

Attribution and Apportionment of Federal Highway Tax Revenues



*Process
Refinements*



ATTRIBUTION AND APPORTIONMENT OF FEDERAL HIGHWAY TAX REVENUES: PROCESS REFINEMENTS

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ATTRIBUTION AND APPORTIONMENT OF FEDERAL HIGHWAY TAX REVENUES: PROCESS REFINEMENTS

Highway-based excise taxes are paid by highway users, and the tax revenues are distributed to States for supporting highways, safety, and transit programs. The processes for collecting these taxes and redistributing them to the States are very complex. The U.S. Treasury collects most of the taxes from a relatively small number of large corporations located in only a few States. The Internal Revenue Service (IRS) does not have an accurate picture of where the motor fuel is eventually consumed. Because the actual State-by-State contributions are not available, detailed analyses are required to estimate a State's on-highway motor fuel use. The attribution process uses State-reported data and nationally applied statistical models to determine how much fuel is used on highways in each State and the proportion of each State's usage in comparison to the total motor fuel usage for all States.

Apportionment is the distribution of funds by statutory formula. Apportionment of funds to the States for four major highway programs is based on factors from the fuel usage attribution process. Currently, about \$12 billion in highway funds is distributed based on motor fuel usage data.

On August 17, 2000, a *Federal Register* notice was issued (65 *Fed. Regist.* 50269). The notice, which described proposed revisions to motor fuel reporting and the attribution process, served also as a request for comments on the revised methodology. On the basis of this notice and the resulting comments, certain processes for collecting and reporting on-highway motor fuel data will be revised. These process refinements will take effect when the Federal Highway Administration publishes written guidance, currently scheduled for June 2002. The new procedures will improve consistency in reporting tax revenues among the States and help reduce risks in attribution. This document describes the new processes for collecting data and attributing highway trust funds.

EXECUTIVE SUMMARY

Federal highway taxes are based on specific tax rates, which differ by type of fuel taxed or by type of user fee (tires, retail sales, or heavy vehicle-use tax). These taxes, which are ultimately paid by final users in specific States, are not paid directly by the final users to the Internal Revenue Service (IRS). Rather, most taxes are collected by the IRS from large corporations (typically large oil companies or distributors with storage facilities) which have no way to measure fuel usage within each State. Since State-by-State tax contributions to the Federal Highway Trust Fund (HTF) cannot be directly measured, other procedures have been developed to attribute on-highway fuel usage, which is then used to apportion Federal funds back to the States. Correct State data and precise attribution procedures are extremely important because apportionments for some highway programs use the percentages of revenues attributed to each State as factors and because the amount of money to be distributed is very large (billions of dollars).

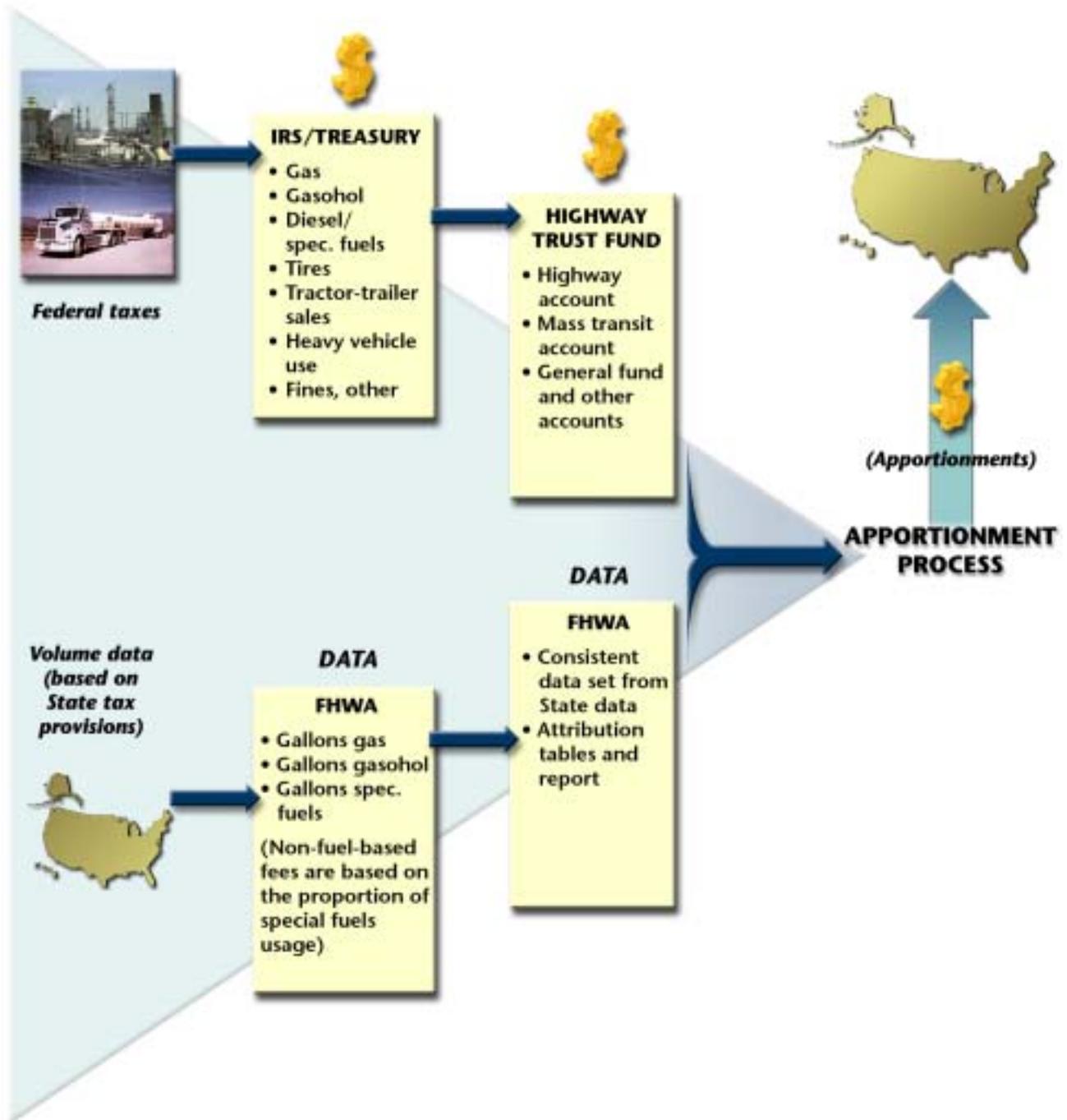
States provide consumption and tax data to the Federal Highway Administration (FHWA) on gallons of gas, gasohol, on-highway diesel, on-highway liquefied petroleum gas, and other alternative fuels that were consumed in the State. Because State tax data are collected and organized to administer State programs, the fuel usage data sets submitted to FHWA from the States differ, sometimes significantly.

To develop a complete and reasonably consistent data set across all States, FHWA must make adjustments to the State motor fuel data. These adjustments are necessary, for example, to account for public use of gasoline and special fuels (e.g., State laws differ for government use of gasoline and government use of diesel fuel), gasoline losses, fuel types (e.g., gasoline, gasohol at various percentages, special fuels), tax rates (e.g., fully taxed fuels, exempt sales, partially exempt sales, full and partial refunds, and fuels taxed at reduced rates), and off-highway fuel use.

Additional Federal non-fuel-based fees are assessed on heavy vehicle use and on the purchase of heavy vehicle trucks, trailers, and tires. These fees are attributed to States based on special fuels usage.

The end result of this process is a set of tables that attribute on-highway motor fuel usage, by fuel type, to States. The Federal-aid highway apportionment process uses revenue and fuel volume data resulting from attribution to distribute HTF program funds in four categories: the Surface Transportation Program, Interstate Maintenance, National Highway System, and the Minimum Guarantee.

The following figures depict an overview of the revenue collection, attribution, and apportionment processes that are part of Federal highway financing. The first figure is a simple view of the flows of revenue and data. The second provides a slightly expanded view of the apportionment process.



HIGHWAY ACCOUNT
Surface Transportation Program (STP)
Interstate Maintenance (IM)
National Highway System (NHS)
Minimum Guarantee

\$\$
(Apportionment
authorized by
fiscal year)



TRUST FUND (DOLLARS)			
Highway Programs	Fuel-Based Apportionment Factor	Weight of Factor	Reference Table in Highway Statistics
STP	Contribution to Highway Trust Fund (dollars)	35%	FE-9
IM	Commercial Vehicle Contribution (dollars)	33.3%	FE-9
NHS	Diesel Usage (gallons)	30%	MF-27
Minimum Guarantee	Contribution to Highway Trust Fund (dollars)	100%	FE-221

Legislation from the Transportation Equity Act for the 21st Century (TEA-21) increased significantly the amount of Federal apportionments that rely on the motor-fuel/HTF attribution process and factors. For example, under the current attribution process, more than \$12 billion are apportioned annually to the States in TEA-21 Federal apportionments, compared to \$1-2 billion annually under preceding legislation. Also, *all the States* receive Federal apportionments through this process while under previous legislation only about 20 States did.

This brochure describes the motor-fuel/HTF process including some refinements and improvements FHWA is making after consultation with the States.

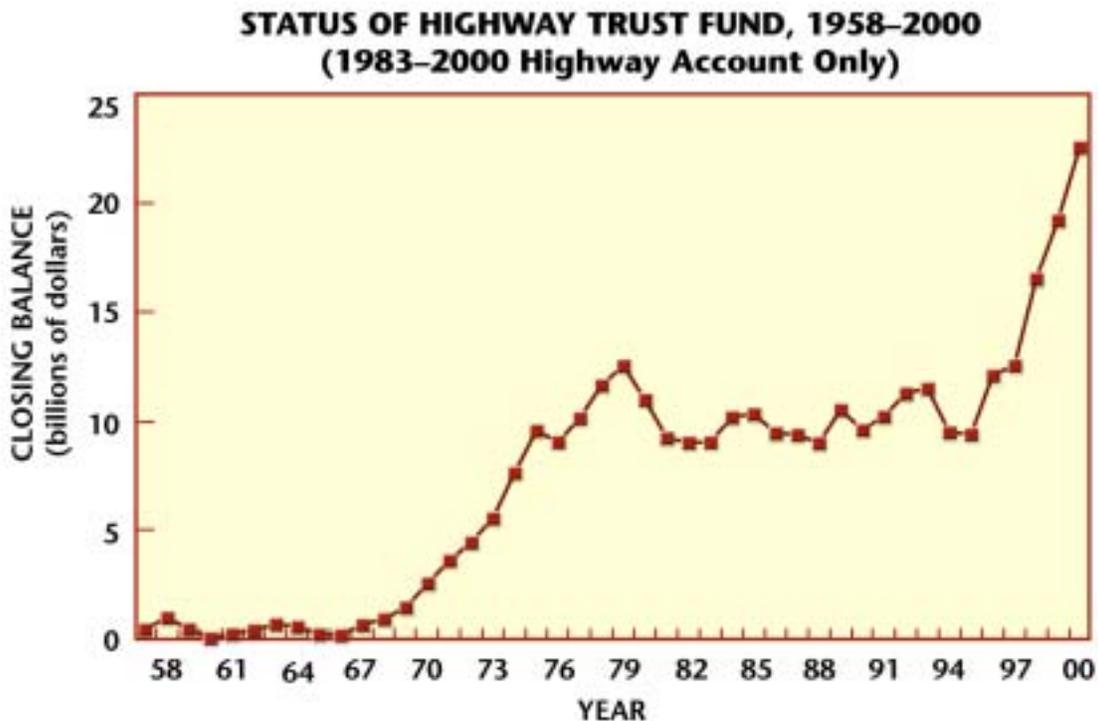
The first two sections of the brochure provide general background on the process; the third section describes the FHWA reassessment of the process. The fourth section describes refinements FHWA is making to ensure that data are reported and processed in a consistent manner. An implementation timetable for these refinements is also included. The fifth section describes an Implementation/Action Plan that will incorporate the latest in technology and management processes into the motor-fuel/HTF attribution process.

BACKGROUND

Historical Perspective

The Highway Trust Fund (HTF) was established in 1956 (Public Law 84-627) to ensure a dependable source of Federal funding to support highway programs. Prior to 1956, motor fuel and vehicle taxes went to the General Fund; although highway funding was provided from the General Fund, there was no relationship between fuel tax receipts and highway funding. Since 1956, legislation has periodically extended taxation of motor fuels and the HTF. The Transportation Equity Act for the 21st Century (TEA-21) extended the HTF through September 30, 2005.

The HTF currently contains two accounts: the Highway Account and the Mass Transit Account; this document only concerns funds in the Highway Account. The income and outlays for transportation have increased steadily over time. The closing balance of funds in the Highway Account of the HTF remained at around \$10 billion from 1983 through 1995. In 2000, the closing balance in the Highway Account was over \$22.5 billion. It is necessary to maintain a balance of funds in the HTF to be able to meet unpaid commitments. This balance is not surplus funds because the HTF functions as a reimbursable program and must maintain funds for reimbursing obligations. The closing balance (income – outlays = closing balance) is shown in the following chart for 1957 through 2000 (the latest available data).



Source: U.S. Department of Transportation, Highway Statistics 2000, Table FE-210.



Funds from the Highway Account are distributed to the States for highway use. Under TEA-21, State-reported motor fuel data have been used, along with other factors, in the apportionment of these funds for the Surface Transportation Program (STP), the National Highway System (NHS), the Interstate Maintenance (IM) program, and the Minimum Guarantee.¹

The Federal Highway Administration (FHWA) uses motor fuel usage data, supplied by the States, to determine where (i.e., in which State) motor fuel is being expended for on-highway use. The current process has been in place since 1985. This process for attributing on-highway motor fuel usage to the States is explained in the section “Attribution and Apportionment.”

Revenue Collection

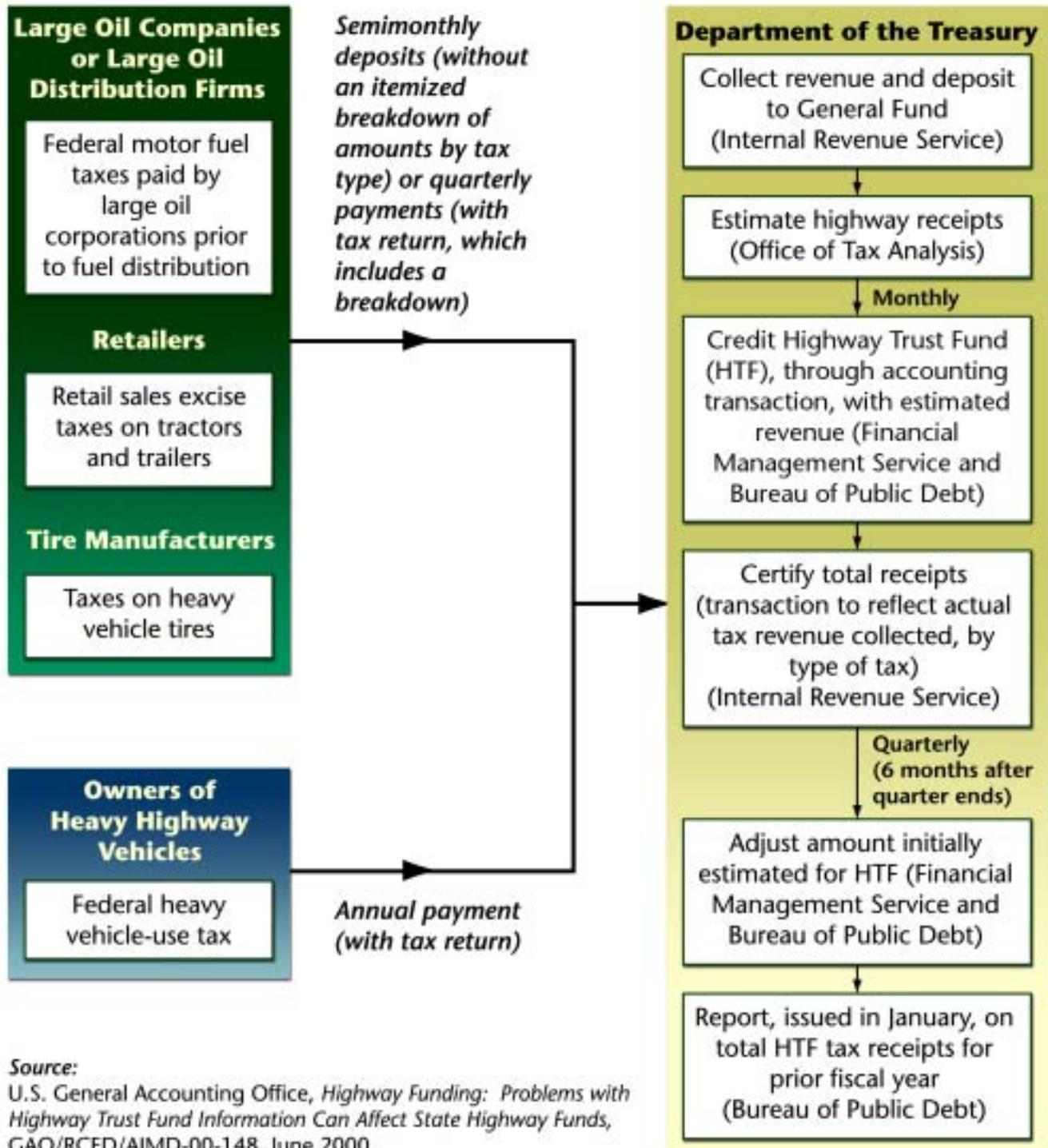
The Internal Revenue Service (IRS) collects Federal fuel taxes from large oil companies or large oil distribution firms with storage facilities prior to distribution of the fuels to customers. The Federal fuel taxes are imposed when the fuel is first removed from bulk storage and sold. Although these taxes are “passed on” to the individual purchaser, data at the individual purchaser level are simply not available.

Additional Federal heavy vehicle non-fuel-based fees include (1) the retail sales excise tax on tractors and trailers, (2) the tax on heavy vehicle tire sales, and (3) the heavy vehicle-use tax. Truck registration was once used as a proxy for truck taxes, but was rejected because it did not accurately reflect on-highway usage in a particular State. In fact, the State where the heavy vehicle and/or tires are purchased is not necessarily the State in which these purchases will be used.

The process for collecting Federal motor fuel taxes and user fees, issuing credits, and certifying receipts is shown in the flow chart below. This process involves four organizations within the Treasury Department. The final information from Treasury, which documents receipts for the previous fiscal year, determines the overall level of highway user tax receipts attributed to the Highway Trust Fund by tax type. This amount represents the total highway program funds available for apportionment to the States. In addition, the revenue by tax type is used in the distribution of funds for specific programs; for example, on-highway diesel usage is a factor in the formula for the NHS program.

¹The Minimum Guarantee program ensures that each State receives at least 90.5 percent of its share of contributions to the Highway Account of the HTF.

HIGHWAY TAX REVENUE PROCESS FLOW



Federal tax rates for each of the highway fuels and other highway user fees and the distribution of these tax revenues into the Highway Trust Fund or other accounts are provided in Appendix D of this report (reproduced from Table FE-21B from *Highway Statistics*). The Federal motor fuel taxes make up about 85% of the HTF's receipts. The following table shows actual net Highway Account revenues for 2000 by the fuel or fee category.

ACTUAL NET HIGHWAY ACCOUNT REVENUES FOR 2000		
Fee Category	Amount (\$ billions)	Percentage of Total
Gasoline	\$17,579	58
Gasohol	1,093	4
Diesel and Special Fuels	6,991	23
<i>Subtotal – All Motor Fuels</i>	<i>25,663</i>	<i>85</i>
Truck and Trailer Sales	3,321	11
Truck Tires	442	1
Heavy Vehicle Use	921	3
<i>Subtotal – All Truck-Related Taxes</i>	<i>4,684</i>	<i>15</i>
Total	\$30,347	

Source: U. S. Department of Transportation, *Highway Statistics 2000*, Table FE-9.

State Data Reporting

State-reported motor fuel data is a critical component of the process that distributes HTF monies to the States. Currently, motor-fuel-based apportionment factors result in the distribution of about \$12 billion for the STP, IM, NHS, and minimum guarantee programs. Under ideal *data* conditions, all States would treat motor fuel taxation exactly the same. This is not, however, the case. Indeed, even though all States must use the same two forms for reporting motor fuel data to FHWA, significant differences in reporting can occur.

The data reports submitted to FHWA by the States are Form FHWA-551M (“Monthly Motor-Fuel Consumption”) and Form FHWA-556 (“State Motor-Fuel Tax Receipts and Initial Distribution by Collection Agencies”). Copies of these forms are shown in Appendix C. Form FHWA-551M, which is typically completed by the State agency that collects the motor fuel tax, is sent to the FHWA Office of Highway Policy Information and to the FHWA Division Office. The form is to be submitted no later than 90 days after the close of the month for which data are being reported. Unavailable data from one month can be included in the next month’s report, with notes of explanation included on the second page of the form. FHWA uses these



State-reported revisions and corrections of motor fuel data to update the State data files. Data are currently submitted from the States in several formats – mailed in paper reports, facsimile paper reports, e-mailed reports, or computer disk reports in spreadsheet format. FHWA is converting to electronic submissions in calendar year 2002.

The first page of Form FHWA-551M contains columns for entry of gallons of four types of motor fuel: gasoline, gasohol, highway diesel fuel, and highway liquefied petroleum gases. The rows of the report provide space for entry of gallons of fuel for each type that meets any of several State taxation characteristics (e.g., gross volume reported, fully tax exempt gallons, gross volume taxed, fully refunded gallons, and net volume taxed). The second page provides space for notes, technical information, and general comments. There is also space for State tax rates for the various motor fuel types, space for computation of motor carrier gallons, which are taxed and calculated differently due to International Fuel Tax Agreement (IFTA) reporting. Finally, there is space for details on State treatment of gasohol by blend ratio.

With the data submitted by the States, FHWA produces a report entitled *Monthly Motor Fuel Reported by States*. This monthly report is produced about six months after the month in which the transactions occur that trigger State taxation of motor fuel. It normally takes States about three months to administer the tax collection process and produce accurate monthly data. It then takes about three more months for that data to be reported and placed in FHWA-generated tabular format. The data on hand from the States at the time of preparation for publication are included, and States that have not submitted data by that time are, obviously, not included. Although the data are not consistent or complete at this early stage, they represent the first place for States to check FHWA motor fuel entries for reasonableness and consistency with their own records.

Form FHWA-556 is an annual report of State highway-related tax receipts, which is due to FHWA by April 1 of each year. The form represents motor-fuel tax revenue collections for the State's fiscal year. It contains columns for reporting separate receipts for gasoline, special fuels, and other receipts. Page 2 of Form FHWA-556 provides space for notes and comments. Instructions for completing both forms are given in Chapter 2 of *A Guide to Reporting Highway Statistics*.

A draft summary report is compiled by FHWA about August of each year for the preceding calendar year. During the next 12 months, the draft report is reviewed and modified, as necessary, with State participation in the review process. Therefore, the final report on motor fuel usage for calendar year "xx" is available in August of calendar year "xx + 2."

A time line of activities is shown in the following figure. The length of time required to obtain and analyze the States' data, estimate missing and/or inconsistent data, and coordinate these

Time Line for Motor Fuel Data and Attribution Process

Activity Date	FHWA Activities	Date of Motor Fuel Data Received from States		
		2001	2002	2003
2002	JAN	10/01		
	FEB	11/01		
	MAR	12/01		
	APR	FY01 year-end	1/02	
	MAY	Run estimation models for non-highway use of gasoline, public fuel use, and gasohol consumption for CY01	2/02	
	JUN		3/02	
	JUL	Perform annual State-by-State analysis for CY01	4/02	
	AUG	Produce • Draft summary report on fuel usage for CY01 • Final summary report on fuel usage for CY00	5/02	
	SEP		6/02	
	OCT	Prepare computation tables for FY03 apportionments using CY00 motor fuel data and FY01 Treasury information	7/02	
	NOV		8/02	
	DEC		9/02	
2003	JAN		10/02	
	FEB		11/02	
	MAR		12/02	
	APR		FY02 year-end	1/03
	MAY	Run estimation models for non-highway use of gasoline, public fuel use, and gasohol consumption for CY02		2/03
	JUN			3/03
	JUL	Perform annual State-by-State analysis for CY02		4/03
	AUG	Produce • Draft summary report on fuel usage for CY02 • Final summary report on fuel usage for CY01		5/03
	SEP			6/03
	OCT	Prepare computation tables for FY04 apportionments using CY01 motor fuel data and FY02 Treasury information		7/03
	NOV			8/03
	DEC			9/03
2004	JAN			10/03
	FEB			11/03
	MAR			12/03
	APR			FY03 year-end
	MAY	Run estimation models for non-highway use of gasoline, public fuel use, and gasohol consumption for CY03		
	JUN			
	JUL	Perform annual State-by-State analysis for CY03		
	AUG	Produce • Draft summary report on fuel usage for CY03 • Final summary report on fuel usage for CY02		
	SEP			
	OCT	Prepare computation tables for FY05 apportionments using CY02 motor fuel data and FY03 Treasury information		



results with updated highway user tax data from Treasury is about two years from the end of a calendar year. For example, fuel usage for a State for calendar year 1997 was combined with Treasury information for fiscal year 1998 to provide apportionments to the State for fiscal year 2000.

Although States report their gallons of fuel used monthly (FHWA-551M) and total tax receipts (FHWA-556) annually, it is not currently sufficient for FHWA to simply sum up the total gallons of fuel reported and use that data for attribution. States have very different tax legislation, tax forms, and administrative procedures. There are significant variations among the States in, for example, exemptions or refunds for off-highway use or for government use. In order to ensure more equitable reporting, FHWA must make adjustments to the State data to account for these discrepancies. These adjustments are part of the attribution procedure, which is discussed in the next section.

ATTRIBUTION AND APPORTIONMENT

Attribution is basically the process of determining a State's on-highway gallons of motor fuel use by looking at a State's motor fuel tax data and determining if the fuel represented by the tax data is used on-highway. The outcome of the attribution process is a set of tables listing how much fuel of a specific type is used in each State and the proportion of each State's usage in comparison to the total usage for all States. The proportion of the gallons of fuel expended in a State is then used to estimate the Federal Highway Trust Fund receipts attributable to highway users in each State.

Apportionment is the distribution of funds to the States by statutory formula. Certain factors in the apportionment formulas of four major highway programs are based on the attribution tables.

Attribution Overview

Attribution starts when Federal revenue is collected by IRS and assigned to the appropriate tax category – i.e., gasoline, gasohol, diesel and special fuels, tire tax, truck-tractor and trailer retail excise tax, and heavy vehicle-use tax. The total funds in each tax category are verified and reported by IRS; however, IRS has no record of where or how the fuel was consumed. Therefore, FHWA uses the attribution process to determine on-highway fuel use within each State. FHWA uses State-reported data and also statistical methods to estimate missing or not-reported State data.

The validity of the attribution process is dependent on receiving accurate data from the States. Typically State revenue departments maintain records according to the legislative requirements of that State. For example, some fuels may be exempted from tax, or taxes may be refunded, or the tax rate for a particular fuel may vary depending on the fuel's use. In some States, these data do not exist, and FHWA must estimate the data.

Preliminary Estimation Procedures

FHWA completes several steps in the motor fuel analysis process prior to beginning the annual State-by-State analysis. These steps include an estimation of non-highway fuel uses, public fuel uses, and gasohol consumption. The estimation models are briefly described below. The models require data from several outside sources. One major dataset is the Census Bureau's Vehicle Inventory and Use Survey (VIUS). This data set contains information on annual vehicle miles of travel, percent of off-road use, major use of the truck (agriculture, retail, etc.), engine type, and the State in which the truck is registered. VIUS does not, however, provide a fuel use breakdown between gasoline and gasohol, on-road versus off-road fuel economy, or a distribution of off-road travel by State. The VIUS is conducted every five years; the latest survey was in 1997.

The vast majority of State-reported motor fuel gallons are for on-highway use. The estimation process to determine gallons of non-highway gasoline, public fuel use, and gasohol consumption is needed to ensure consistency. The following chart summarizes the reasons these three estimation models are needed.

ESTIMATION MODELS
<p>Estimation of off-highway gasoline and gasohol gallons</p> <ul style="list-style-type: none">• <i>Off-highway sectors:</i> Agriculture, construction, industrial and commercial, marine, aviation, and off-road recreation• <i>Why needed:</i> Some States have no data to begin an on-highway/off-highway analysis. Without an estimate of off-highway gallons, the States that tax all motor fuel gallons would over-represent their on-highway usage, because they would have included off-highway gallons as being used on-highway
<p>Estimation of public use of gasoline</p> <ul style="list-style-type: none">• <i>Public sectors:</i> Federal civilian, State, county, municipal• <i>Why needed:</i> Some States are unable to report on gallons of tax-exempt or fully-refunded on-highway fuel usage. Also, some States are unable to separate on-highway and off-highway public fuel usage
<p>Estimation of gasohol gallons</p> <ul style="list-style-type: none">• <i>Sectors:</i> Gasohol by Federally-legislated percentages (i.e., 5.7%, 7.7%, 10%)• <i>Why needed:</i> Few States recognize the Federal definitions; indeed, most States define gasohol as a 10% blend, and State definitions of reformulated gasoline may or may not match the Federal definition of gasohol

Estimates of off-highway fuel gallons of gasoline and gasohol include fuel used for agricultural, construction, industrial and commercial, marine, aviation, and off-road recreational purposes. It should be noted that off-highway use of diesel does not need to be estimated because FHWA motor fuels reporting procedures do not include gallons of diesel used off-highway.

FHWA estimates the public use of gasoline for the same reasons that it estimates off-road uses of gasoline. Although the Federal tax code exempts public uses of gasoline, not all States do so. Thus, it would be inconsistent to use as-reported State data without adjustment. A model was developed to estimate Federal government civilian highway gasoline usage. When States report Federal use in excess of the estimation produced by the model, the excess is assumed to



be a non-highway usage and is subtracted. State, county, and municipal fuel usage is generally exempt from State taxes, or taxes may be fully or partially refunded, or taxes may be imposed at reduced rates. State, county, and municipal use of gasoline is included in gasoline attribution.

Some States are able to provide data on off-highway and/or public uses of motor fuels. After the FHWA models have compiled their estimation on a State-by-State basis, FHWA applies business rules to determine which data to use.

FHWA also needs reliable estimates of gasohol consumption. The Energy Policy Act of 1992 created three types of gasohol for Federal tax purposes – 10, 7.7, and 5.7 percent ethanol by volume. However, few States recognize or define three types of gasohol in State legislation. This disconnect in the tax treatment of gasohol requires FHWA to estimate gasohol revenues attributed to each State using the Federal definitions since attribution is based on Federal motor fuel tax revenue. Thus, FHWA runs a nationwide model to estimate the number of gallons of ethanol used within each State. The total number of gallons of ethanol used nationwide and reported to IRS is used for comparison and for production of a final percentage of use by State.

State-by-State Analysis

Because of the differences in State data reporting, FHWA evaluates and adjusts the data submitted by the States. FHWA's State-by-State analysis is a detailed process, requiring completion of four worksheets for each State, plus additional calculations in some situations. It is important to note once again, that the purpose of this process is to attribute to each State its proportion of on-highway motor fuel usage. This attribution of gallons is based on State tax information. To obtain equal treatment of all States, adjustments are made to the State reports to account for unequal reporting of off-highway uses, public uses, and differences in definitions of gasohol.

The first step in the FHWA annual analysis of a State's data is to run a summary program of the monthly FHWA-551M reports for a *calendar* year. [The State annual summary report (FHWA-556) is for a State's fiscal year, which may be on a calendar basis or may be on some other annual basis.] Using this calendar year summary, FHWA compares the annual summary totals based on FHWA-551M monthly reports with the preliminary estimates provided through the nationwide models for non-highway fuel use, public fuel use, and gasohol consumption.

From the gross gallons reported, FHWA subtracts the gallons of gasoline listed as exempt or refunded for off-highway purposes or exported to other States and the gallons of diesel listed as non-highway, public (except transit), and exported. *(There has been a change regarding*

reporting of public diesel usage. More information is provided in the section on "Process Refinements.") FHWA also examines motor fuel loss allowances. (There has been a change regarding reportable losses. More information is provided in the section on "Process Refinements.") Because IFTA data are available on a quarterly rather than a monthly basis, some months will contain "spikes." In addition some States do not report IFTA gallons on FHWA-551M; the missing IFTA data may be on FHWA-556, or the data may be on supplementary documents. (FHWA will be providing additional guidance on reporting IFTA data.)

Form FHWA-556 serves as a checkpoint for the time period covered by the State's fiscal year. It is used to compare State-reported revenue against State-reported gallons multiplied by the State's tax rate. Some States have very complicated tax structures and require additional special attention.

Generally, State motor-fuel taxes are levied on all consumers, and refunds of the taxes paid or exemptions to the tax are given for non-highway use of motor fuel. However, not all States offer refunds or exemptions for all classes of non-highway use, and not all available refunds are actually claimed. Thus, often the net volume of fuel taxed is not the same as the volume consumed on highways. Volume of motor fuel consumed on the highways in each State is the primary data parameter of interest for FHWA purposes. Therefore, various adjustments to the tax-status information provided by the States are needed to treat States equitably.

By FHWA definition, transit use, regardless of the ownership of the transit system, is treated as private and commercial use of special fuels. Many States do not report their use of transit special fuels. Transit motor fuel use is available on the Federal Transit Administration web site, and States may use this data if they wish.

Aviation gasoline is another fuel tracked by an independent source. Since aviation gasoline is treated differently than normal gasoline, the U. S. Department of Energy (DOE), Energy Information Agency, tracks its inventory. FHWA uses this source along with estimation procedures for determining the stock of aviation gasoline in a State.

While intrastate diesel fuel use is captured under normal State reporting procedures, interstate use is covered under IFTA procedures. Almost all States and Canadian Provinces now use IFTA provisions. (The Yukon, Alaska, and Hawaii are the exceptions.) IFTA taxation addresses the issue of where the fuel is used, rather than where it is purchased. IFTA measures the use of diesel, gasoline, gasohol, and other special fuels. A problem with IFTA data is the reporting lag. IFTA processing takes place on a quarterly basis and a State does not know its IFTA net tax revenue until five to six months after tax liability occurs. Current FHWA guidance asks for State data within 90 days of the end of the reporting month.

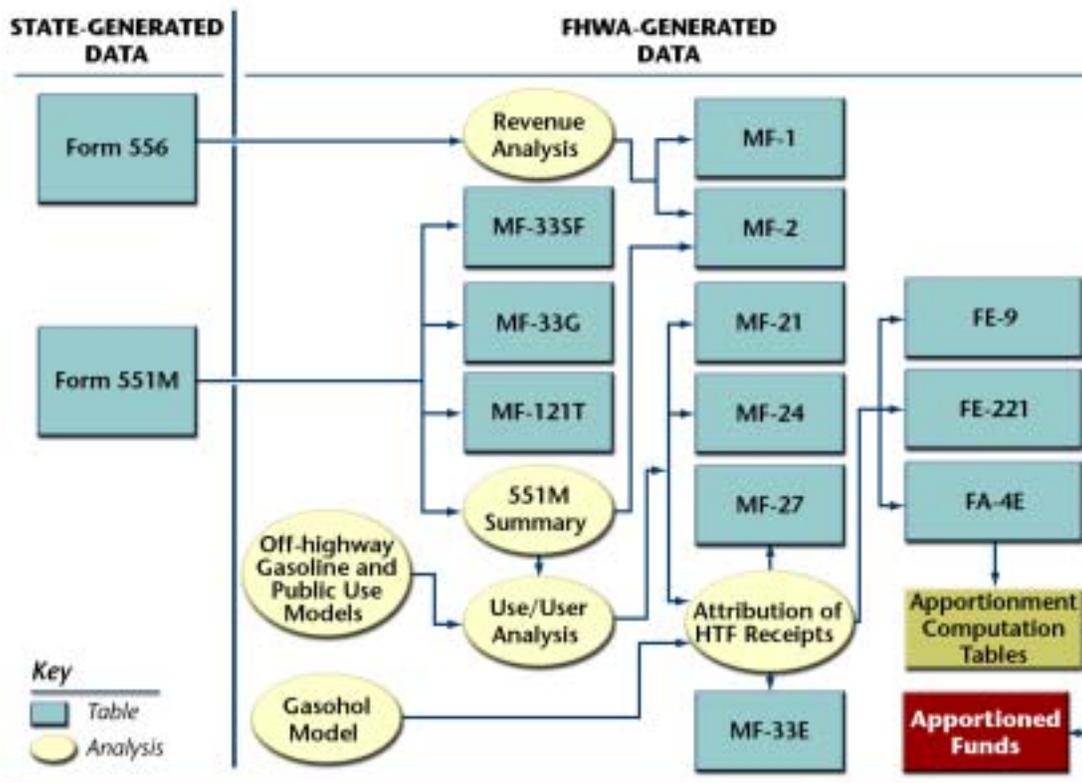


At this point in the attribution process, the State's data will have been separated into use (on-highway versus off-highway), fuel type (gasoline, gasohol, special fuels), and tax status based on public, private, and commercial categories (exempt, refunded, taxed-at-other-rate, etc.). As a final step, FHWA sums the on-highway gallons to derive a national total for each of the three motor fuel types and divides each State's gallons by the total gallons. This percentage is the State's share. For the Federal truck tax revenue, each State's share of special fuels is used to calculate attribution. This analysis is documented in a draft data report, issued about eight months after the end of the calendar year being reported. States and the FHWA work together to review and modify the report as needed. The final version is issued around August, about 20 months following the calendar year being reported.

In summary, the attribution process estimates the gallons of motor fuel used on-highway in each State. The process uses data reported by the States, develops estimates for unreported data, and adjusts the data based on consistent definitions. The methodology is sound. However, improvements in data uniformity, accuracy, and consistency would ensure that each State receives its share, consistent with Congressional intent. FHWA proposes to provide improvements in instructions (e.g., a revised *Guide to Reporting Highway Statistics*) and other documentation (e.g., IFTA reporting description and a description of FHWA models and analyses). The purpose of these documentation improvements is to assist the States in reporting their data.

A flow chart showing the basic steps in the attribution process is shown on the following page. The boxes on this chart represent actual tables of data; the ovals are steps in the analysis process as described above. Titles of the tables (e.g., MF-1) shown in the chart are provided in the table below the chart.

FLOW CHART OF MOTOR FUEL DATA



TITLES OF TABLES USED IN "FLOW CHART OF MOTOR FUEL DATA"	
Table Number	Table Title
	<i>Monthly Motor Fuel Information</i>
MF-33SF	Special fuels reported by States
MF-33G	Gasoline and gasohol reported by States
MF-121T	State tax rates on motor fuel
	<i>General State Motor Fuel Information</i>
MF-1	State motor fuel taxes and related receipts
MF-2	Motor fuel volume taxed
MF-21	Motor fuel use
MF-24	Non-highway use of gasoline
	<i>Attribution Tables</i>
MF-27	Highway use of motor fuel
MF-33E	Estimated use of gasohol
FE-9	Receipts attributable to highway users by State
FE-221	Comparison of receipts to apportionments and allocations
FA-4E	Selected data used in apportionments

Apportionment

Apportionment is the distribution of funds using a statutory formula. Funds are available for obligation by the State at the time of apportionment, usually the first day of the Federal fiscal year (October 1) for which they are authorized. The following table shows the apportionment formulas, under TEA-21, for the four programs whose funds are distributed, at last partially, on the basis of fuel use or contribution to the Highway Account of the HTF. Because the apportionment of funds in these programs is based heavily on the data provided to FHWA by the States, complete and accurate data are extremely important.

APPORTIONMENT FORMULAS FOR PROGRAMS DISTRIBUTED USING MOTOR FUEL DATA			
Program	Factors	Weight	Statute*
STP	Total lane miles of Federal-aid highways	25%	104(b)(3)
	Total VMT on Federal-aid highways	40%	
	Estimated tax payments attributable to highway users paid into the Highway Account of the HTF	35%	
IM	Interstate system lane miles	33-1/3 %	104(b)(4)
	VMT on interstate system	33-1/3 %	
	Annual contributions to the Highway Account of the HTF attributable to commercial vehicles	33-1/3 %	
NHS	Lane miles on principal arterial routes (excluding Interstates)	25%	104(b)(1)
	VMT on principal arterial routes (excluding Interstates)	35%	
	Diesel fuel used on highways	30%	
	Total lane miles on principal arterial highways divided by the State's total population	10%	
Minimum Guarantee	Each State's share of apportionments for aggregate sum of specified programs is at least 90.5% of its percentage contributions to the Highway Account of the HTF	100%	105

**Denotes appropriate section in Title 23, U.S. Code.
Source: U. S. Department of Transportation, Financing Federal-Aid Highways, Appendix E.*

FHWA REASSESSMENT EFFORTS

Because TEA-21 increased the importance of motor fuel data as an apportionment factor, the FHWA initiated a review of the entire motor fuel reporting system and attribution process in late 1998. Expert support was solicited from the American Association of State Highway and Transportation Officials (AASHTO) and the Federation of Tax Administrators (FTA). In addition, State Departments of Revenue, State Departments of Transportation (DOTs), and FHWA field offices provided technical expertise. Comments were also received during three public workshops held during late 1999 and early 2000. The General Accounting Office (GAO) also completed a study in June 2000 identifying concerns with HTF information.²

FHWA/AASHTO/FTA Review

The review conducted by FHWA with assistance from AASHTO and FTA concluded that the existing motor fuel reporting and fundamental attribution processes were basically sound; however, some improvements were recommended. Better, more thorough, updated documentation was needed. The attribution methodology needed process improvements in reporting, treatment of motor fuel data, and process management. Improved instructions and advice to the States also could result in improved reporting.

Four specific recommendations resulted from the review:

- Modify the current data reporting and attribution processes to reduce the likelihood of error;
- Improve the information flow to the States about the attribution process and include the States in process improvements;
- Develop a “smart system” for reporting and analysis processes and for calculation of apportionments; and
- Provide training to State and FHWA personnel.

To address these recommendations, both short-term enhancements and long-term strategic actions have been proposed. These improvements are discussed in the section, “Implementation/Action Plan.”

²U.S. General Accounting Office (GAO), *Highway Funding: Problems with Highway Trust Fund Information Can Affect State Highway Funds*, GAO/RCED/AIMD-00-148, June 2000.

GAO Recommendations

The June 2000 GAO report addressed the processes for (1) collecting and reporting accurate information on highway tax receipts and (2) distributing highway program funds to the States. The report discussed the Treasury Department's process for allocating highway user tax receipts to the Highway Account of the HTF, FHWA's attribution and appropriation processes (as discussed in the previous section of this brochure), and the impact of the Treasury and FHWA processes on the amount of highway funds received by each State.

A discussion of the GAO findings and recommendations for improvements to the Treasury Department's processes is not included here. The GAO report expressed two concerns about the reliability of the FHWA attribution process:

- State data were not thoroughly and independently reviewed to verify their accuracy, reliability, and consistency; and
- The FHWA attribution methodology (1) was not fully documented or independently reviewed, (2) was very complicated, using almost 200 formulas to accommodate for differences among States' taxation laws and methods, and (3) had been repeatedly "patched" over the years to adapt to new laws and program requirements.

GAO provided four specific recommendations to address these concerns:

- Ensure that detailed independent verifications of motor fuel data are performed for each State, perhaps on a rotational basis over a period of years;
- Fully document the methodologies, processes, procedures, and rationale for attribution;
- Conduct an independent, comprehensive review of the attribution models and methodology; and
- Evaluate the potential use of IRS data systems currently under development which may provide data on highway motor fuel usage.

FHWA agrees with these conclusions and is implementing actions to address each recommendation. These plans for improvement are discussed in the section, "Implementation/Action Plan."

PROCESS REFINEMENTS

Based on FHWA's reassessment of the reporting and attribution process and on the GAO study, several specific issues were identified. These issues were published in a *Federal Register* notice for public response.³ Sixteen States provided comments on the issues provided in the *Federal Register*. Two additional issues were also raised by commenters. The comments may be found at <http://dmses.dot.gov>; search for docket number FHWA-2000-7635. All of the issues are discussed below. Certain process refinements are required to address these issues; these changes are explained in the following sections.

Some of the issues concern the data reported by the States. Because of differences in State laws, States collect different types of data. Chapter 2 of *A Guide to Reporting Highway Statistics*⁴ provides instructions for completing Forms FHWA-551M and FHWA-556.

An implementation timetable for the process refinements is shown in the following table.

IMPLEMENTATION TIMETABLE FOR SPECIFIC REFINEMENTS				
Issue	Calendar Year	Data Year	Apportionment Year	Apportionments
Public Use of Diesel	2002	2001	FY 2004	STP, IM, NHS, Minimum Guarantee
Accounting for Motor-Fuel Losses	2002	2001	FY 2004	STP, IM, NSH, Minimum Guarantee
Oversight of State-reported Data ^a	2002	2001 (baseline year)	FY 2004	STP, IM, NSH, Minimum Guarantee
Special Fuel Versus Diesel Fuel ^b	2000	1999	FY 2002	STP, IM, NHS, Minimum Guarantee
Reporting of Alternative Fuels	2002	2001	FY 2004	STP, IM, NHS, Minimum Guarantee
IFTA Procedures ^c	2001-2002	2001	To Be Determined	To Be Determined
^a When available, ExFIRS data will be used as a potential motor-fuel verification tool. ^b Treatment of special fuel is unchanged from current policy. ^c Results of the IFTA processes study will yield improved IFTA instructions and indicate any process changes that may be necessary.				

³U.S. Department of Transportation, Federal Highway Administration, "Highway Motor Fuel Reporting Reassessment; Public Workshop," *Federal Register*, Vol. 65, No. 160, August 17, 2000, pp. 50269-50272.

⁴U.S. Department of Transportation, Federal Highway Administration, *A Guide to Reporting Highway Statistics*, <http://www.fhwa.dot.gov/ohim/hsguide/tocpref.pdf>

Reporting of Public Use of Diesel Fuel

In the past, FHWA instructions to the States called for the inclusion of private and commercial diesel gallons but excluded public diesel gallons. Changes in historical methods for collecting diesel taxes and differences among States concerning tax exemptions for public diesel use have increased the need for a more refined method of reporting diesel fuel usage. Only about seven States can separate public diesel usage from other uses and report the usage correctly according to instructions.



Process Refinement: To ensure equity and consistency, FHWA will utilize total on-highway diesel fuel usage, including private, commercial, and public uses.

Other methods exist for ensuring equity among the States. For example, FHWA could require that States implement procedures to collect the appropriate information, or FHWA could estimate the information for the States. The process refinement noted above involves the least State reporting burden, the least expense, and the most reliable results. Many States do not separately identify publicly used diesel motor fuel. In addition, there would be a reporting burden on counties and school districts reporting to the State.

In comments on the *Federal Register* notice, five States opposed the proposed change. These five States expressed concerns of not being able to report on gallons of diesel used by public entities because the public use of diesel fuel in these States is currently not taxed and there is no mechanism for obtaining usage reports. One additional concern was that the revision could impact smaller rural States that have a small public use of diesel.

Although these five States opposed the change, other States specifically mentioned that this process refinement would appear to provide equitable treatment.

Accounting for Motor-Fuel Losses

Motor fuel may be lost by leakage from storage tanks, spillage, fire, or other means; in addition, measurement differences brought about by temperature or other conditions and meter faults can result in apparent losses. Because this lost fuel is neither consumed on the highway nor used for off-highway purposes, it presents a problem for determining the appropriate base for taxation. In the past, FHWA allowed States to report actual losses or a percentage loss, which was capped at 1%. Usage data for States that did not report losses were not adjusted by FHWA to account for losses. In addition, diesel losses were not considered significant and were not counted. During the reassessment meetings and in the

Federal Register notice of August 17, 2000, it was recommended that actual diesel losses also be documented and reported. However, because diesel reporting accounts for actual on-highway fuel use, a reporting of diesel losses is unnecessary.

◆ *Process Refinement:* To ensure equitable and consistent reporting, States will report actual losses of gasoline. FHWA will discontinue calculating percentage losses; no percentage losses will be allowed.

On comments to the *Federal Register* notice, three States opposed the change in percentage allowances. These States were concerned that the change would confuse distributors who are accustomed to taking a flat percent loss allowance. Other States supported the change.

Oversight of State-Reported Data

For decades, States reported motor fuel usage data to FHWA for record-keeping purposes and publication in *Highway Statistics*. During the past two decades, this data has been increasingly used for apportioning highway funds to the States. Responsibility for oversight of State-reported motor-fuel data is an FHWA Division Office responsibility. Currently, FHWA Division Offices conduct motor-fuel reviews on a three-year cycle. The purpose of these reviews is to address key reporting issues, help the FHWA evaluate the quality of the data being submitted by the States, and identify problem areas. The GAO report mentioned earlier concluded that the FHWA needed to ensure that State data were independently verified. Enhanced FHWA oversight of State-reported motor-fuel data is beginning in FY 2002. Baseline oversight reviews will be conducted using the continuous process improvement technique and risk assessment as tools.

Another potential data verification tool is the Excise File Information Retrieval System (ExFIRS). ExFIRS is a tracking and reporting system developed cooperatively by the IRS, U.S. DOT, States, and the motor fuel industry. The purpose of ExFIRS is to ensure proper payment of excise taxes on motor fuels. ExFIRS contains several modules, one of which is the Excise Summary Terminal Action Reporting System (ExSTARS). ExSTARS collects and analyzes data on fuel delivery into terminals (about 1300 nationwide), fuel inventory balances, and fuel destination information. ExSTARS then compares this information with taxpayers' Federal Excise Returns. ExFIRS was demonstrated as a prototype in 1995; actual development began in FY98 with a 5-year development timeframe. ExSTARS, planned as the first module for development, officially started March 31, 2001. About 20 major oil companies are submitting data for testing.



Process Refinement: To ensure appropriate oversight of State-reported data, FHWA Division Offices will be conducting bench-marking motor-fuel reviews and establishing a plan for continuous process improvement. In addition, training and technical assistance in the implementation of periodic reviews will be provided to the FHWA field offices. Finally, FHWA will disseminate the preliminary attribution data early (February to June) for verification by the States. Thus, the States can provide comments, revisions, or concerns to the FHWA prior to the data's use in the appropriation process. This process will either be part of the preliminary notice of apportionment or will be part of a separate motor-fuel verification process.

States generally agreed that oversight and verification is important. The methodology for conducting the oversight was not generally agreed upon. Two States did not support the use of ExSTARS data for verification because they do not believe that it will be accurate enough to be useful. FHWA will continue to monitor ExSTARS.

Special Fuel Versus Diesel Fuel as an Attribution Issue

Historically, the FHWA has allowed States to report gallons of diesel fuel together with small amounts of other special fuels and has labeled the total "special fuels." These special fuels include liquefied petroleum gases (LPG), compressed natural gases (CNG), liquefied natural gases (LNG), 85% alcohol mixtures, and other fuels. The language of TEA-21 directs that the amount of diesel fuel used on highways be used as one factor (worth 30%) in apportioning NHS funds. The language does not include LPG and other fuels, which implies that these special fuels should not be reported as part of the diesel gallons. Unfortunately, about half of the States do not, or cannot, separately identify these other special fuels from the diesel. In addition, the amounts of these special fuels are estimated to be very small (less than 2%).

Process Refinement: No change; the FHWA will retain its current reporting position and not require States to split diesel and other special fuels. For those States that can readily provide information on a variety of alternative fuels, the FHWA will request that they report this information so FHWA can monitor the use of special fuels.

No States responding to the *Federal Register* notice disagreed with the FHWA assessment that it would be too difficult to capture the data necessary to separate diesel and special fuel gallonage.

Reporting of Alternative Fuels

Alternative fuels, such as 85% ethanol (E85), 85% methanol (M85), LPG, LNG, and CNG, are currently a very small portion of the motor fuels used on highway. Trends indicate, however, that the use of alternative fuels is growing. Although gallons is the traditional unit for measuring fuels, some alternative fuels are compressed gases which are measured in other units. In addition, some States impose taxes for alternative fueled vehicles in the form of registration fees rather than on a per-gallon basis. Although these receipts are reported to FHWA as State revenue, no gallons of highway fuel are reported or shown in the consumption and attribution tables. For States that report “gallons” of fuel use rather than a registration fee, E85 and M85 fuels are reported with State-reported gallons of gasoline, and CNG and LNG are reported as LPG. These amounts are reported in FHWA tables and used in the attribution process.



Process Refinement: The FHWA will revise the method for reporting alternative fuels and will develop a methodology for reporting motor fuel gallons for use by those States that have a registration fee in lieu of per gallon taxes on alternative fuels.

Only one State opposed mandatory reporting. This State currently has a tax structure for alternative fuels and is concerned that the Federal methodology might require major changes in its current reporting system. All other commenting States agreed with the proposed change.

Accounting for International Fuel Tax Agreement Procedures

IFTA is a motor fuel accounting process which became mandatory in 1996 and is now used in all States. Under IFTA, carriers report the distances trucks travel in all States and Provinces in which they operate. They pay fuel taxes in their base State (where the carrier’s business is headquartered). Then, on a quarterly basis, the States adjust the motor carrier tax revenues among themselves to allocate motor fuel taxes to the State in which the travel actually took place.

FHWA requires the States to report adjusted gallons, adding in and subtracting out gallons of fuel based on the adjusted tax receipts sent to and received from other States. Accurate and timely reporting of the IFTA adjustments is important.

◆ *Process Refinement:* The FHWA will implement actions to document State practices in reporting IFTA data to the FHWA. This documentation will describe how States collect IFTA revenue, how States separate out revenues not related to the gallons of motor fuel and motor fuel taxes, how they calculate net gallons and revenues, and the time required to process IFTA data and report to the FHWA. FHWA will suggest alternatives for IFTA calculations if full data are not available. These actions will improve FHWA's instructions to States for reporting IFTA data.

No States disagreed.

Additional Comments Received on the *Federal Register* Notice

Two additional comments were received which were not included as issues in the original notice. One State suggested that the FHWA should provide additional guidance and procedures to address issues related to motor fuel sold on Native American Tribal Lands. In addition, one State expressed concern over the recent efforts to convert from the gasoline additive Methyl Tertiary Butyl Ether (MTBE) to ethanol and the impact that this change will have on the receipts assigned to the HTF.

● *Native American Tribal Lands Comment*

As with State and local government uses, fuel purchased for Native American government uses is exempted from Federal tax. In the past few years, some Native American tribes have purchased motor fuel for resale or for uses associated with tribal business (e.g., casinos). In many cases, the State and Native American representatives have agreements for reporting this data; in other cases, they do not. If the States do not receive the data, they cannot report the gallons to FHWA, and therefore they do not receive credit for this on-highway fuel usage during attribution. Obviously, this is a disadvantage for the State.

There is currently no statistical model available to estimate this fuel use. It is possible that the ExSTARS may provide data on fuel shipped to Native American reservations. FHWA wants

States to report gallons of motor fuel sold on reservations and will work to resolve the problems.

● *MTBE Comment*

In November 1998, a Blue Ribbon Panel was appointed by the Environmental Protection Agency (EPA) to examine the effects of MTBE, an oxygenate added to reformulated gasoline to reduce air pollutant emissions. Although the Panel found that reformulated gas provides considerable air quality improvements they also recommended that the use of MTBE as a gasoline additive be substantially reduced because of water quality problems.⁵

One State expressed concern that a conversion from a gasoline/MTBE fuel to a gasohol or ethanol fuel would have an adverse effect on receipts to the HTF and on a particular State's contributions. The concern was based on (1) the lower tax rate on ethanol fuels, and (2) the transfer of a larger percentage of the gasohol taxes (than for gasoline) to the General Fund of the Treasury.

There is no process revision based on this concern. Several factors will contribute to the actual impact of any change in fuel composition based on MTBE. The Minimum Guarantee will tend to make up what the State may lose through converting to gasohol or ethanol fuels. A State's losses may also depend on which States impose MTBE bans, and precisely which oxygenate, if any, replaces MTBE.

⁵ U.S. Environmental Protection Agency, "The Blue Ribbon Panel on Oxygenates in Gasoline: Executive Summary and Recommendations," July 27, 1999.

IMPLEMENTATION/ACTION PLAN

As noted in the section “Process Refinements,” the basic attribution process is valid; however, improvements are desirable and technological advancements can contribute to the FHWA objective of providing better data in an earlier timeframe. Thus, FHWA developed an implementation plan for FY2001-2003 to address improvements in three areas – the motor fuel attribution process; model revisions; and oversight, training, and outreach. Process refinements noted in the previous section are part of the overall implementation plan.

Motor Fuel Attribution Process Improvement

Several actions are being implemented to improve the attribution process. To ensure that States understand the process, additional documentation has been and is being developed. This additional documentation includes, for example, the pamphlet, “Your States Share – Attributing Highway Trust Funds to the States” (<http://www.fhwa.dot.gov/ohim/attrib.htm>) and this booklet. Also, additional instructions on how to complete forms FHWA-551M and FHWA-556 will be provided in a revision of Chapter 2 of *A Guide to Reporting Highway Statistics*.

System improvements are also being planned and implemented. A new tool is being developed for States to use in submitting their data. The first stage of this information system tool was released in December 2001. States will begin using this tool, which is on-line at <http://apps.fhwa.dot.gov/motorfuel>, in January 2002.

Because of differences in State tax laws and regulations, State data reporting can be inconsistent. An AASHTO survey (February 2000) identified several areas in which State reporting may be at risk for data errors. The use of IFTA for reporting diesel fuel usage among the States is one avenue that is being evaluated. By 2003, FHWA will examine methods for reporting alternative fuels to improve the information on usage of non-traditional fuels.

Finally, FHWA has contracted with an independent agency to conduct a thorough review of the attribution methodology. This assessment will include a risk analysis and examine the process from a multi-disciplinary viewpoint, considering, for example, areas of accounting, information management, and statistical models.

Model Updates

Currently, as noted in the section on “Attribution and Apportionment,” FHWA uses several sophisticated models to achieve uniformity needed for equitable funds distribution. Between now and 2003, FHWA will update the existing models as necessary and will investigate alternative approaches to the use of the current models. In Spring 2002, FHWA is sponsoring a



workshop for States and other partners on alternative methods for developing models and using model data. Additional models may be developed if necessary. The goal is to provide States with the tools needed to provide FHWA with more accurate information.

Oversight, Training, and Outreach

In early 2001, a working group of FHWA Field and Headquarters staff was convened to develop a methodology for verification of State-reported data. Responsibility at the FHWA Division level, use of the continuous process improvement technique and risk assessment as tools, and the requirement for a “baseline” review during FY 2002 were the principal recommendations of this working group. Beginning in FY 2001 and continuing through FY 2003, FHWA plans to provide additional training in all aspects of collecting and preparing motor fuel data reports. Outreach sessions were held in FY 2000 and FY 2001 concerning reassessment and proposed process refinements; further workshops are planned to provide additional outreach.

As noted above, FHWA has taken a phased approach to implementing improvements. Short-term efforts have been put into effect to ensure that the information used for FY 2002 and FY 2003 is reliable. In addition, long-term planning to refine the process, reduce State burden, and use current information technology has been initiated.

SUMMARY

In an attempt to continually provide updated information to the States, this document presents an overview of the attribution process, outlines recommendations of recent program assessments, and describes process refinements. Accurate, timely, and complete State data lead to equitable attribution of a State's on-highway motor fuel use and accurate apportionment of Federal highway tax revenues.



SOURCES

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APPENDIX A. ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
CNG	Compressed Natural Gases
CVO	Commercial Vehicle Operation
DOE	Department of Energy
DOT	Department of Transportation
E85	85% Ethanol, 15% Gasoline
EPA	Environmental Protection Agency
ExFIRS	Excise Files Information Retrieval System
ExSTARS	Excise Summary Terminal Activity Reporting System
FHWA	Federal Highway Administration
FTA	Federation of Tax Administrators
GAO	General Accounting Office
HTF	Highway Trust Fund
IFTA	International Fuel Tax Agreement
IM	Interstate Maintenance
IRS	Internal Revenue Service
LNG	Liquid Natural Gases
LPG	Liquefied Petroleum Gases
M85	85% Methanol, 15% Gasoline
MTBE	Methyl Tertiary Butyl Ether
NHS	National Highway System
ORNL	Oak Ridge National Laboratory
STP	Surface Transportation Program
TEA-21	Transportation Equity Act for the 21 st Century
VIUS	Vehicle Inventory and Use Survey
VMT	Vehicle Miles Traveled

APPENDIX B. DEFINITIONS

Allocation	An administrative distribution of funds among the States for programs that do not have statutory distribution formulas
Apportionment	The distribution of funds as prescribed by a statutory formula; a “line of credit”
Appropriation	Legislation that makes funds available for expenditure with specific limitations; legislation that provides for States to be reimbursed
Attribution	A process that (1) uses State-reported motor fuel tax revenue data, estimates missing data, and adjusts the data as required to determine on-highway use of motor fuels within each State; (2) uses this determination to find the proportion of each State’s usage in comparison to all other States; and (3) attributes the Federal Highway Trust Fund receipts to highway users in each State
Authorization	An Act that allows a program to start and establishes a level of funds that may be used
Ethanol	An alcohol (CH ₅ OH) distilled from renewable sources such as grain, sugar crops, or almost any starchy plant
Gasohol	A blend of unleaded gasoline and alcohol (ethanol or methanol); the percentage of alcohol content varies
Highway Trust Fund	An account established by law to hold Federal tax revenues dedicated for highway and transit purposes
Methanol	An alcohol (CH ₂ OH) produced from coal and organic wastes, especially waste-wood products
Minimum Guarantee	Funding provided to ensure that States receive a certain share of the total Federal-aid highway program, that they receive a minimum return on their contributions to the Highway Account of the Highway Trust Fund, and that no State receives less than \$1 million per year in minimum guarantee funds
State	For purposes of apportioning funds under Sections 104 and 105 of Title 23, U.S. Code, any of the 50 States plus the District of Columbia
Trust Funds	Accounts established by law to hold receipts collected by the Federal Government and earmarked for financing special purposes and programs

Definitions in this list were derived from the following sources: *Financing Federal -Aid Highways*, FHWA-PL-99-015, August 1999; *Primer, Highway Trust Fund*, Federal Highway Administration, Office of Policy Development, <http://www.fhwa.gov/policy/primer98.pdf>, November 1998; *Microsoft Encarta Online Encyclopedia 2001*, <http://encarta.msn.com>.

APPENDIX C. FORMS FOR REPORTING STATE DATA

Copies of the two forms used by States to report motor fuel use are attached. FHWA-551M reports a monthly consumption of motor fuel (2 pages) and FHWA-556 (2 pages) reports annual tax receipts, on the basis of a State's fiscal year.



The public report burden for this information collection is estimated to average 6 hours

MONTHLY MOTOR-FUEL CONSUMPTION						State Name
						Year
						Month of Sale or Transfer
						Units (check one) Gallons Liters
Item	Line No.	Gasoline (1)	Gasohol (2)	Private and Commercial		Total (5)
				Highway Diesel (3)	Highway Liquefied Petroleum Gases (4)	
1. Gross Volume Reported	01					
2. Fully Tax Exempt	a. Losses-Flat %	21				
	b. Losses-Actual	22				
	c. Federal	23				
	d.	24				
	e.	25				
	f.	26				
	g.	27				
	h.	28				
	i.	29				
	j. Total (a. thru i.)	30				
3. Gross Volume Taxed (1.-2.j.)	40					
4. Fully Refunded	a. Agriculture	51				
	b. Aviation	52				
	c. Industrial/Commercial	53				
	d. Construction	54				
	e. Marine	55				
	f.	56				
	g.	57				
	h.	58				
	i.	59				
	j.	60				
	k.	61				
	l.	62				
	m.	63				
	n.	64				
	o.	65				
	p.	66				
q.	67					
r.	68					
s.	69					
t. Total (a. thru s.)	70					
5. Net Volume Taxed	a. At Full Rate	81				
	b. Aviation	82				
	c.	83				
	d.	84				
	e.	85				
	f.	86				
	g.	87				
	h.	88				
	i.	89				
	j. Total (a. thru i., 3.-4.t.)	90				
6. Source	a. Agency Preparing this Report					
	b. Compiled under Direction of					

Form FHWA-551M (Rev. 3/96)

NOTES AND TECHNICAL INFORMATION	State Name 0
	Year 0
	Month 0

1. Rate of tax at end of month, in cents per gallon or liter.
(If tax is ad valorem, post percentage, and briefly explain basis below.)

	Rate (cents)	Effective Date
a. Gasoline	0	mm/dd/yy
b. Gasohol	0	mm/dd/yy
c. Diesel	0	mm/dd/yy
d. LPG	0	mm/dd/yy
e. CNG	0	mm/dd/yy
f. M85	0	mm/dd/yy
g. E85	0	mm/dd/yy
h. LNG	0	mm/dd/yy
i.	0	mm/dd/yy
j.	0	mm/dd/yy

2. Computation of gross volume reported (page 1, item 1.)

	Gasoline	Special Fuels
Gross sales from sellers' returns	0	0
Plus: IFTA fuel used in State (from users' returns)	0	0
Less: IFTA fuel purchased tax paid in State (from users' returns)	0	0
= Gross consumption in State (Enter on page 1, item 1.)	0	0

Interstate motor-carrier (fuel use tax) fuel volume shown above covers period:
(Specify month or months covered)

3. Stratification of Gasohol by Blend Ratio

The gasohol volume shown on page 1, column (2) includes:
(Show actual/estimated volume or percentage shares)

Percent Alcohol	Volume	Percentage Share
5.7-7.6%	0	0.0%
7.7-9.9%	0	0.0%
10 + %	0	0.0%

4. Notes and Comments

The public report burden for this information collection is estimated to average 12 hours.

FORM APPROVED OMB NO. 2125-0032

ITEM		VOLUME TAXES		OTHER RECEIPTS (C)	TOTAL (D)
		GASOLINE (A)	SPECIAL FUELS (B)		
		STATE NAME:			
				YEAR ENDING (mm/yy):	
1. Receipts for Year					
a.	(1) Gross collections by distributor				
Volume	(2) Less: distributor allowance for collection expense				
Tax	(3) Gross receipts by State (1) - (2)				
Collections	(4) Less: refunds and credits				
	(5) Net receipts (3) - (4)				
b.	(1) Distributor and dealer licenses				
All Other	(2) Motor-fuel inspection fees				
Receipts	(3) Fines, penalties, and interest				
Under Motor-	(4) Motor-carrier fuel tax registration (decals)				
Fuel Tax	(5) Alternative fuel tax decals (inlieu of volume tax)				
Laws	(6)				
	(7)				
	(8)				
	(9)				
	(10) Total (1) thru (9)				
c. Net Total Receipts a. + b.					
2. Nonhighway					
Dedications of	a.				
Volume Tax	b.				
from Nonhighway	c.				
Gasoline	d.				
	e. Total a. thru d.				
3. Adjusted Total Receipts 1 - 2					
4. Deductions					
by State	a. Expense of Collecting & Administering Volume Taxes				
Collecting	b. Expense of Inspecting Motor Fuel				
Agency	c.				
	d. Total a. + b. + c.				
5. Net Proceeds Available for Distribution 3. - 4.					
6. Balance Undistributed at End of Previous Year					
7. Total Funds Available for Distribution 5. + 6.					
8. Amounts Distributed (Specify Fund or Purpose)					
	a.				
	b.				
	c.				
	d.				
	e.				
	f.				
	g.				
	h.				
	i.				
	j.				
k. Total a. thru j.					
9. Balance Undistributed at End of Year 7. - 8.					
_ If collecting agency activities are funded by another revenue source, note this fact and provide the actual collection and administrative expenses in a footnote.					



**STATE MOTOR-FUEL TAX RECEIPTS AND
INITIAL DISTRIBUTION BY COLLECTION AGENCIES**

STATE NAME:

0

YEAR ENDING (mm/yy):

0

RECONCILIATION BETWEEN FHWA-551M VOLUME AND FHWA-556 COLLECTIONS MAY BE SHOWN HERE, OR IN AN ATTACHMENT.

INTERSTATE MOTOR-CARRIER FUEL TAX (FUEL USE TAX) RECEIPTS:

	Gasoline	Special Fuels
IMC fuel tax receipts	_____	_____
Less: IMC refunds and credits	_____	_____
Net IMC fuel tax receipts	_____	_____

Notes and Comments:

COLLECTING AGENCY:

INFORMATION FROM RECORDS OF:

COMPILED UNDER DIRECTION OF:

Form FHWA-556 (Rev. 12-96)



APPENDIX D. FEDERAL HIGHWAY USER FEES

FEDERAL HIGHWAY-USER FEES 1/						
OCTOBER 2001						TABLE FE-21B
USER FEE	TAX RATE	DISTRIBUTION OF TAX				
		EFFECTIVE DATE	HIGHWAY TRUST FUND HIGHWAY ACCOUNT	MASS TRANSIT ACCOUNT	LEAKING UNDERGROUND STORAGE TANK TRUST FUND	GENERAL FUND
Fuel Taxes (Cents per Gallon)						
Gasoline	18.3	01/01/96	12	2	-	4.3
	18.4	10/01/97	15.44	2.86	0.1	-
Diesel and Kerosene fuel	24.3	01/01/96	18	2	-	4.3
	24.4	10/01/97	21.44	2.86	0.1	-
Special fuels 2/ 3/	18.3	01/01/96	12	2	-	4.3
Liquefied Petroleum Gas	13.6	10/01/97	11.47	2.13	-	-
Liquefied Natural Gas	11.9	10/01/97	10.04	1.86	-	-
Other Special Fuels	18.4	10/01/97	15.44	2.86	0.1	-
Neat alcohol (85% alcohol) 3/ 4/	9.25	10/01/97	7.72	1.43	0.1	-
Compressed natural gas 5/	4.3	10/01/93	-	-	-	4.3
	4.3	10/01/97	3.44	0.86	-	-
Gasohol 6/						
10 percent gasohol made with Ethanol	12.9	01/01/96	3.4	2	0	7.5
	13	10/01/97	6.94	2.86	0.1	3.1
	13.1	01/01/01	7.64	2.86	0.1	2.5
7.7 percent gasohol made with Ethanol	14.142	01/01/96	5.242	2	0	6.9
	14.242	10/01/97	8.782	2.86	0.1	2.5
	14.319	01/01/01	8.859	2.86	0.1	2.5
5.7 percent gasohol made with Ethanol	15.222	01/01/96	6.322	2	0	6.9
	15.322	10/01/97	9.862	2.86	0.1	2.5
	15.379	01/01/01	9.919	2.86	0.1	2.5
Other Taxes - All Proceeds to Highway Account						
Tires	0-40 pounds, no tax Over 40-70 pounds, 15 cents per pound in excess of 40 Over 70-90 pounds, \$4.50 plus 30 cents per pound in excess of 70 Over 90 pounds, \$10.50 plus 50 cents per pound in excess of 90					
Truck and trailer sales 7/	12 percent of retailer's sales price for tractors and trucks over 33,000 pounds gross vehicle weight (GVW) and trailers over 26,000 pounds GVW					
Heavy vehicle use	Annual tax: Trucks 55,000-75,000 pounds GVW, \$100 plus \$22 for each 1,000 pounds (or fraction thereof) in excess of 55,000 pounds Trucks over 75,000 pounds GVW, \$550					
<p>1/ Source: Office of Highway Policy Information, Federal Highway Administration.</p> <p>2/ Special fuels include benzol, benzene, naphtha, liquefied petroleum gas, casing head and natural gasoline, or other liquid used fuel in a motor vehicle except diesel, kerosene, gas oil, fuel oil, or a product taxable under the gasoline tax provisions. Prior to October 1, 1997, most special fuels were taxed at a single rate. Exceptions were LPG, which was not subject to the LUST tax, and neat alcohols, which are taxed at various rates depending on type and source of alcohol. Beginning October 1, 1997, LPG and LNG are taxed based on their energy content relative to gasoline. Other special fuels, with the exception of neat alcohols, are taxed at the basic special fuels rate.</p> <p>3/ Neat alcohol made with alcohol derived from petroleum products (M85) is taxed as a special fuel.</p> <p>4/ In 1996, only \$166,000 was collected by Internal Revenue Service for taxes on neat alcohol and some other miscellaneous sources. There is no accurate way to distribute miscellaneous taxes to specific funds or accounts.</p> <p>5/ Compressed natural gas is taxed 48.54 cents per thousand cubic feet (MCF), with the Mass Transit Account receiving 9.7 cents per MCF and the Highway Account receiving 38.83 cents per MCF. Roughly converting these amounts to cents per gallon results in the entries in the table above.</p> <p>6/ Section 1920 of the Energy Policy Act of 1992 expanded the definition of gasohol effective January 1, 1993. Prior to the Act, gasohol was defined as a blend of gasoline and at least 10 percent fuel alcohol (by volume), and blends containing less than 10 percent alcohol were taxed as gasoline. Under the Act, the product now called 10 percent gasohol corresponds to the old definition. Two additional types of gasohol are also defined. The term 7.7 percent gasohol includes gasoline-alcohol blends where the alcohol content is at least 7.7 percent but less than 10 percent. The term 5.7 percent gasohol includes gasoline-alcohol blends where the alcohol content is at least 5.7 percent but less than 7.7 percent.</p> <p>7/ Section 1401 of the Taxpayer Relief Act of 1997 replaced a mechanism by which the fair market value of tires exceeding 40 pounds was deducted from the fair market value of a truck and replaced it with a credit for the excise tax paid. This provision was effective January 1, 1998.</p>						