

Vehicle costs fall into three categories: operating costs, ownership costs, and costs to the community and the environment.

USE THIS WORKSHEET TO FIGURE THE OPERATION \& OWNERSHIP COST OF YOUR CAR. RECORD YOUR RESULTS ON DASHBOARD REMINDER CARDS AND PLACE ONE IN EACH OF YOUR VEHICLES AS A GENTLE REMINDER TO DRIVE LESS.

| 1. FUEL COST. Fill the gas tank. Divide the cost of filling the tank by the <br> miles driven before the next fill-up. Do this for several tanks of gas and <br> average the results. This will give you the fuel cost to drive a mile. [Note, <br> the national average MPG for cars is (21.4), SUVs (17.)] |  |
| :--- | :--- | :--- |
| 2. DEPRECIATION COST. Subtract the likely resale or trade-in price of <br> your car from the price you paid for it. Divide by the number of miles you <br> are likely to drive it. This will give you an approximate depreciation cost <br> per mile. (The farther you drive the car, the lower this cost. If you like <br> numbers, work out the factors for inflation, loan costs, etc.) |  |
| 3. REPAIR/MAINTENANCE COSTS. Add up your maintenance and repair <br> costs for the past year or two. Divide by total mileage during that time. <br> This will give you cost per mile. (Try estimating the next few years, as <br> costs probably will go up with age of the car. More miles driven now will <br> bring your higher future costs sooner.) |  |
| 4. REGISTRATION AND INSURANCE. You pay these whether you drive or <br> not, so another mile doesn't raise these costs, though insurance rates <br> may be higher if you drive more miles. |  |
| 5. FINANCE CHARGES. Note interest charges if you borrowed money to <br> buy the vehicle. |  |
| 6. TOTAL OPERATING AND OWNERSHIP COST. Combine the per-mile <br> costs from \#1-5. This tells you what it costs to drive the car a mile. |  |

See reverse for Community Costs.

## COMMUNITY COSTS *

None of the above figures factor in the environmental, health, or social costs owning a car. According to the U.S. Environmental Protection Agency, the numbers of cars and trucks on the road and the miles they are driven have doubled in the last 20 years. The EPA estimates that vehicles are now driven two trillion miles each year in the United States, with the national average 11,904 miles per vehicle. Each of these automobiles has a heavy impact on the Earth including:

## Air Pollution

According to the Federal Highway Administration Transportation Air Quality: Selected Facts and Figures 2002, burning gasoline emits pollutants into the air we breathe including:

- 34\% Oxides of Nitrogen, the precursor to ground-level ozone (smog), which damages the respiratory system and injures plants
- $51 \%$ Carbon Monoxide (CO)
- 33\% of Carbon Dioxide (CO2), a primary contributor to global warming


## Water and Soil Contamination

Oil and other automotive fluids contaminate water and soil, and large tracts of land are lost as they are covered with asphalt to make roads and parking lots.

- A 1996 EPA survey of 693,905 river miles estimated that urban runoff was the leading source of impairment for $13 \%$ of the river miles that were impaired.
- One quart of motor oil can contaminate a million gallons of fresh water. The US EPA estimates 13.4 \% of used motor oil is illegally dumped, while another $10.1 \%$ is landfilled.


## Land Use

Cars require a lot of space. In urban areas, road surfaces cover about $1 / 5$ of all available land. Rural roads in 1997 covered an estimated 13,363 square miles of land, an area larger the state of Maryland. Urban roads covered an additional 4,012 square miles, an area larger than Delaware.

## Solid Waste

Over 11 million automobiles were scrapped in 1996. About 75\% of the scrapped material was recycled, while the remaining $25 \%$ was landfilled. In that same year, an estimated 266 million tires were scrapped, $76 \%$ of which was recovered and recycled, used as fuel, or exported to other countries. The 63 million tires that were not recovered were presumably dumped, adding to the approximately 800 million tires currently stockpiled in dumps around the country.

## Effects on Wildlife

It is estimated motor vehicles kill over a million animals in collisions every day in the US. Aug. 1, 2002, article in the Wall St. Journal, "In the Headlights: As Man and Beast Clash on Highways, Both Sides Lose" by James P. Sterba

[^0]
[^0]:    * Most of the data for this page came from two US Environmental Protection Agency reports, Indicators of the Environmental Impacts of Transportation: Highway, Rail, Aviation, and Maritime Transport and Indicators of the Environmental Impacts of Transportation: Updated Second Edition.

