state registration fees, were as follows: standard, \$1,365.00; intermediate, \$1,177.00, and compact \$1,040.00.

Thus, on the basis of 10,000 miles driven annually, total annual costs for the intermediate would be \$218.00 less than for the standard, and for the compact, \$430.00 lower.

Vacation expenditures

Vacation expenditures depend to a great degree on personal preferences, regions traveled and individual means.

While en route by passenger car, two people can travel comfortably on a daily budget of \$52.00 for necessity spending. This figure is based on 300 miles of daily travel, with the car averaging thirteen miles per gallon of gasoline.

AAA breaks down the budget as follows: \$18.00 for meals; \$19.00 for lodging; \$10.00 for gas and oil; \$5.00 for tips and miscellaneous. In addition, there will be expenditures for souvenirs, amusements, admissions to places of interest, recreation, retail purchases and so on. It's wise also to include in the vacation budget a contingency fund for emergencies of one kind or another. Turnpike tolls, depending on the routing, also would be an expense.

AAA points out that the \$19.00 average for lodging would be less in resort areas during the off-season. By picnicking along the way, meal costs could be reduced.

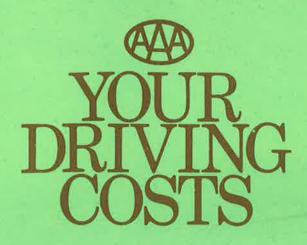
Based on the \$52.00 daily average for two, the motorist's vacation dollar is divided approximately as follows: 35 per cent for food; 20 per cent for gas and oil; 36 per cent for lodging; and 9 per cent for tips and miscellaneous.

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 you 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. Consult your local AAA travel counselor for specific advice and guidance on getting the most for your money.

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HOW TO FIGURE:

- Operating costs for private passenger cars
- Allowances for cars used on company business
- Vacation travel costs

PLUS: A SPECIAL REPORT ON COMPACTS

AMERICAN AUTOMOBILE ASSOCIATION 8111 GATEHOUSE RD. FALLS CHURCH, VIRGINIA 22042



Cost of driving

The cost of owning and operating an automobile is a major expense for America's more than 100 million car owners. For some, it might be their largest single expense, for many it is second only to food and housing. Annually, more than 150 billion dollars are spent on car purchases, automotive taxes, gasoline, parts, accessories, and car insurance. How many more billions are spent on service, repairs and incidentals is almost impossible to estimate.

Many a 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 indicative, 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 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 tremendously. 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. Oil consumption is equally variable from car to car, and it is a good idea to have the oil level checked whenever gasoline is purchased.

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, and 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 refill 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 is usually better than in traffic. Make the test under the conditions which you normally encounter. Repeat the test several times a year if you want great 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. The increasing use of credit cards has made this chore much easier for many motorists.

MAINTENANCE: This cost varies from car to car even more than the cost per mile of gas and oil. During the first year of a new car's life, it may amount to no more than the cost of the maintenance program required by the manufacturer to keep the warranty valid. At the other extreme, some motorists may find it necessary to spend hundreds of dollars for mechanical repairs, replacement of parts and repair of body damage. Money saved by neglecting needed repairs will usually show up in the form of increased depreciation. This can be prevented by having a motor tune-up and adjustment twice a year-preferably in the spring and fall. The only way to determine accurately the cost of maintenance is to keep a record of all expenditures. However, since most motorists don't want to bother with this chore, they can use the figure on page 6. But it should be noted that this figure is an average developed for standard cars in the medium price field and represents only routine maintenance.

TIRES: Tire costs, like fuel costs, also vary from car to car. The type of driving and the type of driver are both factors.

High speeds, warm climates, hard cornering, rapid acceleration and quick stops all contribute to fast tire wear and increased costs of car operation. A conservative motorist who buys a new car each year may spend nothing extra on tires. If the tires on the car he trades are in good condition, he will lose nothing in added depreciation. On the other hand, the motorist who must replace a set of tires every year may spend from \$80 to \$300, depending on the size and type of tires he chooses. The average cost per mile for tires is slightly more than one-half cent.

Fixed costs

INSURANCE: The majority of motorists carry insurance, and the cost of premiums is definitely a part of total operating costs. There is nothing uniform about insurance premiums; they are listed under fixed costs because they do not fluctuate with the number of miles driven. To determine insurance costs simply add the premiums of all policies you carry that are directly related to car operation, such as public liability, property damage, collision, fire and theft, and medical payment.

TAXES: Taxes paid regularly, such as property and use taxes, are fixed annual costs. Sales or excise taxes which are paid only when the vehicle is bought, should be considered a part of the total purchase price, but they should not be prorated in calculating annual operating costs.

LICENSE AND REGISTRATION FEES: These fees should be treated in the same way as taxes. No two states use exactly the same schedules. Merely determine what you spend for license and registration fees and add the total to your fixed costs.

DEPRECIATION: For most motorists, the largest expense of owning a new or recent model automobile is depreciation. It is also the most difficult to determine. Depreciation is merely the difference between 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 easily. 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 auto 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:

Assuming you paid \$3,000 three years ago for your car, today similar vehicles are being offered in the classified section of the local paper for \$1,500. This indicates a depreciation of \$1,500 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. However, before making the deal, you shop at several new car agencies. One has a car listed at \$4,200 fully equipped and offers you \$2,400 for your car in trade. 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 \$2,900 will give you only \$1,300 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, \$200 and \$566—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.

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

Car allowances

To compensate employees who use their cars on company business, a wide number of methods for computing the allowances are used:

FLAT MILEAGE ALLOWANCE: Many companies give a flat allowance, ranging from 10¢ to 12¢ per mile, plus allowances for certain other charges, such as insurance, tolls, parking, etc. However, there is a decided trend toward leasing cars rather than making use of employees' vehicles.

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: Some companies use compensation schedules based on the number of miles driven per week and the type of driving. It more accurately reflects operating costs, but it can be applied only to cars operated more or less constantly on company business.

STANDARD ALLOWANCES: Runzheimer and Company, Runzheimer Park, Rochester, Wisconsin, 53167, provides a service known as the Runzheimer Plan of Automobile Standard Allowances. Their service is now used by more than 400 companies in the United States and Canada and their combined sales fleets cover over 80,000 drivers. Salesmen under this service receive individual allowance schedules which are the basis for accurate reimbursement of car expenses to the drivers by their companies.

Companies operating fleets of 10 or more cars should contact Runzheimer directly if they wish to learn of the greater accuracy that individual schedules provide and which the cost chart shown below cannot offer. Companies with sales fleets of under 10 cars may find the national averages in this chart a helpful guide with their car allowance program.

Details of car costs

Following is a breakdown of the national average cost figures computed by Runzheimer and Company for a 1973 Chevrolet, 8 cylinder, Impala 4 door hardtop equipped with standard accessories (automatic transmission, power steering, power disc brakes) and radio.

| Variable Costs Average | је р | er mile |
|---|----------|---------|
| Gasoline and oil | 3.35 | cents |
| Maintenance | .78 | 3 cents |
| Tires | .62 | 2 cents |
| | 4.75 | cents |
| Fixed Costs | Annually | |
| Fire and theft insurance | | |
| (\$50 Ded.) | \$ | 45.00 |
| \$100 Ded. collision insurance | | 143.00 |
| Property damage and liability | | |
| (\$100 300 25M) | | 179.00 |
| License and registration | | 28.00 |
| Depreciation | | 777.00 |
| | \$1 | ,172.00 |
| (or \$3.21 per day) | | |
| For air conditioning add .15 cents per mile | | |

For mileage in excess of 15,000 annually, an additional depreciation allowance of \$25.00 per thousand should be added to the fixed costs.

The gas and oil amount reflects the purchase of low-lead gasoline in accordance with the manufacturer's recommendations.

The depreciation amount of \$777.00 is an average annual figure predicated on car trade-in value of a full size Chevrolet at the end of four years or 60,000 miles, whichever point occurs first. This is the approximate duration of the most economical service period—the period during which the car is expected to deliver the greatest over-all cost economy.

Using the above figures, it is fairly easy to compute annual driving costs, and it can be shown that the amount of driving has a direct relationship to the cost per mile of driving. For example, the average motorist drives about 10,000 miles a year, which results in the following approximate costs.

| 10,000 miles at 4.75 cents | \$ 475.00 |
|----------------------------|--------------|
| 365 days at \$3.21 | 1,172.00 |
| | \$1,647.00 |
| (or 16.5 cen | ts per mile) |

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

| 20,000 miles at 4.75 cents | \$ 950.00 |
|------------------------------|-----------|
| 365 days at \$3.21 | 1,172.00 |
| 5,000 miles at \$25/Thousand | 125.00 |

\$2,247.00

(or 11.2 cents per mile)

ECONOMY OF COMPACTS: The pocketbook appeal of compact cars—both domestic and foreign—is revealed by these special figures developed by Runzheimer and Company for 1973 models.

The figures below apply only to the Chicago area with 50 to 80 per cent stop-and-go driving. However, they are indicative of the cost ratio between standard and compact makes throughout the nation.

In the Chicago area, total per mile cost for an eight cylinder standard size car equipped with radio, automatic transmission, power steering and power disc brakes was computed at 5.25 cents; for an intermediate size car similarly equipped at 4.95 cents and for a compact equipped with—radio and automatic transmission at 4.20 cents.

The annual fixed costs, including depreciation, \$50 deductible fire and theft, \$100 deductible collision, \$100/300M public liability, \$25M property damage, city and

and 20 cents per day