

## Guidance for Verifying State Motor Fuel Data

The following description of the motor fuel data analysis process is intended to allow individuals already fairly familiar with the FHWA data reporting requirements, with knowledge of how their State's data differs from FHWA requirements, and with some knowledge of FHWA processes, to double check the data that will be used by FHWA. It does not cover every unique situation that may pertain to one, or a few, States. For most situations however, the following description covers the essential actions taken by FHWA in managing the motor fuel dataset.

### Getting Started

Several tables with motor fuel data are relevant. The tables MF-33GA (gasoline and gasohol combined) and MF-33SF (diesel, liquefied petroleum gas (LPG), and other highway fuels combined) show by State and by month the data reported on each State's FHWA Form 551M, with a few modifications.

The MF-21 table summarizes all motor fuel data and shows how State reported data is modified FHWA analysis to meet FHWA objectives: a consistent measure of on-highway motor fuel use by State. If your State has submitted revised Form 551M's, make sure you are using the final revision. These processes are further explained in the "FHWA Adjustments to State Data" section of Chapter 2 of the *Guide to Reporting Highway Statistics*, which can be found at the website: <http://www.fhwa.dot.gov/ohim/hsguide/ch2.pdf>

For special fuel gallons (displayed in Tables MF-21 and MF-27) and State special fuel gallons should match (rounding discrepancies are possible).

For the purposes of the following discussion of FHWA adjustments of State-reported gasoline data, it is best to look at gasoline side of Table MF-21 starting about two-thirds of way across the table and working back to the left. Some of these columns will check exactly with State reported data. Again, make sure you are using the latest revision of your State's submitted 551M.

### Loss Allowance Columns

Starting with the table MF-21 column labeled Total Consumption (gasoline), this number will match (for most States) the sum of each States' monthly gross volumes of gasoline reported for the calendar year (sum all the Form 551M gross volume cells, January through December). This summation of monthly data to derive the calendar year data will continue throughout the rest of this discussion. Most States will find that these gross gallon numbers do not match what is on the table MF-21. This is because some States do not report aviation gasoline and FHWA provides the appropriate adjustments. One State provides LPG on an annual basis and this is incorporated by FHWA. Another State does not tax

motor carrier fuel on a per gallon basis and their data is incorporated through other means.

The next table MF-21 column, labeled Losses Allowed for Evaporation, Handling, Etc., shows each States' reported losses from Line 21 of Form 551M. However, none of these numbers should exceed one percent of the total consumption number plus actual losses (Line 22), if any. If your State does not have legislated loss provisions (indicated by a dash in the losses column of MF-21), you may want to skip the next paragraph that explains the loss allowance ceiling of one percent. FHWA's current practice is to perform attribution including all loss allowance gallons irrespective of State's loss allowance legislation.

Some States allow motor fuel suppliers or distributors (or in a few cases, retailers) to retain a portion of the tax collected to cover a variety of purposes. These purposes include the cost of helping the State collect the tax, providing a general allowance for imprecise measurement of fuel, or nonspecific loss of fuel by accident, among other reasons. If the flat percent loss allowance exceeds one percent of your States total gasoline gallons reported, then the FHWA procedures limit the loss amount to one percent (only one percent of the gallons are subtracted from the total gallons). If this is the case for your State, then the allowance gallons assigned to your State by FHWA should be smaller than if the State data from the summed FHWA 551M were used because the loss was limited to one percent. The rationale behind this adjustment is the concept that while the State may have not collected a tax on these gallons, the gallons that exceed the one percent threshold are actually consumed on the highway, and the State should get credit for them.

The MF-21 column labeled Total Use is the Total Consumption column minus the losses column. Beyond this point, it is likely that you will not be able to check and verify the data. However, you may find the following description useful for understanding how FHWA analyzes your data to achieve the results you see in our statistical tables.

### **Non-Highway Columns**

The next three columns to the left of the Total Use column show non-highway gallons of gasoline, either as private and commercial (P&C) gallons, or as State, county and municipal (SCM) gallons. The third column displays the sum of non-highway uses.

For the P&C or SCM columns, either State reported or FHWA generated estimates of non-highway use of gasoline in each State are entered. All the non-highway SCM data is generated by FHWA models, because States reporting does not differentiate highway and non-highway uses. However, if the sum of non-highway and highway SCM equals your State-reported data, then the data in

our table is what you reported. If this is not the case, then SCM numbers in our table is an FHWA estimate.

P&C non-highway gallons are derived from what your State reports as tax exempt uses, fully refunded uses, or partially exempt or refunded uses, or from FHWA models. Table MF-24 shows the categories of P&C uses, and where State-reported data is used, it is italic and bold text. Because each State's legislation is different on the tax treatment of these types of uses, it is most likely that FHWA generated numbers are used to provide consistency.

The numbers displayed in the non-highway columns are subtracted from each States reported gallons of gasoline, since the goal of FHWA analysis is to represent each State's consumption of on-highway gallons. The reason many of these numbers are estimated is to achieve equitable treatment among States. Some States tax all motor fuels, regardless of the purpose of the fuel's consumption. To count those State's gallons as if they were all on-highway use would unfairly inflate that State's share in the distribution of federal funds. Removing estimated or actual non-highway gallons of gasoline from the data set creates a more accurate and equitable attribution. There is no equivalent non-highway table for special fuel because FHWA reporting instructions exclude non-highway special fuel as described in the above paragraph.

### **On-Highway Columns**

The four columns of data on the left of table MF-21 are the on-highway gallons of gasoline. Displayed in the first three columns are: P&C on-highway gallons of gasoline, Federal civilian on-highway gallons of gasoline, and SCM on-highway gallons of gasoline. The fourth column is the sum of these, and is the FHWA generated number representing each State's on-highway gallons of gasoline for the calendar year.

### **Final Steps to Attribution**

As final steps in the process to produce each State's attributed contribution to the Federal Highway Trust Fund, FHWA sums the gallons of each of the three motor fuel types, and divides each State's number by the total gallons. This generates each State's percentage share of total gallons. Taking the U.S. Treasury's reported revenue collected for the three fuel types, and applying each State's share of the total gallons, FHWA attributes to each State a contribution share of the HTF. For the Federal truck tax revenue (the retail truck and trailer excise tax, the tire tax, and the heavy vehicle use tax), each State's share of special fuels is used to calculate attribution.

A more complete general explanation of attribution may be found on our website: [www.fhwa.dot.gov/ohim/ttrib.htm](http://www.fhwa.dot.gov/ohim/ttrib.htm)