DEPRECIATION: For most motorists, the largest single expense of owning a new or recent model automobile is depreciation. It is also the most difficult cost to determine. Depreciation means the purchase price of your car and its selling price. If all car sales were on a cash basis, and no trade-ins were involved, depreciation could be determined exactly. But such exchanges have become the exception rather than the rule. In recent years, about sixty percent of both new and used cars have been sold on an installment basis, and in an equal percentage of instances a trade-in was involved. The trade-in allowance complicates figuring depreciation.

As anyone who has shopped around for a new automobile knows, the trade-in value of your car depends on the kind and price of the vehicle you buy. Here is an example of how the same car might produce several depreciation figures:

1. Assume you paid $5,000 three years ago for your car, and today similar vehicles are being offered in the classified section of the local paper for $1,500, which indicates a depreciation of $3,500 for your auto, or an average of $500 per year. Thinking you would be in a better bargaining position if you offered cash for a new car, you try to sell your car to a used car dealer. He offers you the wholesale price, say $1,200, which means your car has depreciated at an average rate of $600 per year.

2. However, before making the deal, you shop at several new car dealers. One of them, with whom you are on friendly terms, is interested in your car at $4,200 fully equipped and offers you $2,400 for your car. That sounds much better; your car has depreciated only $600 in three years. Another dealer, who sells a standard model of another make with no optional equipment for $2,200, will give you only $1,500 for the old car—just $100 over the wholesale price.

Looking back over your figures, you find that your car has depreciated at an average annual rate of either $500, $600, $900, 1,200, or 1,250—depending on how and where you dispose of it. Obviously, there is no pat formula for determining depreciation. However, one method the average motorist might use to figure depreciation is to determine the cash outlay necessary to replace his car with a new one in the same price class and with the same optional equipment. (It is interesting to note that most business firms owning automobiles depreciate them at 25 percent each year for tax purposes, but a private motorist would probably find this a very unrealistic figure to use on a year-to-year basis.)

To summarize, the private motorist who wishes to compute the cost of operating his car must calculate two types of expenses—saving costs and fixed costs. Running costs include gasoline, oil, tires, maintenance, and insurance. Fixed costs include: licenses, insurance, taxes, and depreciation.

Car allowances:

To compensate employees who use their cars on company business, several methods are used for computing the allowance are used, depending on the circumstances, such as if the vehicle is used comparatively infrequently, in rural or miles are driven. This chart shows hypothetical methods of compensation generally used:

FLAT MILEAGE ALLOWANCE: A flat mileage allowance of so many cents per mile is usually paid by companies to employees who use their private automobiles occasionally for company business. During the post-war years, most companies raised the reimbursement rate. Today, the prevailing rate is eight cents per mile—up one full cent from two years ago. Here are the latest rates paid by companies according to the Dartmouth Corporation, a Chicago management consulting firm, which makes annual surveys of automobile operation compensation:

<table>
<thead>
<tr>
<th>Percentage of companies surveyed</th>
<th>Pay 6 cents per mile</th>
<th>Pay 7 cents per mile</th>
<th>Pay 8 cents per mile</th>
<th>Pay 9 cents per mile</th>
<th>Pay 10 cents per mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>3</td>
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<td>35</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>3</td>
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<tr>
<td>45</td>
<td>5</td>
<td>8</td>
<td>5</td>
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<td>55</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>65</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>75</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The principal advantage of the flat mileage allowance system is its simplicity. It is readily understood by the car owner and involves a minimum of bookkeeping and office control. The big disadvantage is that it frequently results in over-payment or under-payment compared to actual costs.

WEEKLY ALLOWANCES: A compensation schedule based on the number of miles driven per week and the type of driving has also been developed by the Dartmouth Corporation. It more accurately reflects operating costs, but it can be applied only to employees who travel more or less constantly on company business. More information may be obtained from the Dartmouth Corporation.

Combination allowances:

Ransohoff and Company has developed a service known as the Ransohoff Plan of Automobile Standard Allowance now used by over 200 companies in the United States, Canada and Mexico and their combined sales totaling in excess of 20,000 drivers. Selling under this service receive individual allowance schedules which are the basis for accurate reimbursing for business use by employers and for mileage reimbursement for all business use by employers and for business related personal use.

<table>
<thead>
<tr>
<th>Number of miles driven per week</th>
<th>Per mile at 6 cents per mile</th>
<th>Per mile at 7 cents per mile</th>
<th>Per mile at 8 cents per mile</th>
<th>Per mile at 9 cents per mile</th>
<th>Per mile at 10 cents per mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000</td>
<td>6 cents per mile</td>
<td>7 cents per mile</td>
<td>8 cents per mile</td>
<td>9 cents per mile</td>
<td>10 cents per mile</td>
</tr>
<tr>
<td>3,770</td>
<td>5 cents per mile</td>
<td>6 cents per mile</td>
<td>7 cents per mile</td>
<td>8 cents per mile</td>
<td>9 cents per mile</td>
</tr>
<tr>
<td>1,000</td>
<td>3 cents per mile</td>
<td>4 cents per mile</td>
<td>5 cents per mile</td>
<td>6 cents per mile</td>
<td>7 cents per mile</td>
</tr>
<tr>
<td>400</td>
<td>2 cents per mile</td>
<td>3 cents per mile</td>
<td>4 cents per mile</td>
<td>5 cents per mile</td>
<td>6 cents per mile</td>
</tr>
</tbody>
</table>

In contrast, a car driver twice as far during the same period of time would cost:

Ransohoff and Company has developed a service known as the Ransohoff Plan of Automobile Standard Allowance now used by over 200 companies in the United States, Canada and Mexico and their combined sales totaling in excess of 20,000 drivers. Selling under this service receive individual allowance schedules which are the basis for accurate reimbursing for business use by employers and for business related personal use.
Overall vacation costs are entirely a matter of individual preference and income. The scope of this publication precludes advising where to go, or how much to spend once the traveler has arrived at the vacation spot of his choice. However, it may be helpful to know the approximate costs of motor travel on roads.

The AAA suggests a vacation budget of close to $36 per day for two people driving 300 miles each day. A breakdown of the daily budget for a couple shows they will spend approximately $9.00 on car operation expenses (petrol, oil, tires, and maintenance), $11.00 on meals, $9.00 on lodging, $1.50 on tips, $2.00 for admission, amusement and tolls along the route, and $4.50 for incidentals, souvenirs and emergencies.

The allowance for driving costs is based on three costs: a mile for gas and oil at the recommended daily maximum distance of 300 miles. Thus, for a trip of 1,000 miles, $30 would be needed to cover car expenses. No provision has been made for maintenance or tire costs as it is assumed that the car is in top condition before the trip is started.

The cost of meals is figured on a per-person basis of $1.00 for breakfast, $1.50 for lunch and $2.50 for dinner. Obviously, one could get by for less, or spend considerably more.

For accommodations, a couple can plan on spending about $9.00 a night, although they might spend anywhere from $6.00 to $13.00 for reasonable sleeping facilities, depending on type and locality. If traveling with children, you may find some hotels and motor courts will set up a cot or two in your room at a slight extra charge. Admissions, amusement and tolls will cost about $1.00 a day for each member of the family in visiting such places as caverns, historic scenes and scenic attractions along the road. Allowance for miscellaneous refreshments and incidentals should be covered by the 15 cent emergency food fund carried with you.

As a final aid in planning vacation trips, the AAA offers the following tips on stretching your vacation dollar:
1. Drive during the early part of the day and stop in the late afternoon with plenty of time to find the type of accommodations you want at a price you can afford to pay.
2. Visit travel attractions that offer something worthwhile for your money—avoid tourist traps.
3. If possible plan your trip in the spring or autumn—avoid peak travel seasons when roads and overnight accommodations are crowded and prices high.
4. Contact your local AAA travel counselor for specific advice and guidance on getting the most for your money.

The address of the research firms are:
Durham Corporation
4444 Riverside Avenue
Chicago 40, Illinois

Rambler and Company
722 South Michigan Avenue
Chicago 5, Illinois

1957

### Cost of Driving

The cost of owning and operating an automobile is a major expense for most of America's middle-income car owners. For some, it might be their largest single expense, for many it is second only to food and housing. In 1956 alone, more than sixty billion dollars were spent on car purchases, automotive taxes, gasoline, parts, accessories, and car insurance. How much more billions were spent on service, repairs and incidentals is almost impossible to estimate.

The average motorist has only a passing interest in what all motorists spend; rather, he wants to know how much it costs him to drive his car. Unfortunately, this is a difficult question to answer, for almost every car operating cost item is variable.

While it is possible to compute mean estimates, average costs are merely indicators, and many adjustments must be made to arrive at a reasonable calculation for an individual case. In this report, three methods used by private companies to compensate employees for use of personal automobiles are outlined, and in some cases these methods may be applied by individuals to determine approximate costs of driving. However, for accurate determination of car costs, it is best to use personal records.

### Itemizing car expenses

Car costs may be broken down into two broad categories, variable and fixed. Variable items are directly related to the number of miles driven, how hard the car is used, and how much is spent on service and repair. Fixed costs, though they may vary from car to car, and from place to place, are generally established by agencies and business conditions beyond the control of the motorist, and they change little with the amount and type of driving. Fixed costs generally include insurance, taxes (license and registration fees, use and property taxes), and depreciation.

### Variable costs

**GASOLINE AND OIL:** The cost of fuel and lubricant varies immensely: even for the same make and model it may vary by as much as 50 percent. Much depends on how a car is driven, the type of driving (city, flat country, mountains), the loads carried, and the general condition of the vehicle. Even tire pressure affects gasoline mileage. Consumption is equally variable from car to car. On a trip where fairly high speeds are maintained, a car in good condition may require a quart of oil every 500 miles. The same car driven in slow-moving city traffic might use virtually no oil in a thousand or even two thousand miles.

The best way to determine your gas and oil operating costs is to develop your own figures. Here's an easy way to do it: Fill your gas tank until you can see the gas in the filler neck, then record the mileage on your odometer. Drive normally until the tank is nearly empty; then have it refilled to the same point as when you started. Divide the number of miles driven since the test started by the number of gallons required to refuel the tank: the result is the number of miles per gallon you are getting from your car. If you normally drive in the city, don't wait until you go on a trip to make the test. Mileage on the open highway, of course, is not fair to compare under the conditions which you normally encounter. Repeat the test several times a year if you want greater accuracy. You can test for oil consumption in the same way, but remember to add the complete cost of an oil change each time you have it done.

Here is an example of how one motorist might figure the cost of gas used for one year's driving:

#### Gasoline consumption:

Tank filled — odometer reading 9961.8 (miles)

Tank refilled — odometer reading 10171.4

9961.8 — 10171.4 = 1999.8

Miles driven 207.6

Gallons to refill tank 16.3

Miles per gallon = Miles driven / Gallons used = 207.6 / 16.3 = 12.74

Gallons used = 16.3

Miles driven during year = 9.269

Gallons used during year = 9.269 / 12.74 = 0.73

Cost per gallon $0.15

Cost per year for gasoline = 0.35 X 73.0 = $26.62

#### Oil consumption:

One change on 3,000 miles
Oil capacity: 5 quarts
Cost per qt. = 45 cents

Cost per change = 5 X 0.45 = $2.25

Oil added between changes 2 qts.

Total cost for oil: $2.25 X 3 = $6.75 + 2.20 = $8.95