

[JOINT COMMITTEE PRINT]

**BACKGROUND AND ALTERNATIVES  
RELATING TO THE TAX ON USE OF HEAVY  
MOTOR VEHICLES**

**SCHEDULED FOR A HEARING**

**BEFORE THE**

**COMMITTEE ON WAYS AND MEANS**

**ON FEBRUARY 23, 1984**

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**PREPARED BY THE STAFF**

**OF THE**

**JOINT COMMITTEE ON TAXATION**



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## INTRODUCTION

The House Committee on Ways and Means has scheduled a public hearing on February 23, 1984, on alternatives to the use tax on heavy motor vehicles. This pamphlet, prepared in connection with the hearing, provides background on present law and alternatives to the use tax on heavy motor vehicles.

The first part of the pamphlet is a summary. This is followed in the second part with an overview of present law and background relating to the use tax and other Highway Trust Fund taxes. The third part is a summary of a report to Congress by the Department of Transportation on certain alternatives to the heavy vehicle use tax. The fourth part presents issues which the committee may wish to consider in structuring diesel differential alternatives to the present heavy vehicle use tax.



## I. SUMMARY

Under present law, excise taxes are imposed on the sale of highway motor fuels (including diesel fuel), heavy highway tires, and heavy trucks and trailers. An excise tax also is imposed annually on the use of heavy vehicles on the public highways. Revenue from these highway excise taxes is dedicated to the Highway Trust Fund. The diesel fuel tax, a retail tax, is 9 cents per gallon. The use tax is currently \$3 per 1,000 pounds for vehicles over 26,000 pounds. On July 1, 1984, a graduated use tax rate is scheduled to replace the current flat rate, generally resulting in a higher use tax for heavier trucks.

Major amendments to the highway excise taxes were last made in the Highway Revenue Act of 1982. In general, the Act restructured these taxes to increase trust fund receipts, eliminate minor sources of revenue, and redistribute the highway excise tax liability among truck users so that their tax payments are more nearly proportionate to public costs allocable to their use of the highway system. The Act also directed the Secretary of Transportation to study alternatives and improvements to the use tax and to report to the tax-writing committees of Congress. The study was delivered in January, 1984.

The Department's report does not recommend a specific alternative to the use tax provided under present law. The report evaluates alternatives, which include weight-distance taxes and diesel differentials, in terms of revenue yield, distribution of highway excise tax liability among highway users, and effects on tax administration and compliance. Subsequent to issuance of the report, the Secretary of Transportation testified in a public hearing before the Senate Committee on Finance that the Department favored the diesel differential option labeled DOT 4. This option would increase the diesel fuel tax to 15 cents per gallon for vehicles over 10,000 pounds and reduce the maximum use tax to \$650.



## II. PRESENT LAW AND BACKGROUND

### A. Highway Trust Fund Taxes

#### *Trust fund tax rates*

Most Federal spending on highways is financed by excise tax revenues which are dedicated to the Highway Trust Fund. These highway excise taxes are imposed on: (1) the sale of highway motor fuels, including gasoline and diesel fuel; (2) the sale of heavy, highway tires; (3) the sale of heavy trucks and trailers; and (4) the use of heavy, highway motor vehicles. Current tax rates and future tax rates as scheduled under present law are summarized in table 1. The diesel fuel tax and the heavy vehicle use tax are described in the following paragraphs.

**Table 1.—Highway Trust Fund Taxes Under Present Law <sup>1</sup>**

Item	Rate of tax
Sale of gasoline, diesel fuel, and special motor fuels.....	9 cents/gallon.
Sale of trucks over 33,000 lbs., trailers over 26,000 lbs., and highway tractors.....	12 percent of retail price.
Sale of highway tires over 40 lbs.....	40 to 70 lbs.—15 cents/lb. over 40 lbs. 70 to 90 lbs.—\$4.50, plus 30 cents/lb. over 70 lbs. Over 90 lbs.—\$10.50, plus 50 cents/lb. over 90 lbs.
Use of highway vehicle (annual):	
Before July 1, 1984.....	Not over 26,000 lbs.—no tax. Over 26,000 lbs.—\$3/1,000 lbs.
After June 30, 1984 .....	Under 33,000 lbs.—no tax. 33,000-55,000 lbs.—\$50, plus \$25/1,000 lbs. over 33,000 lbs. 55,000-80,000 lbs.—\$600, plus \$40 (\$44 on July 1, 1986, \$48 on July 1, 1987, \$52 on July 1, 1988) per 1,000 lbs. over 55,000 lbs. Over 80,000 lbs.—\$1,600 (\$1,700 on July 1, 1986, \$1,800 on July 1, 1987, \$1,900 on July 1, 1988).

<sup>1</sup> The Highway Trust Fund taxes are scheduled to expire on October 1, 1988.



## *Diesel fuel tax*

A tax is imposed on the sale of fuel for use in a diesel-powered highway vehicle. Like the gasoline tax, the diesel fuel tax is 9 cents per gallon and is scheduled to terminate on October 1, 1988. Unlike the gasoline tax, which is imposed at the manufacturing level, the diesel fuel tax is imposed at the retail or use level.

Present law provides a number of exemptions from the entire amount of the diesel fuel tax. Fuel used on farms for farming purposes or in off-highway business uses, school buses, or certain helicopters is exempt. Fuel used by buses that provide public transportation for hire is generally exempt. Fuel sold for export, for the exclusive use of State and local governments, for the exclusive use of nonprofit educational organizations, or for the use of certain aircraft museums also is exempt. A partial exemption of 4 cents per gallon, scheduled to expire on October 1, 1984, is provided for fuel used in certain qualified taxicabs.

The exemptions from the diesel fuel tax are accomplished by tax-free sale or allowance of a refund (or credit) for the tax paid when the fuel is purchased. In the case of farm uses, the exemption is generally accomplished by means of a credit available only to the farm operator, tenant or owner. However, applicators of fertilizer or other substances may claim the exemption for fuel they use for farming purposes if the farm owner, tenant or operator waives his claim to the exemption for that fuel.

## *Heavy vehicle use tax*

### *In general*

An annual excise tax is imposed on the use on the public highways of any highway motor vehicle whose taxable gross weight exceeds a prescribed minimum weight. The term "taxable gross weight" means the sum of: (1) the unloaded weight of the vehicle when fully equipped for service; (2) the unloaded weight of semitrailers and trailers, when fully equipped for service, which are customarily used in connection with vehicles of the same type; and (3) the weight of the maximum load customarily carried on vehicles, semitrailers and trailers of the same type.

Exemptions are provided for uses by State and local governments and the United States. In addition, the use of private transit buses for which certain fare requirements are met is exempt.

The taxable period for the highway use tax is generally the one-year period beginning on July 1. The amount of tax is prorated when the first use of the vehicle during the taxable period occurs later than the first month of the period. Payment in quarterly installments is permitted. The tax is paid by the person in whose name the vehicle is registered. Beginning in fiscal year 1985, up to 25 percent of Federal Interstate highway funds could be withheld from a State which fails to require proof of use tax filing before registering vehicles.

The use tax is scheduled to expire on October 1, 1988.

### *Tax rate before July 1, 1984*

For uses occurring before July 1, 1984, the annual rate of tax is \$3 per 1,000 pounds of taxable gross weight or fraction thereof.

However, the use of vehicles whose taxable gross weight is 26,000 pounds or less is exempt.

*Tax rate and additional rules after June 30, 1984*

A graduated tax rate and additional rules and exemptions apply for taxable periods beginning after June 30, 1984.

First, as shown in table 1, the minimum weight of vehicles to which the use tax applies increases from 26,000 pounds to 33,000 pounds. Second, the tax rate for vehicles between 33,000 and 55,000 pounds changes to \$50, plus \$25 for each 1,000 pounds or fraction thereof in excess of 33,000 pounds. Third, the use tax for vehicles having taxable gross weights over 55,000 pounds changes to \$600, plus an additional \$40 for each 1,000 pounds or fraction thereof in excess of 55,000 pounds, except no additional tax is imposed after taxable gross weight reaches 80,000 pounds. Beginning on July 1, 1986, the additional tax of \$40 per 1,000 pounds increases by \$4 every year until it reaches \$52 on July 1, 1988. Consequently, the highest rate of use tax, which applies to vehicles over 80,000 pounds, rises annually in \$100 increments from \$1,600 on July 1, 1984, and July 1, 1985, to \$1,900 on July 1, 1988.<sup>1</sup> Fourth, the graduated rate schedule applies with a one-year delay in the case of a person (small owner-operator) who owns and operates no more than 5 taxable vehicles during a taxable period. For example, small owner-operators continue under the use tax as in effect before July 1, 1984, until the taxable period beginning July 1, 1985.

Table 2 shows the use tax in different years for vehicles of selected weights.

**Table 2.—Highway Use Tax, Selected Weights and Years**

[Dollars per full taxable period beginning July 1]<sup>1</sup>

Thousands of pounds	1983	1984	1986	1987
Taxable gross weight:				
Under 26.....	0	0	0	0
30.....	90	0	0	0
55.....	165	600	600	600
70.....	210	1,200	1,260	1,320
Over 80.....	240	1,600	1,700	1,800

<sup>1</sup> After 1983, assumes that vehicle does not belong to a small owner-operator.

Two additional rules are generally effective as of July 1, 1984. First, a vehicle that travels fewer than 5,000 miles on the public highways during a taxable period is exempt from the use tax, regardless of its taxable gross weight. Second, a credit or refund is allowed on a pro rata basis, if a vehicle on which the use tax has been paid is retired from service because of theft, accident or other

<sup>1</sup> Although the highest rate of tax is \$1,900 per year beginning July 1, 1988, the maximum amount of tax scheduled to be collected is \$475, or one-fourth of \$1,900. The reason is that present law provides a short taxable period for the three months beginning July 1, 1988, as the heavy vehicle use tax is scheduled to expire on October 1, 1988.



casualty. Under present law, these additional rules are effective as of July 1, 1985, for small owner-operators.

## **B. Surface Transportation Assistance Act of 1982**

### ***Highway Revenue Act of 1982***

Major amendments to the highway excise taxes were last made in the Highway Revenue Act of 1982 (Title V of the Surface Transportation Assistance Act of 1982; P.L. 97-424). In general, the Act restructured these taxes to increase trust fund receipts, eliminate taxes that were minor or difficult to administer, and redistribute the highway excise tax liability among users of different types of vehicles.

Congress believed that additional revenue was needed to repair and improve the nation's highways, bridges, and mass transit systems. Congress decided to repeal various excise taxes (on lubricating oil, truck parts, nonhighway tires, and tread rubber and inner tubes) partly because their yield was insufficient to justify the associated administrative and compliance costs. Furthermore, Congress decided to redistribute highway excise tax liability, because evidence developed by the Department of Transportation indicated significant disparities in highway excise tax payments among truck users, relative to costs allocable to their respective use of the highway system. Specifically, the Department reported that users of the heaviest combination trucks were paying relatively too little under prior law, and that users of the lighter trucks were paying relatively too much.

In light of these objectives, the 1982 Act raised the gasoline tax to 9 cents per gallon and increased four highway excise taxes that are paid predominantly by truck users. The Act restructured the tire tax so that it now effectively applies to truck tires and not, as under prior law, to automobile tires. The Act increased from 10 percent to 12 percent the excise tax on the sale of trucks and trailers, converted it from a manufacturers to a retail tax, and exempted lighter trucks that were taxable under prior law. As illustrated in table 2, the Act significantly increased the use tax for the heaviest trucks beginning July 1, 1984, and exempted lighter trucks that were taxable under prior law. Lastly, the tax on highway diesel fuel, most of which is consumed in trucks of all kinds, was increased from 4 cents to 9 cents per gallon.

### ***Nontax provisions***

Certain nontax provisions of the Surface Transportation Assistance Act of 1982 provided for greater access to Federal-aid highways for the heavier, wider, or longer trucks. The overall truck weight limit was increased to 80,000 pounds in all 50 States. The maximum width was increased from 96 inches to 102 inches. In addition, the allowable length was increased to permit the use of trucks known as doubles or tandems on Interstate highways and to allow them reasonable access to primary roads.

### III. DEPARTMENTAL STUDY OF ALTERNATIVES TO HEAVY VEHICLE USE TAX

#### A. Study Requirement

The Highway Revenue Act of 1982 directed the Secretary of Transportation, in consultation with the Secretary of the Treasury, State officials, motor carriers, and other affected parties, to study plans for improving the heavy vehicle use tax and to evaluate possible alternatives to the tax. Findings and recommendations were to be reported to the tax-writing committees of Congress before January 2, 1985. The report, "Alternatives to Tax on Use of Heavy Trucks," was delivered on January 25, 1984.

#### B. Study Findings

The Department of Transportation's report does not recommend a specific alternative to the heavy vehicle use tax imposed under present law, but does discuss several alternatives to the present tax.

The alternatives are evaluated in terms of their revenue effects, distribution of highway excise tax payments among users of different vehicles, and administration and compliance. With respect to revenue, the report recommends that an alternative should produce as much revenue over the duration of the highway excise taxes (scheduled to expire on October 1, 1988) as would be produced if no amendments were made to present law. With respect to distribution, the report maintains that the excise taxes paid by users of any class of vehicles should, insofar as possible, match the highway costs allocable to their use. In broad terms, these allocable costs increase with miles traveled, vehicle size, and the amount of force the vehicle exerts on the pavement.

##### *Weight-distance tax*

The report describes a tax that would increase with both vehicle weight and miles traveled (a weight-distance tax) as a promising means of levying more equitable highway user charges. In contrast, the present heavy vehicle use tax generally does not vary with distance traveled (except for the 5,000-mile exemption), although it does increase with vehicle weight between 33,000 and 80,000 pounds.

The Department's report considers two types of weight-distance taxes. Under one formulation, the tax would be based on the actual weight and mileage of each trip. Under a second formulation, the tax would be based on registered vehicle weight and actual mileage. In either case, mileage would have to be determined and verified. The report finds that this aspect of implementing a weight-distance tax makes it an impractical alternative in the short run.



However, to a certain extent the problem of determining and verifying mileage would not be unique to a weight-distance tax. Present law requires this for purposes of the 5,000-mile exemption from the use tax, and diesel differential options (discussed below) would require this for purposes of effectively exempting lighter vehicles from an increased diesel fuel tax.

### *Diesel differential options*

The report considers variations of a proposal, sometimes called a "diesel differential," according to which a higher excise tax rate would apply to diesel fuel than to other motor fuels. Under this alternative, the diesel fuel tax would be increased for vehicles over 10,000 pounds (if the vehicles are currently subject to the diesel fuel tax) and the heavy vehicle use tax would be decreased or repealed. The general objective of diesel differential options is to reduce the significance of a tax that does not vary with mileage and correspondingly increase the significance of a tax that does vary with mileage.

The report implies that a diesel differential is the only practical alternative for amending the present highway excise taxes to satisfy the objectives of revenue neutrality, equitable distribution of taxes, and administerability. It explicitly states that a diesel differential could be structured "to achieve revenue neutrality, maintain the current distribution of the tax burden across vehicle weight classes, and improve the equity of the user fees within weight classes of vehicles" (p. VIII-2).

### **C. Subsequent Departmental Testimony**

Subsequent to delivery of the report, the Secretary of Transportation, in a public hearing before the Senate Finance Committee on February 9, 1984, testified that the Department favored, among the various diesel differential alternatives it had studied, the option labeled DOT 4. This option has three basic components. First, users of diesel-powered vehicles would pay a diesel fuel tax of 15 cents per gallon, an increase of 6 cents per gallon over the current rate. Second, users of diesel-powered vehicles of 10,000 pounds or less would recoup the additional diesel fuel tax on their income tax returns. Third, the use tax would apply only to vehicles with taxable gross weight of 55,000 pounds or more, and would be reduced to an annual rate of \$50, plus \$24 per 1,000 pounds in excess of 55,000 pounds (to a maximum of \$650). The Department's report indicates that this option would not significantly change the current distribution of the tax burden across vehicle weight classes.

#### **IV. ISSUES IN STRUCTURING A DIESEL DIFFERENTIAL**

A number of issues warrant review when considering a diesel differential as a possible modification of the present highway excise taxes. Among these issues, as previously set forth by Congress and recently addressed by the report of the Department of Transportation, are revenue yield, redistribution of tax payments, and administration.

##### **A. Revenue Yield and Neutrality**

The general purpose of segregating the Highway Trust Fund from the general fund is to assure that highway excise taxes match what is needed for highway spending. If Congress determines that present highway excise taxes are insufficient or excessive for this purpose, then it might decide to adjust trust fund revenues to spending objectives. Such an adjustment, viewed solely from a revenue perspective, may or may not involve amendments to the present diesel fuel tax or use tax. If Congress determines that the present highway excise taxes are likely henceforth to yield the appropriate amount of trust fund revenue, then any alternative to the heavy vehicle use tax should be designed to maintain those revenues (that is, to be revenue neutral). The staff estimates that the sum of trust fund tax receipts for fiscal years 1984 through 1988 (after which highway excise taxes are scheduled to terminate) will be approximately \$65 billion if present law is not amended.

##### **B. Redistribution of Highway Excise Taxes**

A diesel differential option would most likely cause a redistribution of highway excise tax payments among truck users. With respect to a certain vehicle, the change in total excise tax liability effected by a proposal would be the change in use tax plus the change in diesel fuel tax. Assuming that a proposal would not extend the use tax to vehicles under 26,000 pounds (that is, to vehicles which are exempt under present law), it can be concluded that a diesel differential would increase the total highway excise tax liability for vehicles between 10,000 pounds and 26,000 pounds. Users of these vehicles would pay the higher diesel fuel tax but would have no reduction in their use tax. Other users would pay correspondingly less if the proposal were revenue neutral overall.

This redistribution toward lighter trucks may be assessed in light of a Department of Transportation study, which indicates that users of lighter trucks are, on average, already paying somewhat more in highway excise taxes than the highway costs which the Department has determined are allocable to their use. The Department's findings are summarized in table 3.



**Table 3.—DOT Estimates of Highway Excise Tax Payments Relative to Allocable Highway Costs**

[1985 levels]

Vehicle class	Prior law	Present law
Autos and motorcycles .....	5% underpayment ...	6% overpayment
Pickups and vans .....	13% overpayment....	18% overpayment
Other single unit trucks.....	95% overpayment....	14% overpayment
Combination trucks:		
Under 70,000 lbs .....	24% overpayment....	9% overpayment
70,000—75,000 lbs.....	21%	16%
	underpayment.	underpayment
Over 75,000 lbs .....	40%	34%
	underpayment.	underpayment

Source: Department of Transportation, "Alternatives to Tax on Use of Heavy Trucks," January 1984.

Within the context of a diesel differential proposal that is structured to be revenue neutral, a second type of redistribution could occur according to mileage. Persons who drive more miles would find it less likely that their reduced use tax compensated for their greater diesel fuel tax. Persons who travel fewer miles would tend to enjoy a net reduction in their total excise tax liability.

To illustrate this point using the diesel differential option DOT 4, assume that the owners (other than small owner-operators or persons who qualify for the 5,000-mile exemption) of 60,000-pound trucks generally consume diesel fuel at the rate of 5.5 miles per gallon. For the taxable period beginning July 1, 1984, each owner would pay \$170 of use tax under DOT 4, as compared with \$800 under present law. The \$630 reduction in use tax under the proposal would compensate for the extra fuel tax on 10,500 gallons, given the 6-cents-per-gallon diesel differential. Thus, owners of 60,000-pound trucks who drive less than 57,750 miles during the taxable period would pay less in total highway excise taxes under DOT 4 than under present law, while owners who drive more miles would pay more. In general, this break-even mileage tends to vary with truck weight for a given diesel differential option. Assuming the same facts as above, the break-even mileages for a 40,000-pound truck and an 80,000-pound truck would be about 20,600 miles a year and 87,100 miles a year, respectively.

### C. Administrability

Certain administrative difficulties could arise in connection with the diesel differential options. An increased diesel fuel tax would involve a significant number of taxpayers (because the tax is imposed at the retail or use level), although these persons are currently responsible for paying the diesel fuel tax. A higher diesel fuel tax could lead to attempts to evade the tax either through the substitution of untaxed home heating oil for diesel fuel or the resale of diesel fuel originally purchased for an exempt use.



Also, the exemption from a diesel differential of fuel used by automobile and light truck owners would require additional record-keeping or tax filing requirements with respect to about 3.6 million vehicles, in order that the owners might save approximately \$15 to \$25 per vehicle per year (depending on the size of the diesel differential). For example, an exemption for light vehicles could be accomplished by allowing a self-reported income tax credit for the additional diesel fuel tax actually paid. Alternatively, a prescribed amount of diesel fuel credit per vehicle could be provided, equal to an administratively determined estimate of the average excess diesel fuel tax paid annually by an owner of a light vehicle.

