

Oregon has been a pioneer in cost-based road taxation since it adopted the gasoline tax as a primary source of road funding in 1919. The current system of road finance is based squarely on the principle that those who use the roads should help pay for building and repairing them. This is accomplished through a three-tier financing system, which consists of registration fees, fuel taxes and weight-mile taxes. Fixed costs are supposed to be covered by the registration fees paid for various vehicles. Also, road users are expected to pay for road improvements and maintenance in proportion to the costs they impose. This is accomplished through gasoline and diesel fuel taxes for most vehicles, and the weight-mile tax for heavier vehicles. The weight-mile tax is the key difference between the Oregon system and the systems used by most other states.

Most states rely on registration fees and fuel taxes to generate funding for roads. Operators of heavy trucks prefer this system, because it typically results in their paying only a fraction of the cost they impose on the roads. Their use of the roads is subsidized by automobiles and lighter trucks. The latest federal study, conducted in 1997, concluded that heavy trucks on average pay about half of their share of the cost of maintaining the road system and that other classes of vehicles make up the difference. In Oregon, heavy trucks pay their full share of the state road costs.

Economic efficiency is more likely to result when vehicles pay taxes proportional to the cost that they generate by using the road system. This is because a decision-maker will take cost into account in determining whether a particular trip is worthwhile and whether the appropriate equipment is used. Otherwise, the cost of using roads is likely to be ignored, and the resulting decisions may impose costs that exceed their benefits. High fuel taxes encourage conservation of fuel, which creates an incentive to use fewer axles in order to conserve fuel by minimizing friction. But this increases road damage by increasing the weight per axle. Other forms of road financing can create inefficient incentives with respect to road damage. In addition, failure to accurately price the use of roads for heavy vehicles may divert commodities to trucks that could be moved more efficiently by rail or other forms of transportation.

OREGON'S WEIGHT-MILE TAX

by Anthony Ruffolo

At the end of the 1999 session, the Oregon Legislature approved House Bill 2082, a proposal to increase the gas tax and to change the way the state taxes heavy vehicles by eliminating the weight-mile tax. AAA collected enough signatures to refer the issue to the voters (as Measure 82), and voters defeated the ballot measure in May 2000 by about a seven-to-one ratio. While many Oregonians voted against Measure 82 because they were not in favor of paying higher taxes on gasoline, some were also concerned about the change in tax policy. Most motorists are probably unaware of Oregon's weight-mile tax, but a variety of trucking interests have been lobbying heavily for years to get the legislature to replace it. What is a weight-mile tax, and why should you care how Oregon taxes trucks?

The weight-mile tax in Oregon is levied on all trucks weighing more than 26,000 pounds. Each heavy truck pays a tax for each mile driven in Oregon based on the weight of the vehicle. The

weight-mile tax is a method for charging trucks for their share of the cost of construction and maintenance of the road system, which promotes both equity and efficiency in road financing. Economic efficiency is promoted when each person faces the cost of his or her actions. Thus, if a person consumes something, paying the price for that good or service forces the consumer to evaluate the benefits from this form of consumption relative to others which are available. When goods and services are appropriately priced, Adam Smith's invisible hand can lead to an efficient allocation of resources. Moreover, having people pay for the costs they impose is generally considered equitable unless specific reasons exist for redistributing the cost burden.

How Oregon Pays for Roads

There are many ways to generate funds for building and maintaining roads. Roads can be treated as part of the general obligation of government and funded from general revenue sources, such as income, sales and property taxes. Alternatively, they can be funded from taxes on road users, or by some combination of general taxes and taxes on users.

Cars vs. Trucks

Oregon operates under a cost responsibility principle, whereby each class of vehicle is expected to pay for its share of the cost of building and maintaining roads. The cost of building new capacity depends on the number and weight of the vehicles that will use it. If a road must serve many heavy trucks, it must be built to higher standards than one serving only automobiles. Also, road deterioration is significantly affected by the weight of the vehicles using the road, and the more it is used by trucks, the more quickly it will require repairs. The extra cost of accommodating larger and heavier vehicles is attributed to these vehicles, while the basic cost of roads is associated with all vehicles.

The Oregon system attempts to distribute both the cost of new construction and the cost of maintenance to those who generate the cost requirement. Thus, relatively more of the cost of new capacity is assigned to automobiles, while trucks pay a larger share of the cost of road maintenance. It is important that the weight-mile tax rates give appropriate price signals to truckers. The taxes are set based on the weight of the truck, and for larger trucks, the number of axles is also taken into account.

In response to concern that ending the weight-mile tax would lead to a shift in tax burden to automobiles, the legislature referred Measure 76 to the voters in 1999. The measure created a constitutional amendment that appears to

ensure that trucks will continue to pay their fair share of road costs. But there are a number of uncertainties about how this would work. In particular, the method of calculating cost responsibility is not specified by the amendment, and truckers have proposed a variety of changes in the methods of calculation so that trucks would pay a smaller portion of road costs. In addition, the amendment does nothing to prevent dramatic shifts in tax burden among trucks.

Viable Alternatives?

Measure 82 would have replaced the weight-mile tax with large increases in truck registration fees and a diesel fuel tax. Currently, fuel taxes are levied for vehicles weighing up to 26,000 pounds, including automobiles. Fuel taxes cannot establish the close correspondence between cost and taxes that the weight-mile tax maintains for heavy vehicles. One basic problem is that fuel consumption does not vary much with weight, while road damage does. Consequently, a heavier truck pays slightly higher fuel taxes than a lighter truck but does much more damage to roads.

An increase in registration fees for heavy trucks was intended as a way to allocate costs more fairly than the fuel tax can accomplish. Registration fees typically are based on the weight of a truck, but they do not take mileage into account. Therefore, the fees do not differentiate between trucks that travel many miles per year and those that travel few miles per year. One truck that travels twice as many miles as another, and does twice as much road damage, pays the same registration fee. Without the weight-mile tax, there is no road-damage price signal to help determine whether additional trips should be made. At the same time, registration fees may differ for trucks traveling the same mileage in Oregon, because the fees are based on the percentage of a truck's mileage in Oregon rather than its total mileage in Oregon. For example, if one truck travels all of its miles in Oregon, while another travels the same number of miles in Oregon but many more outside of Oregon, the second truck has lower registration fees than the first.

In an attempt to offset the many inequities the new tax system would create, the legislation introduced many exemptions and special tax categories. The complex structure creates potential for unintended consequences, and trucks would still have to report their mileage in Oregon and other states.

Benefits Outweigh Costs

Clearly, the weight-mile tax is more costly to administer and comply with than other road-use taxes. The question is whether the gains in equity and efficiency are worth the cost. It should also be recognized that a number of changes in the tax reporting system already have been made in order to limit these costs.

Ideally, the tax would be levied based on the weight of each vehicle and the ability of the road being used to withstand wear, but this is not currently feasible. Some states use a different form of use tax called a ton-mile tax. This tax is levied based on the actual weight being carried for each trip and the number of miles traveled. The administrative costs of these taxes appear to be quite high, and some states that previously used ton-mile taxes have repealed them. However, Oregon's weight-mile tax rates are based on the average weight carried by a vehicle of each class, so it is only necessary to keep track of mileage rather than mileage and weight. Since truckers typically keep track of mileage anyway, this method greatly reduces the administrative costs. As more automated systems of tracking this information become available, Oregon may have reason to change its system. But the present compromise generates an appropriate price signal without undue administrative or compliance costs.

Some truckers will keep trying to get the tax system changed. Measure 82 would have resulted in large savings for heavy, high-mileage trucks. Yet, many low-mileage and lighter trucks would have seen their taxes increase substantially. Other methods of taxation are not able to generate a close correspondence between cost and revenue for most trucks. Either the burden would be shifted to cars, or some trucks would have to subsidize other trucks. Concerns about equity contributed to the measure's overwhelming defeat. The inability of other tax systems to address these concerns is a strong argument for retaining the weight-mile tax. While Oregon's current road tax system is not perfect, it comes closer to perfection than the alternatives.

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