

[COMMITTEE PRINT]

ENERGY PROGRAM

8

ENERGY TAX PROPOSALS RELATING TO TRANSPORTATION

PREPARED FOR THE
**COMMITTEE ON WAYS AND MEANS
HOUSE OF REPRESENTATIVES**

BY THE STAFF OF THE
JOINT COMMITTEE ON TAXATION



JUNE 6, 1977

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1977

90-388

JCS 27-77

TABLE OF CONTENTS

	Page
I. Introduction.....	1
II. Background.....	3
III. Inefficient automobile tax and rebate.....	15
A. Present law.....	15
B. Administration proposal.....	16
C. Action in the 94th Congress.....	22
D. Staff analysis.....	23
E. Members' proposals.....	29
F. Other proposals.....	30
G. Areas for committee consideration.....	31
IV. Standby gasoline tax and rebate.....	36
A. Present law.....	36
B. Administration proposal.....	36
C. Action in the 94th Congress.....	38
D. Staff analysis.....	39
E. Members' proposals.....	41
F. Areas for committee consideration.....	42
V. Other transportation tax proposals.....	44
A. Motorboat and general aviation fuel.....	44
1. Present law.....	44
2. Administration proposal.....	45
3. Members' proposals.....	45
4. Action in the 94th Congress.....	45
5. Areas for committee consideration.....	46
B. Repeal of excise tax on buses.....	46
1. Present law.....	46
2. Administration proposal.....	46
3. Members' proposals.....	47
4. Action in the 94th Congress.....	47
5. Areas for committee consideration.....	47

I. INTRODUCTION

This pamphlet is the eighth in a series prepared for use by the Committee on Ways and Means during its consideration of the Administration's energy program. This pamphlet is intended to describe in detail the energy tax proposals relating to transportation forming part of the Administration's energy program (H.R. 6831) referred to the Committee on Ways and Means. This description includes sections on economic and other background information, present law, the Administration's proposal, members' and other proposals, staff analysis, areas for committee consideration, as well as the relevant legislative proposals considered by the 94th Congress.

In the 94th Congress, the major bill considered in connection with energy tax proposals was H.R. 6860. This bill was reported by the Ways and Means Committee and was amended on the House floor. Markup sessions on H.R. 6860 were held by the Finance Committee in July 1975, and tentative decisions were made in many areas, but the bill was not reported at that time. Many of the provisions approved by the Finance Committee were added to H.R. 10612, the Tax Reform Act of 1976, as title XX, but all of the energy provisions were deleted in conference. In August of 1976, the Finance Committee reported the provisions of title XX (as passed the Senate) as an amended version of H.R. 6860. This bill was never taken up on the Senate floor and the provisions expired with the adjournment of the 94th Congress.

Unless otherwise indicated, the provisions discussed below with respect to action in the 94th Congress reflect H.R. 6860 as approved by the Ways and Means Committee. Also, unless otherwise specifically indicated, references to the Finance Committee bill are to title XX of the Tax Reform Act (as passed the Senate) and to the Finance Committee's reported version of H.R. 6860. Amendments on the House floor or on the Senate floor (to title XX of the Tax Reform bill) are specifically noted.

II. BACKGROUND

Gasoline consumption comprises a very significant part of the petroleum consumption in the United States, both in absolute terms and as a percentage of total consumption. As indicated in Table 1, gasoline consumption has exceeded 6 million barrels per day in 1971 and each succeeding year. Also, except for 1974, gasoline consumption has risen steadily.

TABLE 1.—Domestic motor gasoline consumption
[In millions of barrels per day]

	Number of barrels	Percentage change from prior year
Year:		
1960.....	4. 156	(—)
1965.....	4. 712	(+2. 5) ¹
1966.....	4. 805	+2. 0
1967.....	5. 049	+5. 1
1968.....	5. 359	+5. 4
1969.....	5. 526	+6. 1
1970.....	5. 785	+4. 7
1971.....	6. 014	+4. 0
1972.....	6. 376	+6. 0
1973.....	6. 674	+4. 7
1974.....	6. 537	—2. 1
1975.....	6. 675	+2. 1
1976.....	6. 978	+4. 5
1977 (January and February)....	6. 596	² +4. 2

¹ Compound rate over the 5-year period.
² Increase of January and February 1977 over the same months in 1976.
Source : Federal Energy Administration.

Approximately 39 percent of the annual petroleum consumption in the United States is gasoline. Highway transportation accounts for over 96 percent of the total gasoline consumption, with the major user being the automobile, which consumes about 74 percent of the total. Trucks use about 23 percent. Table 2 shows a breakdown of gasoline by mode for highway use and by sector for nonhighway use.

TABLE 2.—*Percent annual gasoline consumption by mode and by sector, 1972*

	Percent of total gasoline use	Percent of total petro- leum use
Highway:		
Automobile.....	73. 52	28. 53
Bus.....	. 38	. 15
Truck.....	22. 72	8. 82
Total highway.....	96. 62	37. 50
Nonhighway:		
Agriculture.....	1. 70	. 66
Aviation ¹ 35	. 14
Industry, commerce, and con- struction.....	. 37	. 14
Marine.....	. 69	. 27
Miscellaneous and unclassified...	. 27	. 10
Total nonhighway.....	3. 38	1. 31
Total highway and nonhigh- way.....	100. 00	38. 81

¹General aviation only. Commercial aviation generally uses jet fuel, not gasoline. For 1976, the domestic demand for jet fuel was 5.8% of total demand for refined petroleum products.

Source: 1972 "Highway Statistics, U.S. Department of Transportation.

The primary use of the automobile involves commuting to and from work and business related travel. Over 40 percent of the travel miles driven annually is for these purposes. Social and recreational travel consumes 33 percent of the annual total miles traveled. Personal family activities (such as shopping) use about 19 percent. Table 3 provides a breakdown of vehicle miles traveled by trip purpose.

TABLE 3.—Percent automobile miles traveled by trip purpose, 1974

Trip Purpose	Percent total miles traveled	Estimated gasoline use by purpose, 1974 millions barrels per day
Earning a living:		
Commuting.....	33.7	1.65
Business related.....	7.9	.39
Subtotal.....	41.6	2.04
Personal family:		
Shopping.....	7.5	.37
Medical and dental.....	1.6	.08
Other.....	10.2	.50
Subtotal.....	19.3	.95
Civic, education, and religious.....	4.9	.24
Social and recreational:		
Visiting.....	12.1	.59
Pleasure driving.....	3.1	.15
Vacation.....	2.5	.12
Other.....	15.3	.75
Subtotal.....	33.0	1.61
Miscellaneous.....	1.2	.06
Total.....	100.0	4.90

Source: "National Personal Transportation Study," U.S. Department of Transportation.

Estimates of the average gasoline expenditures and the percent of income spent on gasoline for five income groups are provided in Table 4. Of the five groups, the lowest income group spends the largest percentage of their income for gasoline. The percentage of income spent on gasoline declines as income increases, although the dollar amount spent on gasoline increases as income increases.

TABLE 4.—*Annual household gasoline and automobile oil expenditures, 1972*

Income group	Number of households (millions)	Annual expenditures on gas and oil per household	Mean household income	Percent of income spent on gas and oil
Less than \$3,000-----	8.6	\$96.22	\$1,880	5.14
\$3,000 to \$6,000-----	10.4	197.60	4,500	4.39
\$6,000 to \$10,000-----	13.4	312.00	8,012	3.89
\$10,000 to \$15,000-----	23.9	410.80	12,370	3.32
\$15,000 and over-----	13.4	499.20	22,240	2.24
Income not reported---	11.6	182.00	-----	-----
Total-----	71.2	301.60	12,160	4.24

Source: U.S. Department of Transportation.

Per capita gasoline consumption varies considerably among States. In general, those States with the largest per capital consumption are rural States in which a relatively high percentage of the residents drive considerable distances. On the other hand, those States with low per capita gasoline consumption generally are characterized by well developed urban areas where mass transit is utilized for a significant amount of commuting. Table 5 sets forth the average per capita gasoline consumption on a State-by-State basis.

TABLE 5.—*Per capita gasoline consumption (1975)*

	Gasoline consumption ¹	Population in thousands ²	Per capita gasoline use	Rank ³
Alabama-----	1,861.9	3,614	515.2	15
Alaska-----	148.3	352	421.3	45
Arizona-----	1,128.2	2,224	507.3	22
Arkansas-----	1,142.1	2,116	539.7	10
California-----	9,985.7	21,133	472.5	36
Colorado-----	1,298.0	2,534	512.2	19
Connecticut-----	1,320.2	3,095	426.6	43
Delaware-----	292.6	579	505.4	24

See footnotes at end of table.

TABLE 5.—*Per capita gasoline consumption (1975)*—Continued

	Gasoline consump- tion ¹	Popula- tion in thousands ²	Per capita gasoline use	Rank ³
District of Columbia.....	237.7	716	332.0	49
Florida.....	4,154.3	8,092	513.4	16
Georgia.....	2,722.1	4,926	552.6	6
Hawaii.....	276.3	865	319.4	50
Idaho.....	433.9	821	528.5	12
Illinois.....	4,759.4	11,160	426.5	44
Indiana.....	2,644.3	5,311	497.9	26
Iowa.....	1,460.1	2,870	508.7	21
Kansas.....	1,228.2	2,267	541.8	9
Kentucky.....	1,690.0	3,396	497.6	27
Louisiana.....	1,777.3	3,791	468.8	37
Maine.....	523.3	1,059	494.1	29
Maryland.....	1,811.8	4,098	442.1	41
Massachusetts.....	2,279.4	5,828	391.1	47
Michigan.....	4,386.1	9,117	481.1	32
Minnesota.....	1,868.1	3,925	475.9	34
Mississippi.....	1,148.9	2,346	489.7	31
Missouri.....	2,486.1	4,763	522.0	13
Montana.....	404.9	737	549.1	7
Nebraska.....	790.8	1,542	512.8	17
Nevada.....	393.9	592	665.4	2
New Hampshire.....	389.6	818	476.3	33
New Jersey.....	3,209.8	7,316	438.7	42
New Mexico.....	681.7	1,147	594.3	3
New York.....	5,457.8	18,120	301.2	51
North Carolina.....	2,748.1	5,451	504.1	25
North Dakota.....	324.6	637	509.6	20
Ohio.....	4,866.0	10,759	452.3	38
Oklahoma.....	1,579.2	2,712	582.3	5
Oregon.....	1,172.4	2,288	512.4	18
Pennsylvania.....	4,461.1	11,829	377.1	48
Rhode Island.....	369.8	927	398.9	46
South Carolina.....	1,461.7	2,818	518.7	14
South Dakota.....	375.0	683	549.0	8
Tennessee.....	2,221.3	4,188	530.4	11
Texas.....	7,260.9	12,236	593.4	4
Utah.....	610.8	1,206	506.5	23
Vermont.....	233.9	471	496.6	28
Virginia.....	2,450.4	4,966	493.4	30
Washington.....	1,675.1	3,544	472.7	35
West Virginia.....	805.2	1,803	446.6	40
Wisconsin.....	2,065.3	4,606	448.4	39
Wyoming.....	280.0	374	748.7	1
Total U.S.A.....	99,353.6	213,540	465.3	

¹ Highway Use, in millions of gallons. From FHWA table MF-26, December 1976.

² Provisional estimates as of July 1, 1975. From U.S. Bureau of the Census.

³ Ranked from largest to smallest per capita consumption.

The average number of cars per household increases as household income rises, although approximately 37 percent of households with annual income of under \$3,000 own at least one car. Table 6 provides both the average number of cars per household in various income classes and the percentage of households in various income classes which own no cars, 1 car, 2 cars, and 3 or more cars.

TABLE 6.—Automobile ownership by income class 1, 1972

Annual household income	Average number of cars per household	Percent of households in income class with—			
		No car	1 car	2 cars	3 or more cars
Under \$3,000-----	0. 40	63. 1	33. 6	3. 3	—
\$3,000 to \$3,999-----	0. 74	33. 7	56. 5	8. 4	1. 4
\$4,000 to \$4,999-----	0. 90	26. 1	62. 3	11. 3	0. 3
\$5,000 to \$5,999-----	0. 93	16. 8	64. 7	16. 5	2. 0
\$6,000 to \$7,499-----	1. 22	13. 0	57. 8	25. 6	3. 6
\$7,500 to \$9,999-----	1. 35	5. 8	59. 3	30. 8	4. 1
\$10,000 to \$14,999---	1. 61	2. 8	44. 0	46. 0	7. 2
\$15,000 and over-----	1. 94	1. 2	27. 4	55. 2	16. 2
All-----	1. 17	20. 6	48. 4	26. 4	4. 6

Source: U.S. Department of Transportation.

As Table 7 indicates, the average fuel economy of all model cars sold in the United States decreased steadily (except for 1970) from 1967 through 1974. However, significant improvements in mileage have been made in model years 1975, 1976, and 1977.

TABLE 7.—*Fuel economy trend: Precontrol to 1977, new cars only*
[Sales-weighted city/highway combined fuel economy trend]

	Sales weighted miles per gallon		
	Domestic and imported average	Domestic	Imported
Model year:			
1967	15.5		
1968	15.0		
1969	14.7		
1970	15.1		
1971	14.7		
1972	14.5		
1973	14.0		
1974	13.9		
1975	15.6	14.9	24.3
1976	17.6	16.8	24.9
1977	¹ 18.6	17.7	23.3

¹ This figure was projected by EPA in September 1976 and may be revised downward to 18 mpg or slightly lower due to the increased purchase of larger cars during the current model year.
Source: EPA.

Table 8 sets forth the improvement in miles per gallon on a sales-weighted basis of automobiles of various manufacturers from the 1975 model year to the 1976 model year and to the 1977 model year. The table also separates the effect of several components on the aggregate mileage changes from 1976 to 1977 for these manufacturers.

TABLE 8.—Comparison of fuel economy changes among auto companies, 1975-77

Company	MPG changes, 1976-77, attributable to—(percent)							
	1975 SWMPG ¹	1976 SWMPG ¹	MPG changes 1975-76 (percent)	1977 SWMPG ¹	System optimi- zation only ²	New engine/ vehicle combi- nations only	Weight mix shifts	All changes combined
American Motors-----	19.0	18.3	-3.7	19.2	-0.6	+2.6	+2.8	+4.8
Chrysler-----	15.5	16.5	+6.4	16.6	+3.3	-.1	-2.7	+.5
Ford-----	13.6	17.3	+27.2	17.1	+2.1	-1.0	-2.5	-1.4
General Motors-----	15.4	16.7	+8.4	18.4	+3.2	+.7	+6.5	+10.4
BMW-----	17.7	18.9	+6.8	20.4	+2.8	.0	+5.3	+8.0
Nissan-----	24.9	26.9	+8.0	27.1	+.6	-1.1	+1.2	+.7
Porsche-----	19.8	20.5	+3.5	19.8	-8.8	-3.8	+9.2	-3.4
Toyo Kogyo-----	16.7	21.9	+31.1	26.1	+8.5	-1.1	+11.8	+19.2
Toyota-----	22.2	25.0	+12.6	28.1	+4.8	+1.6	+6.0	+12.3
VW-----	27.4	28.3	+3.3	30.4	+4.5	+.3	+2.5	+7.3
Volvo-----	19.2	19.4	+1.0	19.9	+1.6	0	+1.4	+2.9
Audi-----	24.2	25.2	+4.1	25.9	-2.7	0	+5.6	+3.0
Fuji-----	26.5	29.7	+12.1	30.2	+8.4	-7.3	+.3	+1.5
Fleet Average-----	15.6	17.6	+12.8	18.6	+2.8	+.2	+2.6	+5.6

¹ Sales-weighted miles per gallon.
Source: EPA.

² No new technology or components, but improved combinations of existing equipment and methods.

Table 9 indicates the relationship between domestic automobile production and the sales of imported automobiles. As indicated therein, the 1965 imports constituted a relatively insignificant portion of the U.S. market. Since that time, however, the number of imported automobiles and their percentage of the U.S. market has increased substantially. The sales of imports has exceeded 14 percent of total production in each year from 1970 through 1976.

TABLE 9.—*Retail sales of domestic and imported new passenger cars, calendar years 1965-76*

[Million units]

Item	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
All passenger cars.....	9.3	9.0	8.3	9.7	9.6	8.4	10.3	11.0	11.4	8.9	8.6	10.1
Domestic passenger cars.....	8.8	8.4	7.6	8.6	8.5	7.1	8.7	9.3	9.7	7.5	7.1	8.6
Imported passenger cars.....	.6	.7	.8	1.0	1.1	1.3	1.6	1.6	1.8	1.4	1.6	1.5
Sales of imports as percent of total..	6.1	7.2	9.2	10.7	11.7	15.3	15.3	14.8	15.4	16.0	18.4	14.8

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

As of July 1, 1975, there were approximately 95 million automobiles and 25 million trucks in use in the United States. The percentage of these cars and trucks which fall in various age categories are indicated in Table 10.

TABLE 10.—*Automobile and truck fleets by age of vehicle as of July 1, 1975*

Age	Percent of cars	Percent of trucks
Under 3 yr-----	27	28
3 to 5 yr-----	28	23
6 to 8 yr-----	23	18
9 to 11 yr-----	15	13
12 yr and over-----	7	18
Total-----	100	100

Source: Federal Highway Administration.

These figures indicate that it will take a number of years for the majority of older cars to be phased out of the country's car and truck fleets.

III. INEFFICIENT AUTOMOBILE TAX AND REBATE

(SECTIONS 1201-1204 OF THE ADMINISTRATION BILL)

A. Present Law

Under the Internal Revenue Code, an excise tax has never been imposed on automobiles or other vehicles for the purpose of encouraging the manufacture of fuel-efficient vehicles. However, until 1971, an ad valorem excise tax was imposed on the manufacturers' sale of automobiles. A 10-percent excise tax is presently imposed on the sale by manufacturers of buses and trucks with gross vehicle weight of over 10,000 lbs., and an 8-percent tax is imposed on the sale by manufacturers of parts and accessories for buses and trucks. In addition, the Code imposes excise taxes based on weight upon tires, inner tubes, and tread rubber (sec. 4071).

The Energy Policy and Conservation Act (P.L. 94-163, "EPCA") provides average fuel economy standards and civil penalties for automobile manufacturers who do not meet these standards. The standards are 18 miles per gallon for 1978 model year passenger automobiles, 19 miles per gallon for 1979 model year passenger automobiles, 20 miles per gallon for 1980 model year passenger automobiles, and 27.5 miles per gallon for 1985 model year passenger automobiles.

Pursuant to EPCA, the Secretary of Transportation is to prescribe regulations setting forth average fuel economy standards for passenger automobiles for model years 1981 through 1984. Essentially, passenger automobiles are defined under EPCA as 4-wheeled, fuel-propelled, vehicles, manufactured primarily for public street or highway use and designed for the transport of not more than 10 individuals.

Currently, these standards apply to passenger automobiles weighing 6,000 pounds or less, but the Secretary of Transportation has the authority and has been directed by President Carter to promulgate regulations setting forth those vehicles weighing between 6,000 and 10,000 pounds which also will be subject to prescribed average fuel economy standards. Those vehicles selected by the Secretary of Transportation are to be of the type for which (1) average fuel economy standards would be feasible and (2) either such standards would result in significant energy conservation or such vehicles are determined by the Secretary of Transportation to be substantially used for the same purposes as vehicles weighing 6,000 pounds or less.

Although the Secretary of Transportation has been directed to exercise his authority to designate vehicles in the 6,000-10,000 pound weight range which are to be subject to fuel economy standards, there is no assurance that all or a substantial portion of such vehicles will be covered, nor that the standard for such vehicles which are covered will approximate the standard for passenger automobiles. Also, there is no authority to prescribe standards for any vehicles weighing over 10,000 pounds.

The penalty for failure to meet the standard in any year is \$5 per one-tenth of a mile per gallon by which the manufacturer falls short of the standard for that year, multiplied by all the automobiles produced by the manufacturer in that year. The penalty is not deductible for income tax purposes (sec. 162(f)).

Generally, in determining whether a company has met the standard for any year, separate computations are made with respect to passenger automobiles which are domestically manufactured (i.e., 75 percent of the cost being attributable to value added in the U.S. or Canada) and those which are not domestically manufactured.

Present law provides no income tax credit, or other special tax incentive, to aid in the development of electric motor vehicles. However, late in the 94th Congress, Congress appropriated \$160 million to the Energy Research and Development Administration ("ERDA") for the development of electric motor vehicles. The appropriation directs production of 2,500 electric cars by December 1978, and 5,000 electric cars by October 1984.

B. Administration Proposal

Automobile excise tax

A graduated auto inefficiency excise tax would be imposed on the sale or initial lease of new automobiles whose fuel economy fails to meet fuel economy standards which are keyed to those standards enacted under EPCA. These standards, applied separately to each vehicle, are 18 miles per gallon for 1978 model year passenger automobiles, 19 miles per gallon for 1979 model year automobiles, 20 miles per gallon for 1980 model year automobiles, 21.5 miles per gallon for 1981 model year automobiles, 23 miles per gallon for 1982 model year automobiles, 24.5 miles per gallon for 1983 model year automobiles, 26 miles per gallon for 1984 model year cars, and 27.5 miles per gallon for 1985 model year automobiles.¹

The amount of the tax would increase for each mile per gallon decrease in fuel efficiency below the level at which no tax is imposed. Essentially, the tax is based upon the computation of the amount of additional gallons of gas consumed over 100,000 miles of travel as a result of failing to meet the applicable fuel economy standard. The amount of additional gallons is then multiplied by a specified tax factor set forth in the proposal for each year as follows:

	<i>Cents</i>
1978 -----	16.16
1979 -----	18.04
1980 -----	20.00
1981 -----	23.10
1982 -----	29.08
1983 -----	33.00
1984 -----	40.55
1985 and thereafter -----	49.14

¹ These are the figures in the bill. There appear to be minor differences between these figures and the rebates and taxes computed in the tax and rebate proposal set forth below.

¹ As explained above, standards have not yet been established for 1981-1984 model years, and the standards set forth in the Administration's proposal assumes a pattern of increasing standards and prescribes an adjustment if the actual standards differ from these assumptions.

Thus, for example, for model year 1978, for which the fuel economy standard is 18 miles per gallon, the tax would be computed as follows. A passenger automobile with an average fuel economy of 17 miles per gallon would consume approximately 327 additional gallons of gas over 100,000 miles of travel in comparison to the 18 mile per gallon automobile (5,882 gallons for the 17 mile per gallon automobile less 5,555 gallons for the 18 mile per gallon automobile). By multiplying the additional 327 gallons by the 16.16 cents per gallon tax factor applicable to the 1978 model year, an auto inefficiency tax of \$52 is determined.

In the case of 1978 model year passenger automobiles, the tax would range from \$52 to \$449 for automobiles failing to meet the standard, depending on the degree to which a particular automobile falls short of the standard. For 1981 model year automobiles, the tax would range from \$52 to \$935. For 1985 and later model year automobiles, the tax would range from \$67 to \$2,488. The complete tax and rebate schedule is shown below. (See "Administration's auto excise tax and rebate schedule.")

The fuel economy standard and excise tax based thereon would be modified in accordance with a table issued by the Secretary of the Treasury if the average fuel economy standard prescribed under EPCA differs from the applicable standard under this proposal for a particular model year. The Secretary would base the modified tax on the average fuel economy standard prescribed by the Secretary of Transportation. If these changes are made, the tax would be increased with each mile per gallon decrease in fuel economy so that the modified maximum tax for the model year would not exceed the prescribed maximum tax for the year in question. The tax would be computed, as described above, multiplying the applicable tax factor by the amount of additional gallons consumed over 100,000 miles of travel. The Secretary of the Treasury would be required to prescribe these adjusted taxes prior to the beginning of the model year.

The tax imposable on 1978 model year automobiles would be restricted to passenger automobiles. For 1979 and later model year automobiles, the tax would also apply to those 4-wheeled vehicles rated at more than 6,000 pounds, but less than 10,000 pounds, which the Secretary of Transportation determines (1) are the types of vehicles for which average fuel economy standards would be feasible and (2) either such standards would result in significant energy conservation or such vehicles are the types of vehicles which are used substantially for the same purposes as vehicles weighing 6,000 pounds or less.

Under the proposal, the term "fuel economy" has the same meaning as it does in EPCA, that is, it means the average number of miles traveled by an automobile per gallon of gasoline (or equivalent amount of other fuel) consumed. The determination of fuel economy would be made by the Administrator of the Environmental Protection Agency under EPCA.

The exemption from manufacturers excise taxes generally provided with respect to sales to State or local governments and nonprofit educational organizations would not apply to the fuel inefficiency tax.

Efficient auto rebates

Graduated rebates would be given with respect to sales or initial leases after May 1, 1977, of new, domestically manufactured automobiles whose fuel economy exceeds the applicable fuel economy standard. The rebate would be payable to the manufacturer only if it has passed on the amount of the rebate to the ultimate purchaser of the automobile and has evidence of the payment in its possession. The Secretary of Treasury would adjust the rebate schedule each year in advance so that the total estimated rebate payments would approximate as closely as possible the estimated tax receipts from the auto inefficiency tax. The adjustment would entail the application of a "rebate coefficient," determined each year, to statutorily established "base rebates." Subject to slight variations from year to year, the approximate range of the rebates would be from \$50 (for automobiles exceeding the applicable fuel economy standard by at least 1 mile per gallon) to \$500 (for automobiles exceeding 39 miles per gallon).² The base rebates are computed on the basis of the amount of gallons saved (as opposed to wasted under the auto inefficiency tax computation) over 100,000 miles of travel multiplied by the applicable tax factor for the year in question (the same as that employed in computing the auto inefficiency tax).

The Secretary of the Treasury would be required to prescribe alternative base rebate tables if, in accordance with EPCA, the Secretary of Transportation prescribed fuel economy standards different from those in the tables provided in the bill.

Rebates would also be available for vehicles manufactured in Canada. With respect to vehicles manufactured in other countries, rebates would be available on the basis of executive agreements entered into between these countries and the United States. The executive agreements are to be designed so that domestic automobile manufacturers are not disadvantaged vis-a-vis foreign automobile manufacturers under the tax and rebate system.

Purchasers of electric motor vehicles would be entitled to the highest applicable rebate. An electric automobile would be defined as an automobile powered primarily by an electric motor drawing current from rechargeable storage batteries or other portable sources of electric current.

The bill would also amend the Motor Vehicle Information and Cost Saving Act (as previously modified by EPCA) to require that the label required by such Act to be affixed to each automobile state that the automobile was subject to the tax or rebate and the amount of the tax or rebate.

The bill would apply to sales of automobiles made after May 1, 1977. Thus, purchasers of fuel efficient 1977 model year passenger auto-

² The base rebate amounts for each model year would increase as fuel efficiency improves to insure that larger rebates are paid with respect to automobiles that are the most fuel efficient. Thus, for the 1978 model year the base rebate would be zero for an automobile whose fuel economy is 18 miles per gallon, but the base rebate would be \$473 for an automobile whose fuel economy is 38 miles per gallon. The fuel economy standards would increase with each model year so that, for example, the base rebate would be \$255 for a 1979 model year automobile whose fuel economy is 26 miles per gallon, but the base rebate would be zero for a 1984 model year automobile whose fuel economy is 26 miles per gallon.

mobiles would receive rebates from manufacturers to the extent these passenger automobiles qualify for rebates. The rebates for 1977 and 1978 model years would be paid from the estimated revenue from the imposition of the auto inefficiency tax on 1978 model year automobiles.

For budget accounting purposes, receipts of the auto inefficiency tax would be treated as receipts of the general fund of the Treasury, while the rebates would be treated as budget outlays which require authorization and appropriation.

Administration's auto excise tax and rebate schedule

The base amounts of the excise taxes and the rebates under the Administration's proposal are shown in the following table:

Tax and rebate schedule for new car sales

Miles per gallon		Tax or rebate ¹							
At least	But less than	1978	1979	1980	1981	1982	1983	1984	1985
	12. 5				\$935		\$1, 524		\$2, 488
12. 0	13. 0	\$449	\$553	\$666		\$1, 159		\$1, 819	
12. 5	13. 5				774		1, 294		2, 146
13. 0	14. 0	345	436	538		972		1, 559	
13. 5	14. 5				637		1, 098		1, 854
14. 0	15. 0	256	339	438		812		1, 336	
14. 5	15. 5				519		929		1, 603
15. 0	16. 0	179	258	333		674		1, 143	
15. 5	16. 5				416		782		1, 384
16. 0	17. 0	112	176	249		553		974	
16. 5	17. 5				325		653		1, 192
17. 0	18. 0	52	111	176		446		825	
17. 5	18. 5				245		539		1, 021
18. 0	19. 0	0	52	111		351		693	
18. 5	19. 5				174		437		869
19. 0	20. 0	-47	0	52		266		574	
19. 5	20. 5				110		345		733
20. 0	21. 0	-89	-47	0		189		467	
20. 5	21. 5				52		262		610
21. 0	22. 0	-128	-90	-47		120		371	
21. 5	22. 5				0		188		499
22. 0	23. 0	-163	-129	-90		57		283	
22. 5	23. 5				-47		119		397
23. 0	24. 0	-195	-165	-130		0		203	
23. 5	24. 5				-91		57		304
24. 0	25. 0	-224	-197	-166		-52		129	
24. 5	25. 5				-131		0		219
25. 0	26. 0	-251	-227	-199		-101		62	
25. 5	26. 5				-168		-52		140

26.0	27.0	-276	-255	-230	-202	-145	-101	-57	67
26.5	27.5	-299	-281	-259	-234	-187	-147	-111	0
27.0	28.0	-321	-305	-285	-264	-225	-189	-161	-62
27.5	28.5	-341	-327	-310	-291	-261	-228	-207	-121
28.0	29.0	-359	-348	-333	-317	-295	-265	-251	-176
28.5	29.5	-377	-367	-354	-340	-326	-299	-292	-227
29.0	30.0	-393	-385	-374	-363	-355	-331	-330	-275
29.5	30.5	-408	-402	-393	-385	-383	-361	-366	-302
30.0	31.0	-423	-416	-411	-405	-409	-390	-400	-320
30.5	31.5	-436	-433	-428	-423	-433	-417	-433	-403
31.0	32.0	-449	-448	-444	-441	-456	-442	-463	-440
31.5	32.5	-461	-461	-459	-458	-478	-467	-492	-476
32.0	33.0	-473	-474	-473	-474	-499	-490	-492	-493
32.5	33.5	-473	-474	-473	-474	-499	-490	-492	-493
33.0	34.0	-473	-474	-473	-474	-499	-490	-492	-493
33.5	34.5	-473	-474	-473	-474	-499	-490	-492	-493
34.0	35.0	-473	-474	-473	-474	-499	-490	-492	-493
34.5	35.5	-473	-474	-473	-474	-499	-490	-492	-493
35.0	36.0	-473	-474	-473	-474	-499	-490	-492	-493
35.5	36.5	-473	-474	-473	-474	-499	-490	-492	-493
36.0	37.0	-473	-474	-473	-474	-499	-490	-492	-493
36.5	37.5	-473	-474	-473	-474	-499	-490	-492	-493
37.0	38.0	-473	-474	-473	-474	-499	-490	-492	-493
37.5	38.5	-473	-474	-473	-474	-499	-490	-492	-493
38.0	39.0	-473	-474	-473	-474	-499	-490	-492	-493
38.5	39.5	-473	-474	-473	-474	-499	-490	-492	-493
39.0		-473	-474	-473	-474	-499	-490	-492	-493
Electric cars		-473	-474	-473	-474	-499	-490	-492	-493

¹ Negative amounts are the proposed rebates.

NOTE.—Amounts below the diagonal (the zeros) are rebates (—) and those above are tax. The amount between the dashed lines apply to the whole dollar brackets until 1981 when the tax begins to apply to the half-mile brackets. The brackets move up one-half mile per year through 1985 (the dashed lines move toward the righthand corner) so that in 1982, the tax applies to the whole-mile brackets, in 1983, to the half-mile brackets again, in 1984 to the whole-mile brackets, and in 1985 to the half-mile brackets.

Energy saving estimate

The Federal Energy Administration estimates that the Administration's auto inefficiency tax and rebate will reduce demand for petroleum in 1985 by 300,000 barrels per day, 185,000 barrels a day from automobiles and 115,000 barrels per day from trucks, for an estimated petroleum saving of 110 million barrels a year in 1985. This energy saving estimate for trucks assumes that the tax applies to trucks weighing between 6,000 and 10,000 pounds as a result of a determination by the Secretary of Transportation (as provided by the Administration proposal) that standards are feasible and would result in significant energy conservation for these vehicles.

Revenue estimate

The Administration estimates that its auto inefficiency tax will increase receipts (all of which is to be rebated) by the following amounts:

Fiscal years:	Millions
1978 -----	\$500
1979 -----	500
1980 -----	500
1981 -----	700
1982 -----	900
1983 -----	1,200
1984 -----	1,500
1985 -----	1,900
Total, 1978-85-----	7,700

C. Action in the 94th Congress

The Ways and Means Committee bill contained a provision establishing an ad valorem tax on a manufacturer if the average fuel economy of all cars produced by that manufacturer in a given year were to fall below certain mileage standards. (An ad valorem tax is a tax that is imposed as a percentage of the price of a product.) The provision was to apply to model years 1978 through 1980. The mileage standards were 18 miles per gallon for model year 1978, 19 miles per gallon for model year 1979, and 20 miles per gallon for model year 1980.

The ad valorem tax was imposed only on those cars failing to meet the applicable standard and was equal to a percentage of the manufacturer's sales price of such cars. This percentage increased as the mileage of the model fell below the mileage standard. The percentage increased from 2 percent for one mile per gallon less than the standard to 7 percent for 5 or more miles per gallon less than the standard. The tax rates are set forth in the following schedule:

If the fuel mileage rating (in miles per gallon) was—	The percentage was—		
	1978 model year	1979 model year	1980 model year
20 or more -----	0	0	0
19 or more but less than 20 -----	0	0	2
18 or more but less than 19 -----	0	2	3
17 or more but less than 18 -----	2	3	4
16 or more but less than 17 -----	3	4	5
15 or more but less than 16 -----	4	5	6
Less than 15 -----	5	6	7

The Ways and Means Committee bill did not contain any tax incentives for electric motor vehicles.

On the House floor, an amendment was adopted establishing standards substantially similar to those in the Ways and Means bill, but which provided civil penalties rather than taxes for failure to meet the standards. The bill, as passed by the House, prescribed the following standards for the average fuel economy of all vehicles produced by each manufacturer: 1978, 18.5 miles per gallon; 1979, 19.5 miles per gallon; 1980, 20.5 miles per gallon; 1981-84, to be set by the Secretary of Transportation; 1985 and thereafter, 28 miles per gallon.

A manufacturer was treated as having met the standard for any year if he came within 0.5 mile per gallon of the standard for that year. The penalty for failure to meet the standard in any year was \$5 per 1/10th mile per gallon that the manufacturer fell short of the standard for that year multiplied by all the automobiles produced by the manufacturer in that year.

A House floor amendment added to the bill an income tax credit of 25 percent of expenditures up to \$3,000, for a maximum credit of \$750, on the purchase of electric highway motor vehicles. The provision was to apply only to purchases of new vehicles made between June 3, 1975, and January 1, 1979, and then only if the purchase was for the personal use of the taxpayer or a member of his family.

The Senate Finance Committee did not adopt the tax on fuel inefficient automobiles because, in the interim, Congress had passed the Energy Policy and Conservation Act (Public Law 94-163) which provided for civil penalties for automobile fleets which did not meet designated automobile efficiency standards. (See the discussion in "present law.")

The Senate Finance Committee also deleted the tax credit for electric motor vehicles.

D. Staff Analysis

Energy savings resulting from proposed tax and rebate

There are varying estimates as to the degree to which the proposed tax and rebate would result in energy savings. Much of the variance among estimates stems from differing predictions as to the extent, if any, to which the auto manufacturers, without any tax, would fall short of meeting the auto efficiency standards prescribed under EPCA. No one can say with certainty at this time whether the auto companies will meet the standards by 1985. The differences between these estimates, however, are not substantial. For example, the Administration believes that the auto companies will not meet the 1985 standard of 27.5 miles per gallon ("mpg"), but will achieve about 24 mpg. A projected shortfall of about 3 mpg over this 8-year period is too close to estimate with certainty.

In assessing the proposed auto inefficiency tax and rebate, it should be observed that the auto efficiency standard and penalty under EPCA operate in many respects as an indirect auto inefficiency tax and rebate for any auto manufacturer whose fleet average gas mileage is at or below the standard. For such a manufacturer, the sale of an additional inefficient car will lower the manufacturer's fleet average fuel efficiency

and increase his penalty, while the sale of an additional efficient car will raise the fleet average efficiency and lower the penalty.

However, for a manufacturer whose fleet average gas mileage exceeds the EPCA standard, this standard does not operate as an indirect auto inefficiency tax and rebate. In fact, the standard provides no further incentive to improve automobile efficiency once the fleet average gas mileage has been met. The auto inefficiency tax and rebate program would provide such an incentive, although, as indicated below, the resulting energy savings in this situation may be rather limited.

Although the penalty under EPCA is \$50 for each car in the fleet for every mile by which the fleet average falls below the standard, the implicit penalty on an inefficient car is much more than \$50. First, since the penalty is nondeductible for tax purposes, it is the equivalent of increasing the deductible costs by almost \$100 per car. Second, when the penalty is allocated only to the inefficient cars (as opposed to the entire fleet), it far exceeds the post-income tax cost of \$100 per car per mile below the standard. Because inefficiency is measured in terms of gallons of gas consumed over any assumed number of miles, the penalties allocable to the more inefficient cars is quite substantial. To measure gallons of gasoline consumed by a manufacturer's fleet, the fleet average is computed under a formula employing the harmonic mean.³

Consequently, the contribution of a very inefficient car to not meeting the fleet standard and causing the \$50 per car penalty to be imposed on the entire fleet is substantially greater than the contribution of one slightly below the standard. For example, assuming 100,000 miles to be the distance driven in a year, a car getting 20 miles per gallon would consume 5,000 gallons of gas. An improvement to 21 miles per gallon would reduce this to 4,762, a saving of 238 gallons or 4.8 percent. On the other hand, an improvement from 14 miles per gallon to 15 miles per gallon reduces the number of gallons of gas consumed from 7,143 to 6,667, a decrease of 476 gallons (twice as much as in the previous case) and a decrease of 6.7 percent.

One study⁴ has calculated that the existing \$50 penalty for a manufacturer is equivalent to the following auto inefficiency tax and rebate schedule compared to the proposed tax and rebate proposal:

³The purpose of using this formula is to first obtain a production weighted average of the gallons a car consumes per mile (rather than the miles a car goes per gallon it consumes), and then to translate this figure to miles per gallon by obtaining its reciprocal. This technique achieves a more accurate determination of fuel mileage, since the relevant figure to be averaged is how much gasoline an automobile consumes over any assumed amount of driving.

The formula is as follows:

If X = the total number of cars produced by a manufacturer, X_i = the number of cars in the i th class ($i=1, 2, \dots, n$), M_i = the miles per gallon of the i th class and (M_h = the production weighted harmonic mean fuel economy, the formula for average fuel economy is:

$$M_h = \frac{X}{\frac{X_1}{M_1} + \frac{X_2}{M_2} + \dots + \frac{X_n}{M_n}}$$

⁴James Sweeney, "The Impact of the President's Proposed Gasoline Tax and Gas Guzzler Tax on Gasoline Consumption," Department of Engineering-Economic Systems, Stanford University, May 13, 1977, p. 9. Mr. Sweeney worked at FEA on the development of their original auto model which was used in the development of FEA's 1976 National Energy Outlook and to evaluate gasoline tax options examined by the Ways and Means Committee in 1975. Currently FEA is using a different model as indicated below.

Sweeney analysis of manufacturer pricing response to current legislation versus proposed gas-guzzler tax and subsidy

	Current law: Manufacturer incremental costs ¹ (implicit taxes (+) or rebates (-) from current standards)		Proposed (implicit taxes (+) or rebates (-) from current standards)	
	1980	1985	1980	1985
New car miles per gallon:				
10-----	2,000	4,183	666	2,488
15-----	667	2,292	333	1,603
20-----	0	1,031	0	733
25-----	-400	275	-199	219
30-----	-667	-229	-333	-121
35-----	-857	-589	-428	-362
40-----	-1,000	-859	-473	-493

¹ In calculating the manufacturer's incremental costs, a 50-percent corporate income tax rate is assumed. These figures are the pre-tax cost equivalent to the non-tax-deductible civil penalty of current law. This table is based on the assumption that the manufacturer's fleet is just below the applicable mileage standard. Computations are then made with respect to the hypothetical additions of cars both failing to meet the standard and exceeding the standard.

Doubling the \$50 penalty would double these implicit tax and rebate amounts. Auto manufacturers may lower the price of their efficient cars to increase the sales of these cars, thereby raising their fleet average. The auto companies could be expected to pass on to the auto buyer a part of the implicit cost of the amounts in the table above. For a company whose fleet average already exceeds the applicable standard, however, there is no further incentive to improve its fleet average gas mileage, so that such a company would not have an incentive to adjust its car prices in response to the fleet average standard and penalties.

Analyses differ as to whether the goal of reducing gasoline consumption by 10 percent by 1985 can be met without any additional sanctions. The Department of Transportation, the Congressional Budget Office and James Sweeney reach substantially different conclusions. The principal difference among these estimates is not so much a result of differences in the expected fleet size or fleet efficiency (although there is some) but differences in the assumptions concerning (1) the response of drivers to a reduction in the cost of driving by use of more efficient automobiles, (2) the increase in gasoline usage by trucks, and (3) the shift to diesel automobiles.

Since the administration estimates that the automobile companies will not meet the EPCA mandatory standards, it has concluded that a tax and rebate to encourage the industry to shift production and to shift consumer purchases from inefficient to efficient autos is necessary. The administration estimate is based on a model of the FEA which estimates both the supply and demand response of the auto-

mobile sector. This model computes the additional cost of production to improve the mileage rating for various size classes of cars as well as estimating the demand side. The model assumes that efficiency improvement is carried to the point where the (increasing) cost of additional efficiency just equals the cost of the existing penalty. It can be argued that, with present technology, cars that meet the 1985 standard can now be produced at a price that is not excessive, and, consequently, it may be possible to meet the standard by shifting the size mix of the fleet.

The FEA analysts disagree with the model used by James Sweeney, which indicates the auto companies will meet the mandatory standards, on the grounds that his model is exclusively a consumer demand model and does not take account of the increasing cost of producing a more efficient car. They also contend that his model assumes the standards will be met.

Effect of tax on gasoline consumption

Some analyses indicate that the tax and rebate program will have little impact on the size, composition or fuel efficiency of the fleet, on gasoline savings or on auto sales. The Congressional Budget Office indicates that the average new car fuel economy will be only 23.3 miles per gallon in 1985, rather than the 27.5 mpg of the standard. James Sweeney⁵ projects that because of the severity of the existing penalty, the automobile companies will meet the mandatory standards. As shown in table 11 below, which deals only with the gasoline savings from automobiles, the CBO estimates that the tax and rebate proposal will encourage auto companies to improve their average fleet mileage and save 215,000 barrels per day by 1985 (compared to the 185,000 estimated by the Administration), while Sweeney estimates a saving of only 70,000 barrels per day. His estimated saving, even though he expects the standards to be met in 1985, results from the effect of the tax in pushing auto companies to improve the average slightly above the standards in the early years.

As indicated in table 11, CBO estimates that, if the tax and rebate were doubled (so that auto companies would reach the EPCA standards), the additional gasoline savings (over those resulting from the proposed tax and rebate) would be 70,000 barrels per day in 1985 and 200,000 barrels per day in 1990. The CBO estimates that total gasoline usage will increase between 1978 and 1985 because the estimated decrease in the amount of gasoline used by automobiles would be more than offset by the estimated increase in the amount of gasoline used by trucks. The CBO estimates, based on a study done for the FEA, assume that truck gasoline consumption will increase from 1.6 million barrels per day in 1976 to 1.9 million in 1980, 2.2 million in 1985 and 2.6 million in 1990.

⁵ James Sweeney, *supra* note 4.

TABLE 11.—*Gasoline consumption: Base case and savings from auto inefficiency tax and rebates, CBO¹ and administration estimates*
[Thousands of barrels per day]

	1974	1978	1980	1985	1990
Base case:					
Administration-----				6,940	-----
CBO (all uses)-----		7,390	7,530	7,650	8,160
James Sweeney (autos only)-----		5,230	5,440	5,480	5,580
Savings from auto inefficiency tax and rebate—autos only:					
Administration ² -----		*	45	185	630
CBO ³ -----		10	15	215	450
James Sweeney-----			120	70	40
Increased inefficiency tax and rebates to meet EPCA standard: ⁴ CBO-----		—	15	70	200

¹ Congressional Budget Office.
² The Administration estimates total savings from autos and trucks to be 300,000 barrels per day in 1985.
³ Assumes the crude oil provisions are already in effect which would save (in thousands of barrels per day) 10, 40, 25, and 0 respectively, for the years listed.
⁴ Reduction from level with tax and rebate on the line above. If the proposed auto inefficiency taxes and rebates are doubled and combined with the crude oil tax, the estimated gasoline savings are similar to the proposed auto inefficiency tax plus the gasoline tax at 20 cents by 1980. In addition, it is likely that the EPCA fuel standards would be met in 1985 according to the CBO estimate. With the full gasoline tax the savings are estimated to be 305,000 barrels per day in 1985 and 650,000 per day in 1990.

Effect of tax on auto sales

Another issue is whether the proposed tax will have an adverse effect on automobile sales. The general consensus appears to be that the effect on auto sales would be small (the automobile companies are the most pessimistic). The administration analysis indicates that the tax and rebate will increase auto sales slightly.

As shown in table 12 below, the Congressional Budget Office estimates that in 1985 domestic automobile production in the absence of the tax is expected to be 11.6 million and that the proposed tax and rebate would be expected to reduce automobile production by 280,000 or 2.4 percent. They estimate that, if the level of tax and rebate were doubled, the additional reduction in production would be 330,000 or 2.8 percent, or a total of 610,000 or 5.2 percent. Sweeney estimates that, since the automobile companies will meet the standards, the proposed tax will have minimal impact on auto sales.

TABLE 12.—Auto sales: Base case and effect of inefficient automobile tax and rebates, CBO¹ estimate

[Thousands of autos]				
	1978	1980	1985	1990
Base case.....	11, 660	12, 090	11, 620	12, 180
Reduction from crude oil provisions.....	120	370	80	0
Additional reduction from auto inefficiency tax and rebate.....	20	² —10	280	160
Additional reduction from increased auto inefficiency tax and rebate to meet EPCA standard (compared to auto inefficiency tax, line 3) ³		86	330	460

¹ Congressional Budget Office.
² Increase of 10,000.
³ If the proposed auto inefficiency taxes and rebates are doubled and combined with the crude oil tax, the estimated gasoline savings are similar to the proposed auto inefficiency tax plus the gasoline tax at 20 cents by 1980. In addition, it is likely that, as a result of this doubling, the EPCA fuel standards would be met in 1985 according to the CBO estimate.

Chase Econometric Associates, Inc., predicts that by 1981 the tax and rebate would reduce large car sales by about 117,000 and increase sales of small cars by about 200,000, of which 83,000 come from intermediates, for no net change in overall automobile sales.⁶ The estimates of Data Resources, Inc., are similar to the Chase forecasts, with the share of full size cars being reduced from 22 to 19 percent and the sale of small cars increased by 200,000.⁷

Effect on large cars—new and used

Concern has been expressed that the auto inefficiency tax will place an unwarranted burden on those who, for reasons of business, family size, etc., may need to purchase a larger, more inefficient car, such as a station wagon. In other words, it is argued that some groups who may be unable to respond to the intended incentive of the tax by shifting to a smaller, more efficient vehicle. The response to this argument is that efficient station wagons and other cars with large seating capacities are and will be produced.⁸

The auto tax and rebate has also been criticized for its impact on the used car market. The imposition of the tax on new inefficient autos would make existing inefficient used autos more valuable because they could be purchased without the payment of any tax. This could adversely affect the lower income consumers who tend to purchase used inefficient cars. On the other hand, this may cause these consumers to purchase efficient used cars, the price of which, presumably, does not bear any premium.

⁶ Chase Econometric Associates, Inc., "Forecasts of April 27, 1977: Analysis," by Michael K. Evans.
⁷ Brigitte Sellekaerts, "The Effect of the 'Gas Guzzler' Tax," Data Resources, Inc., Memo #98, April 20, 1977, pp. 2-3.
⁸ For example, for the 1977 model year, all large station wagons manufactured by Buick and Oldsmobile, and some large station wagons manufactured by Pontiac, meet or exceed the 1978 mileage standards.

Rebate for efficient cars

According to the FEA estimates, there is no significant difference in the energy savings if the auto tax is imposed without a rebate. They estimate that if the tax schedule were increased by 20 percent with no rebate, the energy savings would be about the same as with the proposed tax and rebate schedule. This, however, would lead to a small decrease in car sales.

If the rebate were made available to imports, the production of domestic autos would be discouraged and imports would be encouraged. An estimated 90 percent of the imports already meet the criteria for the rebate, whereas only 50 percent of U.S. models do.

E. Members' Proposals***Mr. Vanik***

The Administration proposal for rebates on efficient automobiles would be eliminated.

Owners of 4 cylinder cars would be allowed the same income tax deduction for State gasoline taxes as owners of 6 or 8 cylinder cars.

The income tax deduction for passenger automobiles used for business purposes would not be allowed in the case of automobiles which do not meet the mandatory efficiency standards.

An excise tax of 20 percent of the value of automobile air conditioners would be imposed, effective beginning from model year 1978.

Mr. Waggonner

The auto inefficiency tax and rebates would be eliminated or, alternatively, terminated after 4 years.

The auto inefficiency tax would be applied to foreign general automobiles and light-duty trucks; the rebates would not apply to foreign general automobiles and light-duty trucks.

Mr. Pickle

A \$300 tax credit would be provided for the purchase of electric vehicles (excluding golf carts, snowmobiles, and other similar recreation equipment).

Mr. Stark

A resolution would state that unless the present mandatory standards for the production of fuel efficient automobiles are met, an annual tax of \$1,000 will be levied on the owners of automobiles failing to meet the standards.

Mr. Jones

The rebate for efficient cars would be eliminated.

Mr. Mikva

An annual vehicle registration weight tax would be imposed on all cars manufactured after 1970. The tax would range from \$350, on vehicles weighing 5,500 pounds, down to zero, on vehicles weighing 3,000 pounds or less. The tax would be reduced by 50 percent for one car registered by each family containing more than 3 dependents. The tax would not be imposed in States which impose a comparable tax.

Mr. Fisher

The rebate for efficient autos would be eliminated with the proceeds from the automobile inefficiency tax used for energy research and development, conservation techniques and mass transit.

Mr. Gephardt

The automobile efficiency rebate would be deleted and the revenues from the automobile inefficiency tax used to fund a consolidated transportation account, an energy research and development trust fund, and transportation block grants to States.

Mr. Tucker

The rebate for efficient cars would be stricken. The Department of Transportation would have authority to set lower fuel efficiency standards for light-duty trucks.

The fuel inefficiency tax would not be taken into account by any purchaser for depreciation or investment tax credit purposes.

Mr. Lederer

The auto inefficiency tax would apply to cars not meeting standards which are higher than the present law standards for years 1980 to 1985, with a fleet average standard of 29.7 miles per gallon by 1985. The revenues from this tax would be placed in an energy research and development fund.

The automobile efficiency rebates would apply to foreign cars only if they are assembled in the United States.

Mr. Duncan

A tax credit of 25 percent of expenditures up to \$2,500 would be provided for electric vehicles.

F. Other Proposals

The rate of the auto efficiency tax could be increased in the early years. A possible amendment to the Administration's rate schedule would be the following:

Possible Auto Efficiency Tax

Model year	Percentage increase in tax over administra- tion proposal	Tax on 16-mpg car		Tax on 12-mpg car	
		Admini- stration	Alternative	Admini- stration	Alternative
1978 ¹ -----	100	\$112	\$224	\$449	\$898
1979-----	90	176	334	553	1,051
1980-----	80	249	448	666	1,199
1981-----	60	416	666	935	1,496
1982-----	50	553	830	1,159	1,739
1983-----	30	782	1,017	1,524	1,981
1984-----	20	974	1,169	1,819	2,183
1985-----	0	1,384	1,384	2,488	2,488

¹ If the bill is not passed until near the end of the model year, the tax could begin in 1979. This schedule is merely one alternative; it can be varied in any manner.

The efficiency standards could be written into the statute without any administrative agency authority to subsequently vary them.

G. Areas for Committee Consideration

Auto inefficiency tax versus standards and penalties

One way to accomplish substantial energy conservation is through increased automobile efficiency. Congress has already taken substantial steps to promote increased automobile efficiency through enactment of the fuel efficiency standards under EPCA.

Since these standards are already part of the law, there is a question whether an auto inefficiency ("gas guzzler") tax and rebate program is needed to achieve further conservation.

The EPCA standards and penalties may have the same impact on a manufacturer's behavior as a system of taxes if the manufacturer does not meet, or barely meets, the fleet efficiency standards. Thus, increasing the size of the penalties of existing law may have an impact somewhat similar to imposing a gas guzzler tax and rebate for those manufacturers who do not meet the standards. On the other hand, if there is a substantial possibility that some manufacturers will not meet the standard in some years, Congress might prefer that any additional legislation take the form of taxes on inefficient cars rather than increased penalties for not meeting the standards.

A strong argument for the gas guzzler tax, as opposed to the EPCA penalties, is that it would dampen demand for inefficient cars, thereby providing the auto manufacturers with an even greater incentive to produce efficient cars. While the EPCA penalties increase the cost of cars, they do so on fleet-wide basis and there is no requirement that all of the increased cost be passed through to consumers who purchase the inefficient cars. In fact, in order to remain competitive with other manufacturers meeting the fleet average standard, a manufacturer subject to the penalty would probably have to absorb part or all of the penalty and refrain from passing it on to the consumer.⁹

By contrast, when the consumer sees the amount of the gas guzzler tax shown on the car invoice, he will realize he is paying a premium (which, in many cases, is substantial) to purchase an inefficient car. Thus, the consumer would be provided with a financial and, perhaps, psychological incentive to purchase more fuel efficient automobiles.

Furthermore, while the average fuel economy of a manufacturer's fleet may meet the applicable EPCA fleet-wide mileage standard, some of the cars in the fleet may fall below the standard, while others may be above it. In this instance, the manufacturer would have little or no incentive to increase the efficiency of those cars falling below the standard. Since the imposition of a gas guzzler tax on the cars falling below the standard would reduce the demand for such cars, it would probably encourage the manufacturer to meet or exceed the standard for as many cars in its fleet as possible. This may have a particularly strong impact in the next few years, when manufacturers will still have

⁹To the extent a manufacturer cannot accurately estimate the amount by which he will fail to meet the standard for a year (which is based on actual sales), he would not be able to adjust the prices of cars sold during that year for the precise amount of the penalty attributable to those cars.

the latitude to produce a substantial number of inefficient cars because of the relative ease of meeting the fleetwide standards in these years.

Another argument is that, if individuals are to be permitted to purchase inefficient cars and detract from the conservation effort made by most others, they should as a matter of equity pay a considerable premium (in the form of a gas guzzler tax) for this privilege.

Under the Administration's proposal, the tax (and the rebate) would be based on the extent to which a vehicle falls short of or exceeds the EPCA standards. In considering the desirability of not enacting an automobile inefficiency tax, the Committee should note that EPCA authorizes the Secretary of Transportation to establish the standards for model years 1981-84 by rule. In setting the standard, the Secretary is to establish the level at the "maximum feasible fuel efficiency level". This level is to be determined in accordance with the following criteria: (1) technological feasibility, (2) economic practicability, (3) the effect of other Federal motor vehicle standards on fuel economy, and (4) the nation's need to conserve energy. Due to the relatively broad and ambiguous criteria to be employed in setting the level of maximum feasible fuel efficiency, it is at best uncertain as to what the standards for model years 1981-84 will be.

Application of an auto inefficiency tax

If the Committee determines that an auto inefficiency tax would effectively serve to decrease gasoline consumption, the question arises as to which vehicles the tax should apply.¹⁰ Under the Administration's proposal, the tax would apply to 4-wheeled, fuel-propelled, vehicles, weighing not more than 6,000 pounds, and which are primarily designed for on-highway use. Moreover, under the Administration's proposal, the tax may also apply to certain vehicles weighing between 6,000 to 10,000 pounds. The tax would apply to those vehicles which the Secretary of Transportation, pursuant to his authority under EPCA, determines (1) are the type of vehicle for which average fuel economy would be feasible and (2) either such standards would result in significant energy conservation or such vehicles are used substantially for the same purposes as vehicles weighing 6,000 pounds or less. Examples of vehicles that may fall in this class are recreation vehicles (such as campers), certain trucks, and, conceivably, large limousines and similar vehicles used either for private or public transportation. At this point, however, because of the broad criteria and discretion involved, it is impossible to determine which vehicles will be selected.

¹⁰ The administration proposal is not clear as to whether the auto inefficiency tax will utilize separate mileage figures which take auto air conditioners into account. The mileage figures commonly circulated by the EPA do not make a mileage distinction based on whether an automobile has an air conditioner (or whether it is used to any particular extent). Since air conditioning generally reduces gas mileage by about 10 percent, the Committee may wish to require that different mileage figures be used for automobiles with and without air conditioning (as the Committee did in 1975 in H.R. 6860).

If this were done, a potentially significant problem with the auto inefficiency tax would be retrofitting of air conditioners. It is possible that buyers will forego the purchase of air conditioning until after delivery to avoid or reduce the auto inefficiency tax. For example, if a 1978 model car were rated at 16 mpg with air conditioning and 18 mpg without it, the purchaser would save \$112 (based on the level of tax in the administration's proposal) simply by deferring installation.

Consequently, if the Committee adopts an auto inefficiency tax, it might wish to consider imposing an excise tax on automobile air conditioners (other than factory-installed units) in an amount which would approximate the penalty from the reduction in mileage.

If the Committee decides that a gas guzzler tax is an appropriate means to achieve conservation, it may well wish to consider prescribing its own auto efficiency standards. Initially, the standards which the Committee prescribes might well be the same standards which apply under EPCA. The advantage of prescribing specific standards is that the impact of the tax would not be subject to the discretion of an agency outside of the Committee's jurisdiction. Thus, even if, at some later date, the EPCA standards were reduced, the impact of the tax would not be reduced unless the Committee made a decision that a modification of its own standards was also appropriate. In addition, if the Committee prescribes its own standards, the uncertainty as to the application of the tax during 1981 through 1984 with respect to vehicles weighing not more than 6,000 pounds would be eliminated. Assuming that standards are prescribed for certain vehicles in the 6,000 to 10,000 pound class, the uncertainty as to the application of the tax to these vehicles would also be eliminated.

As indicated above, the auto inefficiency tax may potentially have its greatest energy saving impact with respect to automobiles manufactured in the next few years. The tax could reduce demand for inefficient cars which otherwise would be produced by the manufacturers without any penalty during this period, while still meeting the relatively lax fleet-average standards. (By the mid-1980's, compliance with the relatively stricter fleet-average standards should result in the production of very few inefficient automobiles even in the absence of a gas guzzler tax.) Cars, including inefficient cars, have a fairly long useful life. Even if more people are purchasing efficient cars by the mid-1980's, the conservation effort during that period will suffer because of inefficient cars which were purchased in the late 1970's and early 1980's. Therefore, a tax which discourages the purchase of such automobiles during this period will confer conservation benefits over long periods of time (i.e., the 8 to 10 years average useful life of most automobiles).

It has been suggested by some that the rate schedule proposed by the Administration may not be strong enough to achieve this purpose. The greatest amount of tax imposable for model years 1978, 1979, 1980, and 1981 on the most inefficient cars sold would be \$449, \$553, \$666 and \$935, respectively. For this reason, the Committee might wish to consider a somewhat more steeply graduated tax table.

The Committee may also wish to consider a different effective date from the one in the Administration's proposal—sales after date of enactment. The 1978 models will be coming out in September of this year—close to the time the bill could become law. More advance notice to the automobile companies may be desirable if they are to change production plans in response to the tax. Thus, the tax might first apply to sales for automobile model year 1979. In H.R. 6860, which was reported by the Ways and Means Committee on May 15, 1975, the tax did not apply until model year 1978.

One alternative taxing approach the Committee may wish to consider is an ad valorem tax similar to that proposed in H.R. 6860. The rate of this tax increases in relation to the inefficiency of the automobile, involved, and, since it is imposed on the wholesale price of the automobile, the tax would take into account the inflation occurring in the price of automobiles. However, it could be persuasively argued

that the value of the car is irrelevant to the efficiency or inefficiency of the automobile.

Although not within its jurisdiction, the Committee may wish to consider recommending the alternative of the flat prohibition of the manufacture and sale of cars that fail to meet a minimum standard of efficiency. However, the flat prohibition approach has the disadvantage of being all or nothing. There may be a range of cars which fall below the standards, but which are not so inefficient as to justify a flat prohibition on their sale.

There are considerable indications that regulation of rail, motor and water carriers by the Interstate Commerce Commission (ICC) is structured without adequate concern for efficient use of energy. Thus, for example, it has been pointed out that energy wastage may occur because—(1) certain motor carriers with limited commodity authority, or restricted routings and delivery points, are unable to fill their trucks with authorized commodities; (2) many motor carriers are required to follow specified highway routes, and this requirement often leads to circuitous and inefficient operations; and (3) the diversion of traffic from rail carriers to motor carriers by regulation may well result in increased use of energy per ton-mile with respect to types of traffic and haul in which the rail carriers have substantial cost superiority.

Although it is not within the Committee's jurisdiction, the Committee might wish to recommend that the Ad Hoc Committee consider directing a study of ICC regulations to determine the amount of energy which could be saved by revisions to eliminate practices which result in inefficient use of energy resources.

Application of rebate proposal

Under the administration proposal, rebates, generally ranging from \$50 to \$500, would be paid for the purchase of fuel efficient automobiles. The amount of such payments would approximate, as closely as possible, the estimated tax receipts from the auto inefficiency tax. Generally, the rebates would be paid with respect to automobiles manufactured in the United States and Canada, but would only be available to foreign manufactured automobiles pursuant to executive agreements entered into between the country of manufacture and the United States. Under the proposal, these executive agreements are to be designed so that domestic automobile manufactures are not disadvantaged vis-a-vis foreign automobile manufacturers. Unlike treaties, executive agreements are not subject to congressional review.

This rebate proposal has been criticized on a number of grounds.

(1) It is far from clear that the rebate is necessary to encourage the purchase of fuel efficient cars. For many people, the increasing cost of gasoline coupled with the auto inefficiency tax should represent adequate incentives to purchase efficient cars.

(2) There is a potential problem with the rebate during the first two years because the proposal allows the rebate (if any) for purchases on or after May 1, 1977. However, the tax on gas guzzlers cannot be imposed until the date of enactment of this legislation. The Administration proposal provides that the rebates for purchases of both model years 1977 and 1978 would be paid out of the estimated revenues from the tax imposed on the 1978 model. Thus, the rebates for model years 1977 and 1978 would probably be quite small.

(3) The potential problem resulting from the proposed rebate with our trading partners under the General Agreement on Tariffs and Trade ("GATT")¹¹ is substantial. Generally, GATT prohibits discriminatory policies against foreign imports. While the legal analysis is complex, there is, at the very least, a serious question as to whether the terms of the GATT would permit the United States to give a subsidy (i.e., the rebate) to domestic car manufacturers without making a comparable subsidy available to foreign car manufacturers who meet the same standards.

On the other hand, many believe that if rebates were made available for foreign cars on the same basis as for domestic cars, the rebate program might encourage imports at the expense of domestic manufacturers. To the extent that this analysis is correct, the program would cause decreased profits for American car manufacturers and their suppliers.

The Administration's solution to this thorny problem is to provide that foreign manufacturers would be entitled to a rebate to the extent provided in executive agreements to be negotiated between the United States and the various foreign governments.

In light of the extraordinary importance of this issue to the American economy, it is not at all clear that it would be desirable to enact the rebate with only the hope that future negotiations would be conducted in such a way as not to seriously disadvantage domestic manufacturers.

Because of the above problems concerning the rebate, the Committee may wish to eliminate this proposal.

Possible use of auto tax revenues

There are a number of ways in which the funds collected from the auto inefficiency tax might be used that might have more energy saving potential than any marginal benefits which might be provided by the rebate.

The Committee might wish to use some or all of these funds to create an energy trust fund. As under H.R. 6860, the trust funds could be available for such purposes as: (1) basic and applied research programs related to new energy technologies, (2) development and demonstration of new energy technologies, (3) programs relating to the development of energy resources from properties in which the United States has an interest, and (4) research projects or capital expenditures for demonstration projects relating to local and regional transportation systems. The trust funds could also be utilized to support Federal car or van pooling pilot projects (such as the proposed Federal van pooling project). Also, part of the monies could be returned to the States for use in local energy savings programs such as car pooling and public transportation.

Since reductions in gasoline consumption would reduce revenue from State gasoline taxes (particularly in States which have relatively high gasoline taxes), the Committee might wish to consider using some of the proceeds of the fuel inefficiency tax to compensate the States for this revenue loss.

¹¹ The GATT, which took effect in 1948, is a multilateral trade agreement of reciprocal rights and obligations. Currently, more than 80 countries are full contracting parties to the GATT. It provides a set of rules to govern the conduct of international trade, procedures to settle trade disputes, and a framework for negotiations to reduce obstacles to international trade.

IV. STANDBY GASOLINE TAX AND REBATE

(SECTIONS 1221-1223 OF THE ADMINISTRATION BILL)

A. Present Law

A manufacturers excise tax is presently imposed on gasoline at the rate of 4 cents per gallon, and a retailers excise tax of 4 cents a gallon is imposed on special fuels, including diesel fuel and liquefied petroleum gas. These taxes are scheduled to drop to 1½ cents per gallon on October 1, 1979. Also, fuel used in noncommercial aviation is taxed at 7 cents per gallon. The net revenues from these taxes go into the Highway Trust Fund except for amounts attributable to non-commercial aviation, which are paid into the Airport and Airway Trust Fund, and certain minor amounts attributable to motorboat use, which are paid into the Land and Water Conservation Fund.

Present law provides exemptions from these excise taxes for certain uses of gasoline, including (1) use by State and local governments and nonprofit educational organizations, (2) use in commercial aviation or for export, and (3) use in vessels, further manufacture, and farming.¹ Nonhighway use is eligible for a 2-cent per gallon refund or credit.

B. Administration Proposal

Gasoline tax

Starting in 1979, a standby gasoline tax would go into effect if the applicable consumption target were not met.²

Where domestic gasoline consumption for any fiscal year exceeds the target set for that year by 1 percent or more, a gasoline tax would be imposed, starting on January 1 of the following year, at the rate of 5 cents per gallon multiplied by each full percentage point above the target.³ The tax could not be increased or decreased more than 5 cents from the tax imposed in the previous year, and the cumulative amount of taxes applicable in any one year could not exceed 50 cents per gallon.

¹ In general, similar exceptions are provided from the excise taxes on diesel fuels and other special fuels.

² No similar standby tax would be imposed on diesel fuel or on certain other special fuels (including benzol, benzene, naphtha, liquefied petroleum gas, and casinghead and natural gasoline) which are currently taxed at the same rate as gasoline.

³ The Administrator of the Federal Energy Administration would be required to make, and publish in the Federal Register, no later than November 15 of each calendar year, a determination of whether the domestic consumption of gasoline for the 12-month period ending on September 30 of such calendar year exceeded the target for such year.

The targets are as follows:

12-month period ending Sept. 30 of determination year:	<i>Million barrels average daily consumption</i>
1978 -----	7.35
1979 -----	7.40
1980 -----	7.45
1981 -----	7.40
1982 -----	7.20
1983 -----	7.00
1984 -----	6.80
1985 -----	6.60
1986 -----	6.55
1987 and thereafter -----	6.50

The targets allow for limited annual increases in gasoline consumption, from 7.35 million barrels per day for fiscal year 1978 to 7.45 million barrels per day for fiscal year 1980. From 1980 through 1987, annual reductions are targeted, with consumption decreasing to 7.4 million barrels per day for fiscal year 1981 and further decreasing to 6.5 million barrels per day for fiscal year 1987 and years thereafter.

If an increase in the gasoline tax occurs, this increase is to apply to gasoline in the hands of dealers on the date of the increase. This is accomplished by imposing a "floor stock tax" on inventories of dealers (other than on inventories of retailers held at the place where the gasoline is to be sold at retail). The floor stock tax approach is the practice followed generally when an excise tax is increased in order to provide the same tax on inventories on the date of tax increase as on subsequent sales by producers and others. The gasoline floor stock tax is to be imposed at a rate equal to the difference between the new tax rate and the old tax rate. For purposes of this tax, a "dealer" does not include a producer or importer. The proposal would also provide for floor stock refunds in cases where a decrease in tax occurs.

The existing exemption from manufacturers excise tax generally provided with respect to sales of gasoline to State or local governments and nonprofit educational organizations would not apply to the standby gasoline tax.

Rebate

Funds collected from the standby gasoline tax would be rebated on a per capita basis, the amount of the per capita rebate being based on estimated standby tax revenues. The net revenues from the tax (after taking account of the revenue loss attributable to the business tax deduction of the tax and administrative costs of the rebate) would be refunded to consumers on a per capita basis. However, to the extent the gasoline tax on business is passed on in higher prices, the deduction would be offset by the additional income resulting from the tax. Generally, this refund would take the form of a tax credit to residents of the United States. The credit would be refundable only for individuals eligible for the earned income credit and for individuals who have earned income and dependent children (and who, if married, file a joint return).

Persons entitled to benefits under the Social Security Act or the Railroad Retirement Act having limited taxable income (so that they

would be unable to benefit from an income tax credit) would receive per capita energy payments in September of each year, beginning in 1979. Similar payments would be made by States to families receiving aid to dependent children, with full Federal reimbursement of the costs involved. States would also administer a backup program to make energy payments to individuals not receiving reimbursement under any of the other reimbursement systems.

The per capita energy payment would be disregarded in connection with the administration of all Federal or Federally assisted financial aid programs. The rebate would not be considered as income or as a reduction in Federal income taxes for purposes of State law. Also, the rebate would be taken into account for purposes of Federal income tax withholding.⁴

C. Action in the 94th Congress

The Ways and Means Committee bill imposed an additional 3 cents per gallon tax on gasoline and special motor fuels (but not on diesel fuel).

There were to be no special exemptions, credits, or refunds on the 3-cent tax other than those available under present law—for farming, State and local governments, nonprofit educational institutions, supplies on vessels or aircraft, commercial aviation, and a one-half exemption for local transit use.⁵

A further increase in these taxes would have occurred (starting April 15, 1977) if the U.S. domestic gasoline consumption for 1976 (or later years) was above the 1973 consumption level. The additional tax would have been 5 cents per gallon for each one-percent increase in consumption, with a maximum additional tax of 20 cents per gallon (or a total of 23 cents for the conservation tax, which would have been in addition to the present law tax of 4 cents).

To reduce the potential adverse economic impact and to reimburse individuals for the tax increase on an amount approximating average use of gasoline, the Ways and Means bill provided credits and exemptions for certain uses of gasoline and special motor fuels. For any increase in the gasoline tax above 3 cents per gallon, a refundable income tax credit equal to the tax on 480 gallons a year (whether or not this much gasoline was actually used) was to be provided to each resident individual age 16 or over. This credit was to be reflected in income tax withholding. The Ways and Means bill also provided a 50-percent credit for business use and certain other work-related use, a 75-percent exemption (in lieu of the business credit or deduction) for certain taxicab use, and an exemption for tax-exempt charitable organizations (sec. 501(c)(3)), in the case of both gasoline and special motor fuels. Users exempt from the 3-cent tax were also exempt from the 20-cent increase.

The revenues from the 3-cent tax and the net revenues (after credits and refunds) from any additional tax were to be deposited in the En-

⁴ This rebate program would be combined with the program for the per capita rebates of the crude oil equalization tax.

⁵ Under the Ways and Means bill, the present law's exemption for exports would not have applied to these fuel conservation taxes.

ergy Conservation and Conversion Trust Fund. The Ways and Means bill also included a provision to disregard any refundable gasoline tax credit received by an individual for purposes of determining eligibility under a Federal or Federally-assisted welfare program.

The additional 20-cent gas tax provision was eliminated on the House floor by a vote of 345-72, the additional 3-cent tax was eliminated on the House floor by a vote of 209-187. Increased gasoline taxes were not discussed by Senate Finance Committee in connection with the energy-related provisions of the Tax Reform bill.

However, the Senate Finance Committee version of H.R. 6860 contained a provision which would have imposed an additional one-half cent per gallon tax on gasoline sold after December 31, 1976, and before January 1, 1980. The receipts from this tax, unlike other gasoline tax receipts, would have gone into the general fund of the Treasury Department (rather than being earmarked for the Highway Trust Fund).

D. Staff Analysis

The Administration has indicated that if the tax were triggered for the years 1979 through 1985, a 350,000-barrel-a-day savings would result. It has also estimated that a 350,000-barrel-a-day savings of gasoline consumption would be necessary by 1985 in order to avoid triggering the tax.

The CBO estimates that the gasoline tax is likely to be first triggered in 1982 and reach 45 cents in 1990, and, as shown in table 13, would be expected to reduce gasoline consumption by 65,000 barrels a day in 1985 and 210,000 barrels a day by 1990. James Sweeney estimates the savings from the gasoline tax, assuming no gas guzzler tax and the gasoline tax is imposed at the maximum rate, to increase from 140,000 barrels a day in 1980 to 450,000 in 1990. With the gas guzzler tax, Sweeney estimates the savings from the gasoline tax to be substantially higher because the interaction between the two would encourage consumers to shift their purchases so that the mandatory fleet standards would be exceeded. With the gas guzzler tax, he estimates the savings to range from 150,000 to 740,000 barrels a day for the years 1980 and 1990, respectively.

A gasoline tax affects the amount of gasoline consumed in two principal ways. In the short run, it increases the cost of traveling and reduces the number of miles traveled. In the longer run, when consumers have an opportunity to adjust, the tax encourages consumers to change their travel patterns and to use more efficient automobiles.⁶ However, the responsiveness of miles driven to a change in the price of gasoline appears to be quite low. This responsiveness, the price elasticity of demand (the percentage change in miles driven divided by the percentage change in price), is generally held to be about 0.1 in the shortrun—a year or so—and 0.2 in the longer run—5 to 7 years.

The gross revenue increase from the gasoline tax is about \$1 billion per penny of tax (at 100 billion gallons per year or 6.5 million barrels per day at 42 gallons per barrel).

⁶ The proposed standby tax would not apply to diesel fuel. Presumably, this would encourage a shift to the driving of diesel automobiles because of the price differential between gasoline and diesel fuel. However, such a shift may mean that at least some of the savings on gasoline consumption would be offset by increased consumption of diesel fuel.

TABLE 13.—*Gasoline consumption: Base case and savings from the gasoline tax, CBO ¹ and Administration estimates*
(Thousands of barrels per day)

	1978	1980	1985	1990
Base case:				
Administration-----			6,940	-----
CBO-----	7,390	7,530	7,650	8,160
James Sweeney (autos only)-----	5,230	5,440	5,480	5,580
Savings from gasoline tax:				
Administration ² -----		200	350	400
CBO: ³				
Partial tax			65	200
(level of tax)-----			(20¢)	(45¢)
Full tax		65	150	260
(level of tax)-----		(10¢)	(35¢)	(50¢)
James Sweeney:				
1. With no gas guzzler tax ⁴ -----		140	370	450
2. With gas guzzler tax ⁴ -----		150	490	740

¹ Congressional Budget Office.
² This is the estimated amount of reduction in gasoline consumption necessary to avoid triggering the tax.
³ Assumes the crude oil tax and auto inefficiency tax and rebate are already operative.
⁴ Assumes the gasoline tax imposed at the maximum rate.

The CBO estimates a substantial impact on automobile sales from the gasoline tax. As shown in table 14 below, the CBO estimates a reduction of as much as 850,000 cars sold in 1985, with the maximum gasoline tax, and a reduction of slightly over a million units or about 9 percent of base case sales in 1990.

TABLE 14.—*CBO ¹ estimate of auto sales and effect of gasoline tax (assuming existence of auto inefficiency tax and rebate)*
(Thousands of autos)

	1978	1980	1985	1990
Base case-----	11,660	12,090	11,620	12,180
Reduction from partial gas tax ²			620	1,080
(level of tax)-----			(20¢)	(45¢)
Reduction from full gas tax ²		640	850	1,060
(level of tax)-----		(10¢)	(35¢)	(50¢)

¹ Congressional Budget Office.
² Assumes the crude oil provisions and the auto inefficiency tax and rebates are already operative.

E. Members' Proposals*Mr. Vanik*

A gasoline tax of from 5 cents to 30 cents per gallon would apply only to purchases beyond a basic number of gallons per household per month (which number may vary in different parts of the country).

An excise tax would be imposed on leaded gasoline in an amount which equalizes the retail price differential between leaded and unleaded gasoline.

Mr. Corman

A graduated excise tax on increases in gasoline prices would be established, based on FEA allowed increases in ceiling retail gasoline prices. The excise tax would be 25 percent of the first 4-cent increase over the current ceiling price, 50 percent of the second 4 cents, 75 percent of the next 4 cents and 90 percent of any additional increase. The amount of revenues collected from the tax would be rebated directly to consumers.

Mr. Waggonner

The standby gasoline tax and rebate would be deleted.

If there is a gasoline tax, any revenues would be refunded to actual consumers rather than all refunds being made only to individuals.

An allowance equal to 1 percent of any additional gasoline taxes collected would be paid to the petroleum industry to cover expenses incurred in connection with the collection of gasoline taxes.

Mr. Rangel

The reduction in the 4-cent gasoline tax under present law to 1½ cents scheduled for October 1, 1979, would be postponed indefinitely, with the additional revenues used for mass transit, for the development of alternative energy sources (other than nuclear technology and the liquefaction and gasification of coal), and to defray the increased energy costs of State and local governments.

Mr. Fisher

The gasoline tax should be retained at a drastically lower level with the proceeds from the tax used for energy research and development, conservation techniques and mass transit.

The deduction for State gasoline taxes would be repealed.

Mr. Ford

If a standby gasoline tax is imposed, a substantial portion of the receipts should be used for public transportation.

Mr. Gephardt

The rebate of the standby gasoline tax would be deleted and the revenues would fund a consolidated transportation account, ERDA, and block grants to States for transportation purposes.

Mr. Tucker

Any standby gasoline tax should not exceed 5 cents per gallon immediately, with an additional 5 cents per gallon tax if consumption goals are not met (and with tax decreases with consumption decreases). In addition, the current 4 cents per gallon gas tax would not be reduced to 1½ cents per gallon as presently scheduled in 1979.

The per capita rebate of any standby gasoline tax revenues would be deleted and the revenues would fund a consolidated transportation account, an energy research and development trust fund and block transportation grants for States.

Any new Federal gas tax would be reduced by any State tax on gasoline exceeding a certain per gallon amount.

Mr. Steiger

The increased energy costs of any tax would be reduced for low income individuals through the establishment of a fuel stamp program, similar to the food stamp program.

Mr. Schulze

Gasoline used by local government emergency vehicles (defined as police, ambulance, emergency rescue, and fire vehicles) would be exempted from the standby gasoline tax.

F. Areas for Committee Consideration

Perhaps the strongest argument for the gasoline tax is that it is a standby tax, a sort of backup program to the rest of the Administration's conservation proposals. If the rest of the program which the Congress enacts is successful in terms of conservation, the standby gasoline tax will never go into effect.

Some argue against this proposed gasoline tax on the grounds that no substantial amount of conservation would be encouraged by a tax which can only increase, at a maximum, by 5 cents per year. They contend that if a gasoline tax is necessary and if it is to be effective, it ought to be imposed at a much higher rate.

There are, however, several rejoinders to this argument. First, the various analysts who have studied this proposal estimate that some significant energy saving would result from the tax. Second, it may well be argued that the imposition of a very high rate of tax in one giant step would cause severe economic disruption which could be avoided if the tax were imposed more gradually. Third, an important effect of the tax may be to influence prospective automobile purchasers to buy more efficient automobiles in order to economize on costly gas and also to do their part in meeting the national goal for gas consumption so that no additional standby taxes will be triggered.

There are also those who contend that, since the standby gasoline tax would make gasoline somewhat more expensive, it would cause particular hardship for those people in the lower income classes. However, this hardship could be ameliorated through a rebate program.

The Committee may wish to consider a standby coupon gasoline system which would allow purchases of a basic number of gallons per household without the imposition of any additional gas tax. Purchases of gasoline without the coupons (once the month's allotment had been exhausted) would be subject to the additional gas tax.

If a standby gasoline tax system were adopted, the Committee may wish to restrict the rebate of the tax, as was done under H.R. 6860, to those persons age 16 or over, with the amount of the rebate based on an average amount of gallons consumed each month. Thus, for

example, if the Committee determines that the average gasoline consumption is 40 gallons a month, or 480 gallons per year, the rebate would equal 480 multiplied by the amount of standby tax imposable per gallon for the year in question.

One of the primary advantages of this rebate scheme is that it tends to reward those who practice conservation. Individuals who use less than 480 gallons of gas per year will receive a rebate in excess of their increased cost of gasoline due to the tax. On the other hand, those who do not conserve will not be fully compensated for their increased cost of gas by the rebate. In addition, to the extent that lower income groups may do somewhat less driving than upper income groups, this type of rebate approach may favor this group, thus, possibly cushioning them from the impact of increased energy prices to some extent.

An alternative which the Committee might wish to consider would be an ad valorem tax based on the price of gasoline. Some who believe that a standby gasoline tax is basically a sound idea, nevertheless, object to the imposition to a flat rate tax (for example, 5 cents per year) on the grounds that over a period of time inflation will erode the impact of the tax. This objection can be overcome by using an ad valorem tax, which is based on the price of the gasoline and will tend to increase proportionately with inflation.

The Committee might wish to use some or all of these funds to create an energy trust fund. As under H.R. 6860, the trust funds could be available for such purposes as: (1) basic and applied research programs related to new energy technologies, (2) development and demonstration of new energy technologies, (3) programs relating to the development of energy resources from properties in which the United States has an interest, and (4) research projects or capital expenditures for demonstration projects relating to local and regional transportation systems. The trust funds could also be utilized to support Federal car or van pooling pilot projects (such as the proposed Federal van States for use in local energy savings programs such as car pooling pooling project). Also, part of the monies could be returned to the and public transportation.

Since reductions in gasoline consumption would reduce revenue from State gasoline taxes (particularly in States which have relatively high gasoline taxes), the Committee might wish to consider using some of the proceeds of the tax to compensate the States for this revenue loss.

V. OTHER TRANSPORTATION TAX PROPOSALS

A. General Aviation and Motorboat Fuel (sections 1231–1235 of the Administration bill)

1. Present Law

General aviation fuel

Present law imposes a 7-cents-per-gallon excise tax on fuel for aircraft in noncommercial (general) aviation. The net proceeds from this tax¹ are appropriated to the Airport and Airway Trust Fund. Exemptions from this tax are provided under present law for farm use, military aircraft and aircraft used in foreign trade, State and local governments, exports, tax-exempt schools, and certain aircraft museums. Also, the Secretary of the Treasury is authorized to exempt Federal agencies from this tax.

Motorboat fuel

Under present law (sec. 4041(b)), a 4-cents-per-gallon retailers excise tax is imposed on a number of special fuels.² However, if one of these special liquid fuels is sold for nonhighway use or used for a nonhighway use (or for use in a highway vehicle owned by the United States), this tax is imposed at a rate of only 2 cents per gallon.

Under some circumstances, these special fuels can be purchased for motorboat use (or other nonhighway use) by paying only 2 cents per gallon, but, under other circumstances, a tax of 4 cents per gallon may have to be paid. If the 4-cents-per-gallon tax has to be paid, the excess 2 cents per gallon can be refunded (sec. 6421) or claimed as a credit against income tax liability (sec. 39).

The net proceeds from the motorboat portion of the retailers excise tax are appropriated to the Highway Trust Fund, but are then transferred from that trust fund to the Land and Water Conservation Fund.

Present law also imposes a net 2-cents-per-gallon manufacturers excise tax on gasoline for motorboats, which also is transferred to the Land and Water Conservation Fund via the Highway Trust Fund.³ In general, the exemptions noted above regarding aircraft fuels also apply to gasoline and these special fuels.

¹ In the case of gasoline, this is the sum of a manufacturers excise tax of 4 cents per gallon and a retailers tax of 3 cents per gallon; in the case of other fuels, this is a retailers tax of 7 cents per gallon (sec. 4041(c)).

² The fuels are benzol, benzene, naphtha, liquefied petroleum gas, casinghead and natural gasoline, and any other liquid fuel (other than kerosene, gas oil, fuel oil, gasoline, or diesel fuel).

³ This tax is imposed on gasoline at the rate of 4 cents per gallon, but the purchaser can obtain a refund (or a credit against income tax) equal to 2 cents per gallon if the gasoline is used in a motorboat (or for another nonhighway use).

2. Administration Proposal

General aviation.—The present tax on aviation fuel used in noncommercial aviation of 7 cents per gallon would be increased to 11 cents per gallon, effective October 1, 1977. The additional 4 cents per gallon would not be appropriated to the Airport and Airway Trust Fund.

Motorboat fuel.—The manufacturers excise tax on gasoline and retailers excise taxes on special fuels would be revised by providing that the full tax of 4 cents per gallon would apply if the fuel was used for noncommercial motorboat use, effective October 1, 1977. The additional 2 cents per gallon would be transferred to the Land and Water Conservation Fund.

Energy saving estimate

The energy savings is estimated to be negligible under both proposals.

Revenue estimate

It is estimated that the increase in the tax on aviation fuel will result in an increase in receipts by the following amounts:

Fiscal years:	Millions
1978 -----	\$44
1979 -----	47
1980 -----	50
1981 -----	55
1982 -----	61
1983 -----	66
1984 -----	71
1985 -----	76

It is estimated that the increase in the tax on motorboat fuels will increase receipts by \$1 million in fiscal 1978 and by \$4 million per year thereafter.

3. Members' Proposals

Mr. Vanik

No business expense deductions would be allowed for any business use of airplanes or boats which are used 80 percent or less for business purposes.

Mr. Waggoner

The increase in the general aviation fuel tax would be deleted. Alternatively, the tax increase would be limited to 2 cents per gallon.

The 2-cents per gallon increase in motorboat fuel taxes would be eliminated.

Mr. Tucker

The current taxes on users of commercial aviation—primarily taxes on transportation of persons ("ticket taxes") and on the transportation of property ("waybill taxes"), as well as certain other taxes relating to international departures—would be repealed, and commercial aviation would be subject to the same 11 cent tax as general aviation with the additional funds added to the Airport and Airway Trust Fund.

4. Action in the 94th Congress

None.

5. Areas for Committee Consideration

The Committee could defer consideration of the proposals regarding the general aviation and motorboat fuels taxes until it makes a more complete review of the Airport and Airway Trust Fund, the Highway Trust Fund, and the Land and Water Conservation Fund.

Another area that the Committee may want to consider when it reviews the Highway Trust Fund is the application of the fuels tax to commuter buses.

B. Repeal of Excise Tax on Buses (section 1241 of the Administration bill)

1. Present Law

Under present law, a 10-percent manufacturers excise tax is imposed on the sale of buses having a gross vehicle weight of more than 10,000 pounds.¹ However, present law provides for an exemption from this tax for "local transit buses"; that is, those "which are to be used predominantly by the purchaser in mass transportation service in urban areas".² The tax also does not apply to school buses for "exclusive" use in transporting students and employees of schools operated by State or local governments or by nonprofit educational organizations.³

In addition, there is an 8-percent manufacturers excise tax on parts and accessories (other than tires and inner tubes, which are taxed separately) of the type used on buses and trucks.⁴

The revenues from the excise taxes on buses and bus parts go into the Highway Trust Fund (through September 30, 1979).

2. Administration Proposal

The 10-percent excise tax on buses would be repealed. Floor stocks refunds would be provided in the case of tax-paid buses in dealers' inventories on the day after enactment. Also, consumer refunds would be provided in the case of sales made after April 20, 1977, and on or before the date of enactment. The proposed floor stocks refunds and consumer refunds are essentially similar to those provided on past occasions, such as the Revenue Act of 1971, when the manufacturers excise tax was repealed for automobiles and light-duty trucks.

The Administration proposal does not deal with the tax on bus parts.

¹ This tax is scheduled to drop to 5 percent for sales on or after October 1, 1979.

² This exemption applies to privately-owned local transit buses, since "public" transit buses are exempted under the State-local government exemption provision.

³ This applies to persons purchasing school buses for contract operation to transport school students or employees; school buses sold directly to State-local governments or to nonprofit educational organizations for their exclusive use are already exempted under the State-local government exemption provision (sec. 4221(a)(4)) or the nonprofit educational organization exemption provision (sec. 4221(a)(5)).

⁴ This tax is also scheduled to be reduced to 5 percent on October 1, 1979.

Energy saving estimate

The energy savings is estimated to be negligible.

Revenue estimate

It is estimated that the repeal of the tax on buses would reduce receipts by \$13 million in fiscal year 1978 and by \$9 million per year from 1979 to 1985. (If the excise tax on bus parts and accessories were also repealed, it is estimated that receipts would be decreased by an additional \$3 million in fiscal year 1978 and by an additional \$2 million per year from 1979 to 1985.)

These amounts would otherwise go into the Highway Trust Fund (through September 30, 1979).

3. Members' Proposals*Mr. Rangel*

The excise tax on truck parts and bus parts would be repealed.

Mr. Jones

The excise tax on bus parts would be repealed.

Mr. Gephardt

The excise taxes on bus parts, tires, inner tubes, tread rubber, lubricating oil, gasoline and other fuels would be removed for privately-owned local transit systems.

4. Action in the 94th Congress

The House version of H.R. 6860 would have repealed the excise tax on intercity buses. This would have been accomplished by expanding the present exemption for buses used in local mass transit operations to cover all buses "which are to be used predominantly by the purchaser in public passenger transportation service." The present exemption would have been broadened so that it covered buses used by regulated common carrier companies in intercity bus operations. "Predominantly" was defined as use of the bus which is at least 50 percent in "public passenger transportation service." In other words, a bus which is used for charter service for more than 50 percent of its operation would not have been exempted by this provision from the 10-percent excise tax.

The Finance Committee expanded the scope of the House provision to repeal the excise tax on all buses as well as the related tax on bus parts and accessories. The repeal of the excise tax on bus parts would have applied only to parts designed and ordinarily used for buses, as contrasted to parts for trucks.

5. Areas for Committee Consideration

If the committee decides to repeal the excise tax on buses, it might also wish to repeal the 8-percent manufacturers excise tax on bus parts and accessories (other than tires and inner tubes, which are taxed separately), as was proposed by the Finance Committee in the 94th Congress.

