DATE: March 5, 2012  
TO: Interested Parties  
FROM: William E. Hamilton  
RE: Michigan's Return on Contributions to the Federal Highway Trust Fund

Background
There are several federal transportation taxes dedicated to federal transportation programs. Those taxes include the 18.4 cent per gallon federal gasoline excise tax, the 24.4 cent per gallon federal diesel tax, federal taxes on other motor fuels, on truck tires, on commercial truck and trailer sales, and on vehicles of over 55,000 Gross Vehicle Weight. Those taxes, which currently generate approximately $35.0 billion each year, are credited to the Federal Highway Trust Fund – the federal fund used to support federal-aid transportation programs.

The Highway Trust Fund includes both a Mass Transit Account and a Highway Account. The Highway Account supports federal-aid highway programs. The federal-aid highway program is typically authorized on a multi-year basis. The current federal authorizing act is called the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

The federal-aid highway program is largely carried out by states in partnership with the federal government. From one perspective, federal-aid highway funds are made available to states to help achieve national transportation priorities. From another perspective, the federal-aid highway funds help support state highway programs and in a sense represent a return to states of transportation tax revenue.

The amount of federal aid each state receives can be more or less than the amount of highway tax revenue attributable to each state. It is widely recognized that there are legitimate reasons some states receive a higher share of attributed Highway Trust Fund contributions than others. For example, federal highway taxes attributable to western states with large land areas and relatively small populations would not be enough to support their share of national highway systems.

Federal transportation taxes are not collected by state governments or, for the most part, from end users. Federal fuel taxes are collected from a small number of fuel suppliers. As a result, each state's tax contribution to the Highway Account of the Highway Trust Fund can only be estimated.

The amount of federal taxes attributable to each state is estimated by the Federal Highway Administration (FHWA) using an analytical model. The FHWA publishes a report on the amount of revenue attributed to each state, as compared to the amount each state receives back through federal-aid highway programs. The FHWA analysis starts with July 1, 1956 when the Highway Trust Fund was established to fund construction of the Interstate Highway System. See [http://www.fhwa.dot.gov/policyinformation/statistics/2010/pdf/fe221.pdf](http://www.fhwa.dot.gov/policyinformation/statistics/2010/pdf/fe221.pdf)

The federal-aid highway program provides funds from the Highway Account of the Federal Highway Trust Fund to states within specific program categories. The major federal program categories are:
Interstate Maintenance (IM), National Highway System (NHS), Surface Transportation Program (STP), Congestion Mitigation and Air Quality (CMAQ), Highway Bridge Replacement and Rehabilitation (HBRR), and the Highway Safety Improvement Program (HSIP). Funding for each of these program categories is apportioned to states based on formulas established in the federal authorizing legislation. For example, federal HBRR program funds are apportioned to states based on each state’s proportionate share of structurally deficient or functionally-obsolete bridges.

In addition to these six core apportioned programs, SAFETEA-LU provides additional funds to some states based on equity considerations. This additional funding, intended in part to bring "donor states" up to an established minimum rate of return on attributed state contributions to the Highway Account of the Highway Trust Fund, is called the "Equity Bonus." Under SAFETEA-LU the minimum rate of return on a state's imputed contribution to the Highway Trust Fund is as follows: 2005=90.5%; 2006=90.5%; 2007=91.5%; 2008=92.0%; 2009=92.0%.

The Equity Bonus minimum rate of return provisions do not apply to all federal-aid highway programs. A number of discretionary programs are excluded from the Equity Bonus calculation. As a result, the rate of return for some states may still be below the Equity Bonus minimums on a total highway funding basis.

Problems in Rate of Return Calculation
The FHWA’s rate-of-return calculation represents how much each state has received in federal-aid highway program apportionments and allocations as compared to imputed contributions to the Highway Account of the Federal Highway Trust Fund. While historically, some states have been considered "donor" or "donee" states, from 2005 through 2010, every state has received more in federal-aid highway program funding than they contributed to the Highway Account of the Highway Trust Fund. In effect, there were no "donor states" during this period.

Since 2005, all states have been receiving more than they contribute to the Highway Account of the Highway Trust Fund because expenditures from the fund have exceeded Highway Trust Fund revenue. Expenditures from the Highway Account of the Highway Trust Fund exceeded dedicated Highway Account revenue in nine of ten years from 2001 through 2010. This has been possible because Congress used balances in the Highway Trust Fund in order to increase transportation spending beyond the level that can be supported by revenue. In addition, the Highway Trust Fund has been augmented with $28.6 billion federal General Fund transfers – $8.0 billion in 2009, $7.0 billion in 2009, and $13.6 billion (net) in 2010.

The use of federal General Fund revenue to support the Highway Trust Fund is problematic for at least two reasons. First of all, it breaks the connection between transportation funding and highway "user fees." In addition, inclusion of federal General Fund revenue in the Highway Trust Fund distorts the application of the Equity Bonus. The Equity Bonus was intended to consider each state's imputed highway tax contribution to the Highway Trust Fund; it does not consider states' relative contribution to the federal General Fund. As a result, states may receive disproportionately larger or smaller Equity Bonus funding in relation to contributions to the federal General Fund. For example, in FY 2008 New York receive 2.41% of the Equity Bonus distribution while it contributed 8.45% of the federal General Fund. Michigan's FY 2008 share of the Equity Bonus, 2.67% is relatively close to its contribution to the federal General Fund, 2.45%.
For 2010, the most recent fiscal year for which data is available, Highway Trust Fund highway taxes attributable to Michigan totaled $897.3 million, while federal-aid highway funds apportioned to the state was $1.164 billion – in other words, for highway taxes contributed to the Highway Trust Fund, Michigan received 130% back in federal highway program funds. This is due to the situation described above – Congress is distributing more for the program than is supported by highway tax revenue.

The alternative way to calculate Michigan's rate of return is to compute Michigan's apportionment divided by the apportionment to all states, then to divide that percentage by the Michigan's percentage contribution to the Highway Trust Fund, i.e. Michigan's contributions divided by the contribution of all States. Computed in this manner, Michigan's 2010 relative rate of return is only 90.0%.

Cumulatively, from 1957 through 2010, federal transportation taxes attributable to Michigan total $25.285 billion, while the state has received $24.561 billion in program funds – a rate of return of 97%.

Based on FHWA data sheets, Michigan's 2010 computed rate of return, 130%, is 41st out of 50 states, and its cumulative rate of return since 1957 is 97% – 46th out of the 50 states.


**Federal Transit Programs**

The Equity Bonus, and the discussion of each state's rate of return on contributions to the Highway Trust Fund, apply only to federal-aid highway programs. There is no minimum rate of return for federal transit programs and little discussion of each state's rate of return relative to Mass Transit Account of the Highway Trust Fund. Expenditures from the Mass Transit Account of the Highway Trust Fund averaged $5.7 billion from 2003 to 2010; they were $7.3 billion and $7.4 billion in 2009 and 2010, respectively.

Although there is not a rate of return figure for transit programs, it is understood that historically, Michigan’s share of federal transit program funding has been relatively low. This is due, in part, to the federal transit program’s bias towards urban light rail systems. With regard to public transit, Michigan has been exclusively a bus state.