

# Resources and Information

## Milage of Typical Cars (Milage Lookup)



The vehicle above gets about 12 miles/gallon.



King's ride to work.

**Heat generated by burning various fuel sources:**

Fuel	Heat of Combustion kJ /g
Municipal waste	-12.7
Cellulose	-17.5
Pinewood	-21.2
Methanol	-22.7
Peat	-20.8
Bituminous coal	-28.3
Isooctane (a component of gasoline)	-47.8
Natural gas	-49.5

## Energy consumption for hot water use:

- Colby showers run at 2 gal/min
- Average "hot" water temperature: 105 °F
- Average ground water ("cold"): 55 °F
- Steam generation/water heating is approximately 85% efficient at the Colby steam plant

## Electricity generation/use:

- Electricity generation is approximately 60% efficient at the Colby steam plant

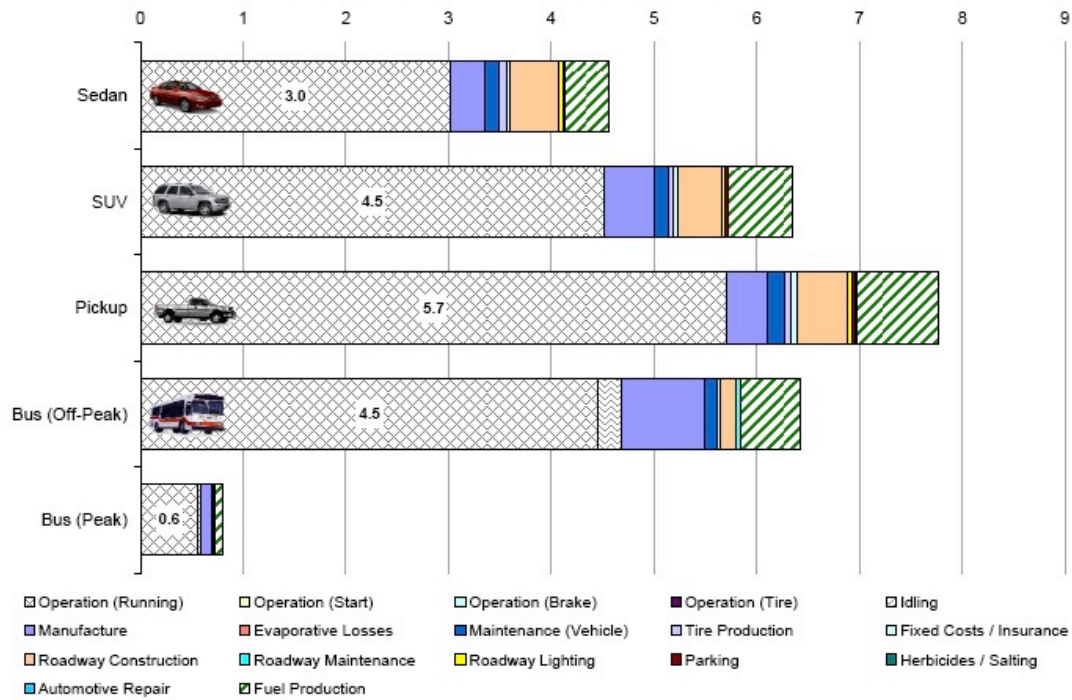
## Manufacturing: The Secret Cost

What is Life Cycle Analysis?

Life Cycle Analysis for Transportation (see selected figures below)

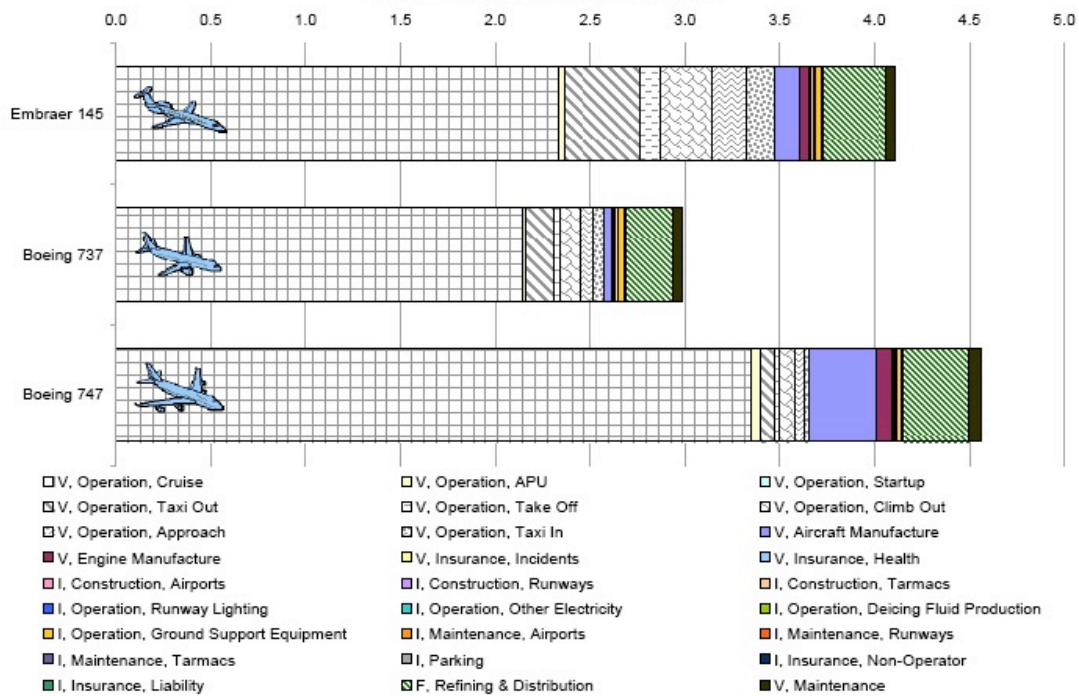
**Table 31 - Onroad energy inventory**

**Onroad Modes - Energy (MJ) per Passenger-Mile-Traveled**

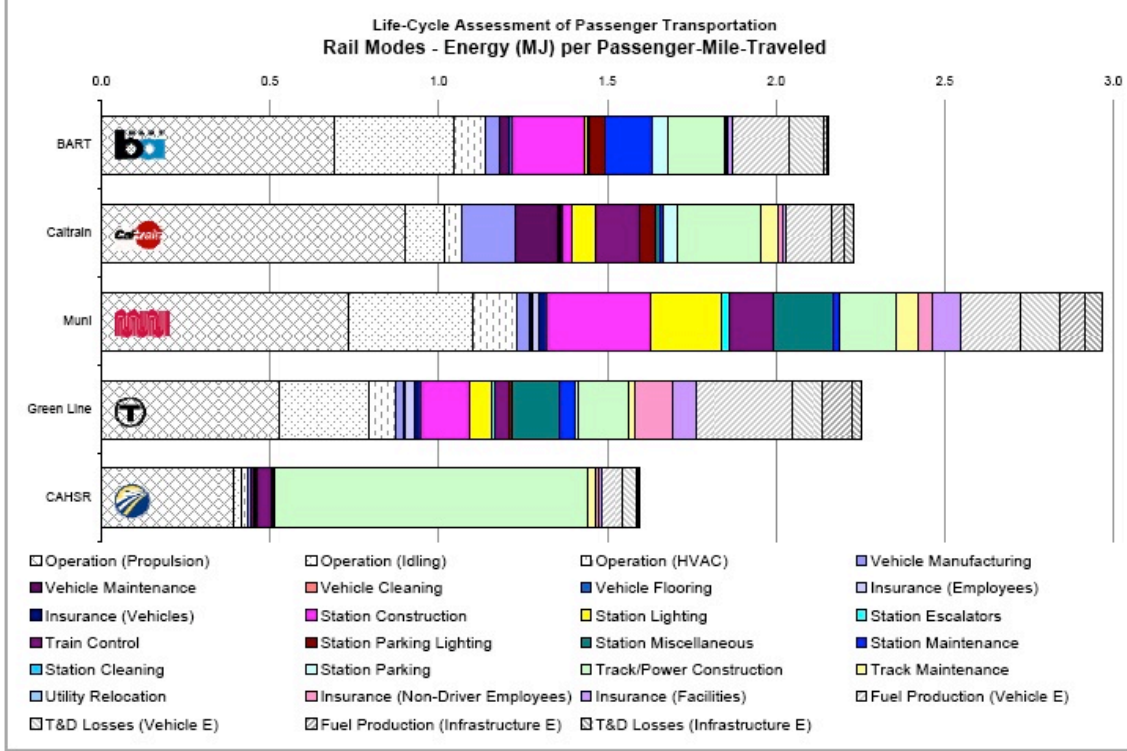


**Table 87 - Air energy inventory**

**Aircraft - Energy Consumption in MJ/PMT**

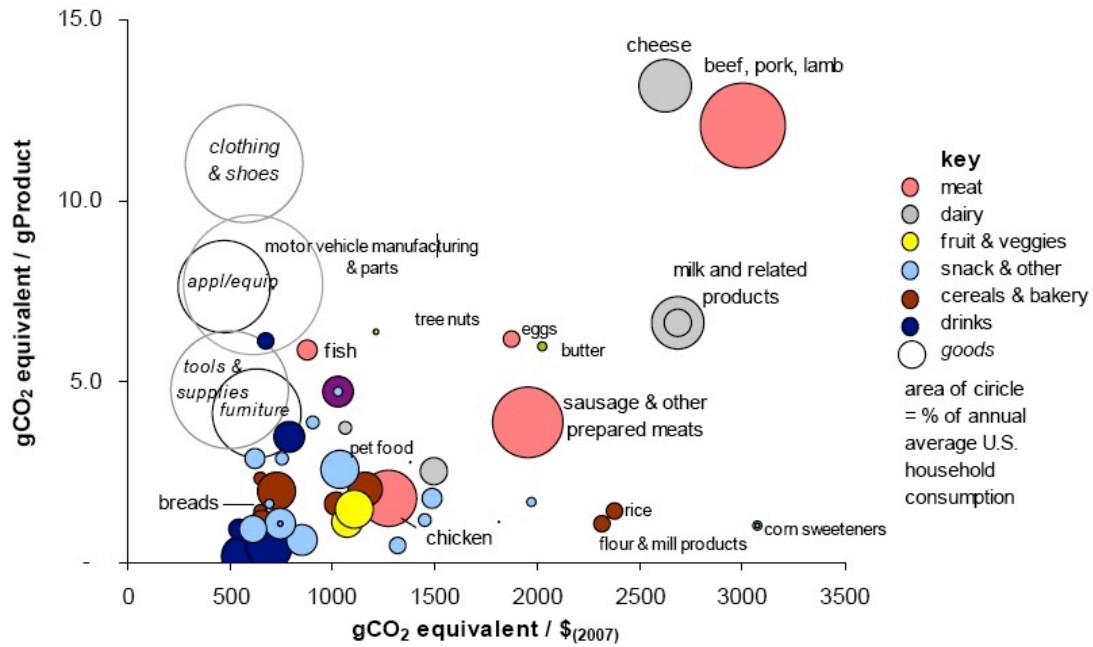


**Table 65 - Rail energy inventory**



## Life Cycle Analysis of Consumer Products

- Production of PET plastic (number 1 recyclable plastic) uses about 80MJ per kilogram of raw polymer, including feedstock and energy for production. ([Source](#))
- 81% of a computers energy consumption over the lifetime of the product is due to the energy costs of production! ([Link](#))
- [Cell Phone Life Cycle](#)
- [Life Cycle Assessment of Food, Goods, and Services](#)



**Figure 2. Cradle-to-consumer GHG emissions from consumer products, and specific food groups sold in the United States.** LEAPS provides cradle-to-consumer life cycle greenhouse gas emission factors for consumer goods in terms of grams of carbon dioxide equivalents (CO<sub>2</sub>e) per dollar spent by consumers and gCO<sub>2</sub>e per of unit of product (typically the mass measured in g or kg). The area of circles represents total annual emissions for the typical U.S. household for each item. Goods are aggregated into five major categories for illustrative purposes.

## Energy Conversions

- Check out this helpful site on [Unit Conversions](#).