distance/usa.html>
 Denver Alamosa = 245 <http://www.flydenver.com/gt/mileage.asp>

<http://transcripts.cnn.com/TRANSCRIPTS/0305/12/se.14.html>
 Average US passger weight 195 lbs x 218 passenger on 2 level =

195	218	42510 lbs = cargo	Tons =	21.255
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6-8 Miles per gallon an average tractor-trailer truck gets fully loaded (7 mpg av.)
 2 mpg RangerXpress, 1.5 mpg for 2 level

Milage of Trucks & Cargo Carried

<http://www.knoxnews.com/news/2008/mar/11/transporting-gets-pricey/?printer=1/>

Sources:

www.epa.gov/oms/models/tier2/hdgas.pdf

EPA on truck emissions per mile

Heavy Duty Gas Vehicle

"= HDGV"

Milage of Trucks & Cargo Carried

<http://www.knoxnews.com/news/2008/mar/11/transporting-gets-pricey/?printer=1/>

<http://www.coloradorailcar.com/flyer.pdf>

[DMU Milage, etc](#)

EPA conversion numbers from fuel per brake-horsepower-hour to fuel per mile

www.epa.gov/oms/models/tier2/hdgas.pdf

EPA on truck emissions per mile

1.150 X pounds of fuel per brake-horsepower-hour

http://findarticles.com/p/articles/mi_m1215/is_5_203/ai_87022868

The Engines used by Colorado Rail Car

<http://www.dieselnet.com/standards/us/hd.php>

Basic info on types of diesel trucks, engines, etc

<http://www.epa.gov/OMS/climate/420f05001.htm>

CO2 emissions from a gallon of gasoline =

$2,421 \text{ grams} \times 0.99 \times (44/12) = 8,788 \text{ grams} = 8.8 \text{ kg/gallon} = 19.4 \text{ pounds/gallon}$

8.8 kg/gallon

