Federal-Aid Highway Program:  
“Donor-Donee” State Issues

Updated December 1, 2004

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Summary

Few issues in the history of the Federal-Aid Highway Program have raised such heated debate as the arguments over how closely the program’s payments to the individual states should match the amount of federal highway taxes each state’s highway users pay to the highway account of the Highway Trust Fund (HTF). Referred to as the donor-donee state issue, it has re-emerged during the debate over the reauthorization of federal surface transportation programs, TEA-21 (Transportation Equity Act for the 21st Century) (P.L. 105-178). During the 108th Congress, conferees failed to reach an agreement on reauthorization (H.R. 3550). Donor-Donee issues, however, are expected to be readdressed when reauthorization legislation is reintroduced in the first session of the 109th Congress.

“Donor states” are states whose highway users are estimated to pay more to the HTF than they receive. “Donee states” receive more than they pay. The basic donor state argument is a relatively straightforward call for equity or fairness. Donor state advocates generally contend that for too many years they have been subsidizing the repair and improvement of donee state infrastructure, especially the older highway infrastructure in the Northeast. Some of the donor state advocates argue that the federal role should be reduced and that the Federal-Aid Highway Program should be streamlined or eliminated and the Federal Highway Administration (FHWA) should become primarily a conduit for block grants to the states.

Donee state advocates argue that fairness should not be separated from needs. They assert that the age of their highway infrastructure, especially in the Northeast, the high cost of working on heavily congested urban roads, and the limited financial resources in large sparsely populated Western States justify their donee status. They also argue that there are needs that are inherently federal rather than state and that a national highway network cannot be based solely on state or regional boundaries.

A number of interest groups and State Departments of Transportation have proposed that reauthorization should increase the minimum guarantee to 95% and expand the guarantee to cover all Federal-Aid Highway Programs. This may be difficult to achieve in a tight budget environment. The Minimum Guarantee program is already the largest federal highway program.

The Federal Highway Administration’s donor-donee figures indicate that for FY2001 all 50 states were donee states and for FY2002 49 states were donee states. This increased concerns over the comparability of the state payment calculations and the state receipt (apportionments plus allocations) calculations. For the donor-donee state concept to be statistically valid the total state payments and overall receipts should be equal. This does not mean that concerns over distribution equity are unimportant, but that the ratios underpinning the debate may at times have more to do with the gap between overall revenues and distributions than donor losses and donee gains. Also, the use of non-current data may skew the donor-donee ratios and lead to conclusions about donor or donee status that may be unwarranted. This report will be updated as warranted by events.
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Federal-Aid Highway Program: “Donor-Donee” State Issues

Introduction

Since the 1980s few Federal-Aid Highway Program issues have raised as much heated debate as the persistent arguments over how closely program payments to the individual states should match the amount of federal highway taxes each state pays into the highway account of the Highway Trust Fund (HTF). The issue is commonly referred to as the “donor-donee” state issue. A “donor state” is usually defined as a state whose highway users pay more in estimated federal highway tax revenue to the HTF than that state’s Department of Transportation receives from the federal government in Federal-Aid Highway funds. A “donee state” receives more federal-aid highway funds than its highway users pay to the HTF. In general, donor states would like to get a higher return on their taxes paid, while donee states oppose having their funding shares reduced. On the surface, closing the donor-donee divide would appear to simply require a mathematical adjustment to equalize the return on taxes paid. Under the surface, however, the donor-donee divide is the result of a complex interaction of highway program formulas, discretionary program spending, equity adjustments, differing regional needs, national needs, the impact of the business cycle on revenues and spending, as well as the overarching issue of determining the appropriate federal role in funding federal-aid system highways.

The overall issue for Congress is how to structure and maintain a Federal-Aid Highway Program that meets federal highway policy objectives. Secondarily, is the question of whether the Federal-Aid Highway Program provides, or should provide, as equitable as possible a return to the states on each tax dollar the states’ highway users pay into the highway account of the HTF.

This report begins with a general background discussion as well as a legislative history of the issue with emphasis on the donor-donee controversy during the two most recent surface transportation reauthorization debates, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) (P.L. 102-240) and the Transportation Equity Act for the Twenty First Century (TEA-21) (P.L. 105-178; P.L. 105-206) debates. It then sets forth a number of statistical issues that may skew some conclusions about donor-donee status. Finally, the report examines some of the issues that in the past have constrained efforts to increase donor state federal aid distributions to bring them more in balance with state revenue contributions.

During the 108th Congress, both the House and the Senate passed surface transportation reauthorization bills (H.R. 3550; S. 1072) that included provisions designed to address some donor-donee issues, but were unable to come to

1 Further references to the HTF in this report are to the highway account of the HTF.
agreement. The 109th Congress will address donor-donee issues once legislation is reintroduced in early 2005. This report is not a legislative tracking document for the minimum guarantee/equity provisions in these bills.

### Background

There are a number of characteristics of the Federal-Aid Highway Program that need to be kept in mind during a discussion of the donor-donee question. First, the Federal-Aid Highway Program is really an umbrella term for all the highway programs administered by the Federal Highway Administration (FHWA). Most of these programs can be described as being either formula (apportioned) programs, which constitute the vast majority of program funding, or the smaller discretionary (allocated) programs. The formula programs apportion funds to the State Departments of Transportation based on formulas set forth in legislation. The discretionary programs are programs nominally under the control of the FHWA that were designed to provide funds to projects chosen through competition with other projects. In recent years, however, most of the discretionary program funding has been earmarked by Congress.

The distinction between formula and discretionary programs becomes especially significant in the process of attempting to make equity adjustments in the funding levels among the states. For example, how can all discretionary programs be constructed to guarantee a designated percent return to states on their payments to the HTF and still remain discretionary? The programs were created to fulfill perceived policy needs. The separate program budget accounts were authorized based at least in part on the amounts of money each program needs to meet its program goals (determined in part by the budget constraints of the time) rather than by basing the distribution on estimates of the revenue paid by highway users in the individual states.

The definition of donor and donee states is controversial. In part, the use of the terminology, donor and donee, itself leads to interpretation problems. Charges, often in newspaper opinion columns, by state officials, or by construction interests, that a state’s congressional delegation has failed to secure the state’s “fair share” if the state receives less than a 100% return on its highway tax contributions, are common during highway program reauthorization.

The “fair share” at the 100% return level is problematic for a number of reasons. First if all states got 100%, there would not be enough funds left to administer the programs. Second, some highway needs, such as roads on federal lands, border crossing infrastructure, trade corridors, and interstate system maintenance, have inherently federal aspects that would likely not be addressed if the Federal-Aid Highway Programs were predicated on a 100% return to all states. Even advocates

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2 For more information on equity guarantee issues and options, see CRS Report RL32409, *Highway Program Equity Guarantee Issues*.

3 For Legislative tracking see CRS Report RL32226.
of “devolution” of much of the Federal-Aid Highway Program to the states have acknowledged some federal needs. Third, donor states themselves have in the past recognized the need for some states to get an increased share. During the ISTEA reauthorization debate, for example, donor states agreed that large sparsely populated states and some small states (such as Rhode Island, Vermont, and Delaware) should get increased shares. Fourth, many of the “donee” states with what appear to be unusually high shares are states with small programs in relative dollar terms, and bringing them down to 100% would not free up enough funds to significantly increase the donor state share as a whole. Some argue that the minimum guarantee percentage (currently 90.5%) could be a more accurate benchmark for “fair share.”

Nearly all the debate over donor-donee issues is based on statistics drawn from Table FE-221 in the annual FHWA publication, *Highway Statistics*. The use of this table’s statistics as the basis of donor-donee arguments is problematic. This is because the Minimum Guarantee is based on the most recent year data available for contributions to the HTF (usually a two year lag) while distributions (apportionments and allocations) are determined at the beginning of each fiscal year. This brings into question the comparability of FE-221’s “payments into the fund” statistics and its “apportionments and allocations from the fund” statistics that are used to determine the share ratios. For example, the FY2003 table compares, on a dollar in-dollar out basis, FY2003 contributions into the fund to FY2003 apportionments and allocations. As will be discussed later, the TEA21 90.5% minimum guaranteed rate of return for FY2003 is calculated based on FY2001 payments to the HTF. This means that in years of rising highway tax collections, the two year lag in contribution statistics pulls some states below the minimum guarantee level of 90.5%. This can give the impression that the minimum guarantee is not working effectively, when it actually is. The use of non-current data may skew the donor-donee ratios and lead to conclusions about donor or donee status that may be unwarranted.

Under TEA21, this “most recent year data available” statistical dilemma on the contributions side has been complicated further on the spending side by the Revenue Aligned Budget Authority (RABA) distributions that are based on historical and future estimates of revenues rather than current year actual revenues. This led to a large gap between the estimated total contributions of the 50 states to the HTF and the actual distributions (apportionments and allocations) from the HTF. For the donor-donee state concept to be valid statistically the total estimated state payments to the HTF should equal the total state receipts from the HTF.

Donor-donee issues have become a fundamental part of the policy debate over federal highway funding over the last 20 years, with interest in the issue generally surfacing in the context of the broader debate during the periodic reauthorization of federal surface transportation programs. This legislative context is important because it means that any “equity adjustment” provisions must fit with the overall compromises that create a reauthorization bill that can pass both houses of Congress and gain Executive Branch approval.
 Legislative History

Although some would argue that the seeds of the donor-donee controversy were sown with the enactment of the Federal-Aid Highway Act of 1956, Title II of which established the Highway Trust Fund (HTF), a case can be made that it was the first publication of Table FE-221 in the 1972 edition of the FHWA’s annual *Highway Statistics* that fed concerns about the state “fair share” issue that persist to this day. Table 221, “Comparison of Estimated State Payments into and Receipts from the Highway Trust Fund, and Federal-Aid Apportionments,” published for each state, in side-by-side format, presented not only the state payments to and receipts from the HTF, but also the ratio of aggregate payments to aggregate receipts for 1957 through June 30, 1973. The receipt of federal aid for each dollar paid to the highway trust fund varied greatly from state to state. Alaska appeared to fare best and North Carolina worst at $8.34 and $0.52, respectively. During the 1970s significant construction was still being done on the Interstate Highway System, but the degree of effort required varied significantly from state to state. This may have, in the minds of some, provided a reasonable justification for the disparity among state returns on each user tax dollar of revenue states paid into the HTF. By the early 1980’s, however, the interstate system was nearing completion. At the same time, a general perception that U.S. roads and bridges had deteriorated coincided with growing support for increased spending on transportation infrastructure, in part, as an economic stimulus measure.

Surface Transportation Assistance Act of 1982 (STAA)

STAA (P.L. 94-424) authorized a significant increase in funding for the Federal-Aid Highway system for the years FY1983-FY1986 and included a provision designed to mitigate the dissatisfaction of donor states by providing that each state would receive a minimum allocation from the core FHWA programs. Specifically, the bill ordered the FHWA to allocate among the states sufficient funds to assure that each state’s total apportionments from the core highway and safety programs (Interstate Highway Substitution, Primary, Secondary, Interstate, Urban, Bridge Replacement and Rehabilitation, hazard elimination, and rail-highway crossings, and section 203 of the Highway Safety Act of 1973) would not be less than 85% of the percentage of estimated tax payments each state paid into the highway account of the HTF. These “equity adjustment” allocations could be obligated to the core highway programs.

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4 STAA also established the Mass Transit Account of the HTF but did not make it subject to the minimum guarantee. The donor-donee discussion is limited to the highway account of the HTF and does not take into consideration federal mass transit funding which is also paid for by federal fuel taxes but is deposited into a separate account. Although, typically, donee states in the Northeast are more transit dependent, some highway donor states get significant federal transit funding, while some donee states, especially the large “pass-through” Western States get relatively little.
Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA)

STURAA (P.L. 100-17) authorized the Federal-Aid Highway Program for FY1987-1991, retaining the 85% minimum allocation, but altering the basis of its calculation. The act revised the calculation to include the allocated (sometimes referred to as discretionary) programs, with the exception of federal lands programs and safety programs. For FY1987 and FY1988 emergency relief funds and interstate construction discretionary funds were not included in the calculation. The act made permanent the minimum allocation provision established by STAA.

With the exception of the changes in the treatment of the minimum guarantees, the formulas for allocation of funds under STAA and STURAA remained the same. Minor changes were made in the criteria for awarding discretionary program grants. Emergency Relief and Federal Lands Highways grants continued to be distributed on a project-by-project and needs basis, respectively.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

ISTEA (P.L. 102-240) reauthorized surface transportation programs, including Federal-Aid Highway Programs, for FY1992-FY1997, making major changes in the overall program structure, program formulas, minimum allocation, and other provisions that could impact the state donor-donee ratios. To a great extent, the changes were an outgrowth of the fact that the remaining unfinished portions of the interstate system would be completed under ISTEA. The act also enunciated a broader vision of the mission of federal highway programs to include air quality, alternative transportation, and historic preservation. ISTEA retained the three formula programs that provided funding for the Interstate system (Interstate Construction, Interstate Maintenance, and Interstate Highway Substitution) as well as the Bridge Replacement and Rehabilitation Program. The other formula programs, such as, the Primary System, Secondary System, Urban System, and Urban Transportation Planning, were replaced by the National Highway System Program, the Surface Transportation Program, and the Congestion Mitigation and Air Quality Program. The distribution criteria for projects under the discretionary programs remained the same except that the Interstate Construction Program (renamed the Interstate Discretionary Program) was changed to be at the discretion of the U.S. Department of Transportation (USDOT) and the Interstate 4R program funds were now a set-aside within the new National Highway System Program.

Equity Adjustment Provisions. ISTEA included five provisions, with separate funding, designed to assure a more equitable distribution of federal funds to the states.

The 90% Guarantees. The act both raised the minimum allocation to 90% of estimated state contributions to the highway account of the HTF (although narrowing its calculation to the core formula programs, scenic byways, safety belt and motorcycle safety grants). The act also included a new minimum payments guarantee that assured that each state’s apportionments (for the core formula
programs) for the fiscal year and allocations (to the discretionary programs) from the previous year would be at least 90% of its estimated state contributions (i.e., calculated from all programs except special projects).

**Donor State Bonus.** For each fiscal year, donor states were identified by comparing projected contributions to the HTF with the apportionments to be received that year by each state. Under the donor state bonus, starting with the state with the lowest return, each state was brought up to the level of the state with the next highest level of return. This was repeated successively for each state until the ISTEA authorized program amount was exhausted.

**Hold Harmless.** This provision set a specific percentage that each state was to receive from the core formula highway programs plus Federal Lands Highway Programs, minimum allocation, donor state bonus, and Interstate Reimbursement. Each state received an addition to its regular apportionments to raise its total to the set percentage.

**Reimbursement for Interstate Segments.** ISTEA authorized $2 billion for FY1996 and FY1997 to reimburse each state for the costs to them of building segments of the interstate system without federal assistance prior to or during the early days of the Interstate Construction Program.

Despite these provisions significant gaps remained among states on their share return on contributions to the HTF. As reauthorization of ISTEA approached, dissatisfaction with the effectiveness of the equity provisions led to challenges to the ISTEA program paradigm.

**Transportation Equity Act for the 21st Century (TEA-21)**

The reauthorization debate that preceded passage of TEA-21 (P.L. 105-178) included a wide range of views on the donor-donee state issue and is worth reviewing because all the major underlying arguments that had over time emerged, reemerged during the TEA-21 debate. Significant characteristics of the debate included a greater, primarily regional role and virtually no role for party affiliation. Also in play were different philosophies of the appropriate role of the federal government vis-a-vis the states, differing views of whether the completion of the Interstate Highway system should trigger a reduction in federal involvement in highway construction; how national highway needs criteria can fit a return-on-the-tax-dollar view, and the influence of a large increase in gas tax revenue to the HTF on program structure.

**Regional Conflict Over Funding.** Under ISTEA, Southern and Mid-Western States made up most donor states while Northeastern, Pacific Rim, and large sparsely populated Western States made up most of the donee states. In general, donee states were satisfied with the distribution under ISTEA and supported the “ISTEA works” legislation that, in general, adhered to the ISTEA funding formulas. Most of the donor states joined “STEP-21,” a coalition whose centerpiece proposal was a guarantee that each state receive at least a 95% return on its estimated contribution to the highway account of the HTF. The dominance of regional differences over party affiliation was reflected on the Senate Committee on Environment and Public Works, where the Republican committee leadership
supported the donee friendly “ISTEA works” bill while a Republican colleague, sponsored the Streamlined Transportation Efficiency Program for the 21st Century (STEP 21) which included the 95 cents on the dollar guarantee, as well as program formula changes supported by donor states.

**Donor State Arguments.** The basic donor argument is a relatively straightforward call for equity or fairness. Donor state advocates generally contend that they have been subsidizing the repair and improvement of donee state infrastructure, especially the older highway infrastructure in the Northeast. The Southern donor states have been fast-growth areas relative to many of the donee states and argue that their needs are just as great or greater. A secondary argument for some of these states is that they are generally more dependent on roads and do not benefit from federal transit spending to the degree that some donee states, in particular New York, do. Finally, some of the donor state advocates argue that with the completion of the Interstate Highway System the rationale for the donor-donee disparity in federal highway funding is so weakened that the Federal-Aid Highway Programs could be streamlined or eliminated and the FHWA should be little more than a conduit for block grants to the states.

**Donee State Arguments.** Donee state advocates generally argue that fairness should not be separated from needs. Donee states argue that their position as donees is justifiable because of the age of their infrastructure, especially in the Northeast, the high cost of working on already heavily congested urban roads, and the limited financial resources in large sparsely populated Western States. Donee state advocates have also argued that when all federal programs are considered, not just the Federal-Aid Highway Program, Northeastern states are often donors while southern states are often donee states. Donee state supporters also argued that Southern and Mid-Western states spend less of their state and locally derived resources on highways than the donee states, and chide the donor states for pleading for federal funds when they are not willing to ante up their own resources. Finally, donee states argue that it is unreasonable to expect FHWA to become little more than a tax collector for the states. They argue that there are needs that are federal rather than state and that a national highway network cannot be based on state or regional boundaries.

**Devolution.** What most observers considered a more radical approach was the Transportation Empowerment Act, sponsored by Senator Connie Mack of Florida and Representative John Kasich of Ohio. This bill would have devolved much of the federal highway program role to the states. Only a program for maintaining the Interstate System and federal lands highways would have remained federal. A four year phase out of 12 cents of the federal gas tax would have corresponded with the declining federal role. States would have had the option of replacing the declining federal taxes with gas tax increases of their own. States would then have had the freedom to spend, or not spend, on their own roads as they saw fit. Although this proposal garnered some support from advocates of a reduced federal role in government, it did not obtain broad support from many Governors, state legislatures, or State Departments of Transportation, many of whom were wary of the political implications of pushing large replacement gas tax increases through their state legislatures, and at the same time keeping these funds programmed for highways.
TEA-21 Equity Provision Changes. The equity changes that followed the debate and were included in TEA-21 were more limited than most would have expected early in the reauthorization debate. The main reason for this was the large increase (roughly 40%) in overall funding levels. Still there were equity provisions that were included in the hope that they would narrow the donor-donee divide.  

Minimum Guarantee. The TEA-21 minimum guarantee has three components:

Guaranteed Base Share. TEA-21 guarantees each state a percentage share of the total program, defined as all the apportioned programs: Interstate Maintenance Program (IM), National Highway System Program (NHS), Surface Transportation Program (STP), Highway Bridge Replacement and Rehabilitation Program (HBRRP), Congestion Mitigation and Air Quality Program (CMAQ), Metropolitan Planning, Recreational Trails Program, Appalachian Development Highway System Program and Minimum Guarantee, as well as High Priority Projects.

Minimum 90.5% Share on Contributions. Each state is guaranteed at least 90.5% return (up just 0.5% over ISTEA) on its share of tax contributions to the highway account of the HTF (based on the most recent year for which the data are available — generally from two fiscal years before). Using Ohio as an example, of total FY2001 highway account contributions, Ohio’s percentage share contributions amounted to 3.7578%. Ohio is guaranteed 90.5% of its share of estimated FY2001 contributions and is thus guaranteed a minimum share of 3.4008% of the FY2003 apportionments (i.e., the core formula programs), plus High Priority Projects and the Minimum Guarantee itself. If the above base share is less than a 90.5% return to a state then the share is adjusted upward until the 90.5% share is reached. The money to raise shares to 90.5% is provided by “squeezing” down the percentages (but not the total amounts) of those states that are above the minimum.

Minimum State Payment. Each state is guaranteed that as part of the minimum guarantee it will receive at least $1 million in Minimum Guarantee funds.

It is important to keep in mind that the TEA-21 Minimum Guarantee was a compromise provision. It is constructed in such a way as to give money to all states in the process of bringing the donor states up to the 90.5% minimum guarantee. Each state gets the $1 million minimum. Then, the lowest percent share of any state or the District of Columbia (generally the District) is used to extrapolate the total program funding (as defined under Minimum Guarantee) needed for the District to retain its total program percentage. For example, using FY2003, because the District’s program level percent share of 0.3860% is lower than the District’s percentage of total apportionments (roughly 0.5%), high priority projects, and $1 million guarantee, and because no money can be taken back, the only way to achieve the District’s 0.3860 % was to raise the national total. To achieve that percentage for the District, a total FY2003 program size of $27.76 billion was needed. The total Minimum Guarantee program funding needed to achieve this total was over $6

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5 P.L. 105-178, Sec. 1104. Also 23 U.S.C. Sec. 105.
6 TEA-21 authorizes such sums as may be necessary for FY1998-FY2003 for MG.
billion. Ironically, the degree of the District’s donor status meant more money for all states (in absolute, not relative terms).

**Minimum Guarantee Distribution.** Each year, the first $2.8 billion of Minimum Guarantee funds are administered as STP funds (see STP discussion below) except that set-asides for Transportation Enhancements, Safety Construction, and certain population-based sub-state allocations do not benefit from this distribution. Any Minimum Guarantee funds above $2.8 million are distributed to the five core programs: STP, Interstate Maintenance (IM); Highway Bridge Replacement and Rehabilitation Program (HBRRP); National Highway System (NHS); Congestion Mitigation and Air Quality Improvement (CMAQ). The distributions to the states are based on the ratio of each core program’s apportionment to the total apportionment of all five programs for each state.\(^7\)

**Program Formula Changes.** TEA-21 also included formula changes that were perceived as benefiting donor states.\(^8\)

**Interstate Maintenance Program.** TEA-21 reduced the weight given each state’s share of total Interstate Highway System lane miles and total state share of Interstate System vehicle miles traveled to 1/3 each and created a third weighted category that provided the final 1/3 be distributed based on each state’s percent share of annual contributions to the HTF attributable to commercial vehicles. This final weighted third was expected to benefit donor states.

**Surface Transportation Program.** STP’s apportionment formula under TEA-21 is weighted 35% to estimated state share of tax payments paid into the Highway Account of the HTF. This also was expected to benefit donor states. State share of total lane miles of Federal-aid highways (25%) and share of total vehicle miles traveled on Federal-aid highways (40%) were the other weighted attributes in the STP apportionment formula.

**National Highway System Program.** TEA-21’s NHS apportionment formula is weighted at 30% of a state’s share of diesel fuel used on highways. Some observers expected that this would also benefit donor states.

**The Resolution of the TEA-21 Donor-Donee Debate.** In the end, what many observers had predicted would be a major battle between donor and donee states was resolved relatively amicably.\(^9\) This occurred despite the donor states only being able to achieve a 0.5% increase in the minimum guarantee percentage and formula changes which some predicted would have little impact on donor state returns on the tax revenues these states payed to the highway account of the HTF. Some even argued that donor states would have been better off if TEA-21 had retained the ISTEA formulas. In the case of TEA-21 what alleviated the concerns of

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\(^7\) 23 U.S.C. 105 (c) (1).

\(^8\) P.L. 105-178 Sec. 1103. Also 23 U.S.C. 104.

the STEP-21 and other donor state advocates was the amount of money available during TEA-21’s lifetime. By shifting, in 1997, revenues generated by the 4.3 cent deficit reduction gas tax to the HTF, Congress was able to provide for large increases in highway funding for all states. The extra money made the donor-donee debate less urgent to the donor states. As the TEA-21 authorization nears its expiration (FY2003), however, the donor-donee state issue has resurfaced.

**Federal Highway User Taxes**

The Highway Account of the HTF is supported by revenue from a combination of a variety of fuel taxes as well as taxes on heavy tires, truck and trailer taxes, and a heavy vehicle use tax. Revenues from the fuel taxes are also distributed to the Mass Transit Account and the Leaking Underground Storage Tank Trust Fund. Part of the tax on gasohol is paid to the general fund of the Treasury. All tire, truck and trailer, and heavy vehicle use taxes go to the Highway Account.

Because the federal taxes on fuel are collected at the first point of distribution (at the terminal “rack”) rather than at the retail level, most of the revenue is collected from a small number of corporations located in a relatively small number of states. To determine how much of the revenue should be credited to highway use in each state the FHWA has to make estimates based on state fuel use and fuel tax data. Because tax treatment of fuel sales varies from state to state and often from federal tax treatment as well, this is a complex process. For example, the fees on tires, heavy vehicle use, heavy truck and trailers sales, are attributed to states based on states’ special fuels usage. Although the basic methodology is considered sound, the estimates are not an exact replication of sales in each state.\(^{10}\)

**Statistical Caveats**

In most years, the revenues from the taxes that support the HTF have increased. However, a combination of the impact of September 11, 2001 on travel and the recession has, for the moment, caused a leveling off of revenues. The use of non-current data (i.e., revenue estimates from two years prior) may skew the state donor-donee ratios and lead to conclusions about donor or donee status that are unwarranted. This and fluctuations of total annual payments into the HTF and total annual apportionments and allocations from the HTF mean that the apportionment and allocation to tax payments ratio for the states as displayed in *Highway Statistics* Table FE-221 will sometimes show a final share for some states below 90.5%. This does not always indicate that the minimum guarantee has been unfulfilled.

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It is also important to keep in mind that Table FE-221 provides same year dollar-for-dollar comparisons of payments to the HTF and all apportionments and allocations to the states. The 90.5% minimum guarantee, however, guarantees a share of apportioned funds within the “scope” of the minimum guarantee program only (i.e. the allocated (discretionary) programs funding is not counted). This meant that under TEA21 the minimum guarantee only covered about 94% of total highway program spending (i.e. the guarantee was, in effect, a 90.5% guarantee of 94% of the total Federal-Aid Highway Program).

**FY2001: The Year of the Vanishing Donor States**

The statistical problems with the comparative tables relied upon to identify which states are donors and which are donees were brought to prominence by the release of the *Highway Statistics 2001* version of Table FE-221. According to the table, all 50 states and the District of Columbia were donees during FY2001. This should be statistically impossible. The assumption underlying the donor-donee debate is that contributions (i.e. state payments) and state receipts (i.e., apportionments and allocations distributed to the states) for each year are roughly similar. Because revenues for FY2001 were lower than expected while total distributions, including Revenue Aligned Budget Authority calculations, were several billion dollars higher, all states’ ratios were pulled up above 1.0. This pattern was nearly replicated in FY2002. For FY2002 49 states had ratios above 1.0 and one state, California, had 0.99. This does not necessarily mean that concerns over distribution equity are unfounded; just the opposite may be the case. Rather, the statistical ratios underpinning the debate may have more to do with the gap between overall revenues and payments than a tradeoff between donor losses and donee gains. Preliminary data for FY2003 indicate that 17 states had a return under 1.0.

The gap between the estimated total state payments to the HTF and total actual apportionments and allocations which occurred in FY2001 was not the first such time a statistical problem has occurred. It was, however, the only year, in the tables for the most recent ten years, that all 50 states and the District of Columbia had a ratio over 1.0 (49 states were donees in FY2002). Figure 1 shows the changes from year to year of total state contributions to the HTF and total receipts (apportionments and allocations) from the fund. What is important is that they differ virtually every year. This brings into question the use of table FE-221 ratios, as currently computed, as a means of determining donor-donee status. In FY1994, only one state ratio fell below 1.0. It was a year somewhat similar to FY2001 in that revenues fell while apportionments and allocations from the HTF remained high. In FY2002 contributions increased slightly while receipts from the HTF fell slightly, but the gap between the two continued to be large enough to keep 49 states in the donee category. On the other hand, the two years with the largest number of donor states, FY1996 (32 donor states) and FY1998 (35 donor states) were years when contributions exceeded apportionments and allocations by over $4 billion.
FHWA recently released a modified table, FE-221B (The table is available at [http://www.fhwa.dot.gov/policy/ohim/hs02/xls/fe221br.xls], which sets forth and consolidates state contributions and receipts for all six years of TEA-21 and provides a cumulative ratio for FY1998 through FY2003 (the cumulative ratio for all states during the life of TEA21 was 1.06).\textsuperscript{11} Over the six year period, 33 states plus the District of Columbia have received more than they payed to the HTF. Of the 17 states whose payments exceeded their receipts, eleven fell below 0.95, three fell below 0.905, and no states fell below 0.90. Although this table, for purposes of the reauthorization debate, is a significant improvement over the yearly tables, it does not eliminate the statistical problems created by comparing two year old and current data or the gaps between overall contributions versus overall receipts.

Fixing this problem could be difficult. Delaying the apportionment and allocation data until the state shares are calculated (i.e., apportionments and allocations would also be based on data from two fiscal years earlier) would almost certainly be opposed by many states. One possible change that might narrow the fluctuations of the differences between estimated contributions to the HTF and receipts, would be to add a revenue adjustment factor to bring the contribution

\textsuperscript{11} Figures for FY2003 are preliminary and may be subject to change.
estimates closer to current year revenue levels. For example, national fuel tax receipt data totals are available much earlier from the Treasury Department than the state data computed by FHWA. Using this known total to create a weighted adjustment factor could adjust FHWA calculated state contribution shares to reflect the more current known totals. Although this would be adding an estimated adjustment factor on to other estimated data (i.e., earlier year state share totals), it would probably be more representative of the same year data needed to make more accurate donor-donee ratios.12

The Minimum Guarantee and Total Program Size

As mentioned in the earlier discussion of TEA-21, the minimum guarantee determines the total highway program size. The method of calculating the total program size necessary to provide the final adjusted state shares can lead to counterintuitive results. For example, in some situations increased tax revenues could inadvertently reduce the size of the minimum guarantee apportionment necessary to provide the state shares required and thereby reduce the total program size. Only FHWA, however, has the expertise and data bases to determine the outcome of any proposed tax increases or minimum guarantee program changes.

Reasons Why Contributions to the HTF Vary From Year to Year

There can be significant fluctuations in the total tax revenue a state is credited for paying into the HTF. There are a number of reasons, individually or in combination, that have led to increases or decreases in the revenues that states pay to the HTF from year to year.

Federal Tax Rate Changes

The federal tax revenues into the HTF on a gallon of gasoline and diesel fuel were raised by tax changes in 1983 (5 cents), 1990 (2.5 cents), 1995 (2.5 cents formerly directed to the general fund for deficit reduction), and 1997 (4.3 cents formerly directed to the general fund for deficit reduction). A tax on gasohol was first imposed in 1983 and has increased over the ensuing years to a range of 7.64 cents, 8.859 cents, or 9.919 cents per gallon, distributed to the highway account of the HTF based on the percent of alcohol used in the blend (another 2.5 cents is distributed to the general fund).

Economic Conditions

The revenue stream generated by all the federal highway taxes grows or contracts with the growth or contraction of the economy. Economic slowdowns in the early 1980s, early 1990s, and recent quarters of low or negative growth have

12 This would not deal with the year shifting of budget authority that can occur under RABA’s look forward/look back estimates.
undoubtedly had some impact on the revenue stream to the HTF as did the boom years in-between. As the economy began to slow down in 2000, truck vehicle sales dropped dramatically. At the same time sales of gasohol, which is taxed at a lower rate than gasoline (also, 2.5 cents per gallon of the gasohol tax goes to the general fund for deficit reduction) were increasing somewhat as a substitute for the controversial additive MTBE. This has had an impact on HTF revenue beginning in FY2001. Some of the impact of business cycles is difficult to quantify because of the timing of tax increases in the 1980s and 1990s which pushed up revenues. The recession of 2001 had a major impact on the revenues paid to the HTF. Nearly $3.5 billion less revenue was paid to the HTF in FY2001. At the same time, total apportionments and allocations to the states increased over $4.6 billion (reflecting the FY2001 revenue aligned budget authority increase). In combination this led to a situation where all 50 states received more from the HTF than they paid in. For FY2001 all 50 states were donee states. For FY2002, although the gap between contributions from and receipts to the states contracted somewhat, 49 states and the District of Columbia remained donee states. Eventually, however, when economic growth increases, total payments from the states will rise relative to apportionments and allocations. As the contribution-receipt gap narrows the number of states in the donor category can be expected to increase.

Fuel Tax Evasion

Changes in enforcement of fuel tax evasion can have an impact on the level of revenue collected. According to FHWA the farther down the distribution chain that gas taxes are collected the greater the problem of gas tax evasion. This has caused some states to move their collection up to the first level of distribution (i.e. to the terminal “rack” as is done by the U.S. Treasury). When such a change occurs it can cause an increase in revenues credited to the state making the change. The wholesale level is less prone to tax evasion than the retail level, but is more prone to tax evasion than the terminal “rack.”

Record Keeping

According to FHWA, in some states the quality of record keeping can vary from one reporting period to another. For instance, delays in reporting by the state can mean that one reporting period can lead to a low estimate in one year and a high estimate in the next. States that collect their data at the retail level may be more vulnerable to this kind of record keeping problems.

All of the elements discussed above can affect the revenue estimates credited to a state. All of the elements may in any particular year, for any particular state,

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13 Over the life of TEA21, apportionments and allocations exceeded payment to the HTF by $9.75 billion (according to FE-221B, revised).

interact with each other. Also, it is important to understand that changes in one state can impact the share of other states.  

### Reasons Why Total Apportionments and Allocations Vary

For the most part a state’s total level of apportionments and allocations is determined by the total amount of federal funding available, the structure of the “core” apportioned programs and their distribution formulas, the funding a state gets from high priority projects, the impact of the minimum guarantee distribution (determined by the state revenue estimates, base share, and 90.5% guarantee), and the amount of allocated (discretionary) program funds that a state successfully competes for or obtains as a result of a congressional earmark. As mentioned earlier, the RABA adjustments can also have a major impact on apportionments and allocations.

### Fair is Foul and Foul is Fair: The Elusive Resolution of the Donor-Donee Issue

The persistence of the donor-donee debate as part of the reauthorization of Federal-Aid Highway Program is a reflection of the differing views and expressed needs of the many stakeholders in federal highway spending policy and the genuine difficulty in addressing these differences. Although the basic end-game is who gets the money, the wide differences over what constitutes equitable distribution or what degree of federal involvement is bad or good for the nation as a whole or the states in particular has, to date, consistently led to compromise reauthorization bills. Donor state coalitions as a result, have faced and continue to face both political and practical barriers to raising the donor state shares. For more information on equity guarantee issues and options, see CRS Report RL32409, *Highway Program Equity Guarantee Issues*.

### Raising the Minimum Guarantee

Since STAA-1982 set the MG at 85% it has been raised twice: to 90% under ISTEA and to 90.5% under TEA-21. However the closer the MG approaches 100% the more difficult increasing the MG becomes.  

As described earlier, the structure of the minimum guarantee varied in STAA, ISTEA, and TEA-21, as did the range of programs covered by the guarantees.
MG distribution. Donee states will almost certainly resist any attempt to eliminate or significantly reduce their base shares. Ironically, assuming the money were available, donor states might actually get more money in absolute terms by leaving the base shares as they are, and accept, as they did in TEA-21, the benefits of a larger MG apportionment.

A major change such as raising the 90.5% share to 95% would probably require that legislators start with that percentage and work back through all the Federal-aid programs goals and formulas to make them conform to the new guarantee. Even so, achieving the 95% level, on a dollar-in — dollar-out basis, could be difficult. The 1.5% administrative takedown, the 1% for Metropolitan Planning Organizations, and the roughly 2% or more that generally goes to the Federal Lands Highways Program (the program that least lends itself to “equitable” distribution across all 50 states) leaves any 95% equity mechanism with little room to maneuver. Some propose bringing these programs and activities under the minimum guarantee umbrella as well. This, however, exacerbates the difficulties of developing a statistical and administrative paradigm that could successfully distribute this combination of discretionary program and administrative funds among the states and still fulfill their statutory program purposes. In entering this debate states will need to decide if their goal is to increase their states’ total federal funding or closing the donor-donee gap.

Either expanding the minimum guarantee to include the allocated (discretionary) programs or establishing a second minimum guarantee to cover these programs has been proposed by some states that have traditionally been donor states. As mentioned earlier, the impact of these changes on either the total program level or on individual state funding is difficult to predict. Only FHWA has the expertise and data bases to determine the impact of these proposals.

Another strategy donor states could attempt would be to focus on raising the base percentages in favor of the donor states coupled with either modest or no change in the 90.5% minimum guarantee. Even with increased availability of funding, the likelihood of getting enough donee states to accept smaller shares and support such a program change would be low.

**Federal Highway Discretionary Programs and Federal Needs**

Another issue with raising the minimum guarantee is how to fund the discretionary programs. Because the minimum guarantee distributions are apportioned to the core formula programs, the larger the minimum guarantee, the less revenue is available to fund discretionary programs such as Federal Lands Highway Programs and the corridors and borders programs. Over the last few years the discretionary program funding has been largely earmarked during the annual U.S. Department of Transportation appropriations process. These programs are very popular as sources of earmarks which are outside the control of the State Departments of Transportation. Eliminating or substantially reducing these programs to allow for a higher minimum guarantee percentage could therefore be difficult for

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17 This assumes that the scope of programs under the MG continues to cover most programs.
those who favor the availability of discretionary programs for congressional earmarking.

A related issue is the view that certain program goals are inherently federal. Generally included are federal support for border crossing infrastructure, trade corridors, and roads that cross or serve federal lands. Even if the federally administered discretionary programs could be restricted to only those programs that serve clearly federal needs, there would be limits to how far the minimum guarantee could be raised. In addition, should these “federal needs” programs be eliminated, significantly reduced, or turned over to the states, the reduced federal role this implies could be viewed as strengthening the argument for the devolution of the Federal-Aid Highway Programs and the taxes that support them to the states. As mentioned earlier, most states are wary of raising state taxes to replace a reduction in taxes at the federal level.
Appendix I: One State’s Experience

The following example uses Ohio, to examine a donor-donee state experience over the last twenty years for which data are available. Ohio’s return on its federal highway taxes paid to the highway account of the HTF are set forth. Possible reasons for the changes in Ohio’s percentage return are discussed. Only FHWA has the databases and expertise to conduct a detailed year-by-year evaluation of changes in Ohio’s percent return on taxes paid. In addition, only the State of Ohio has the information to explain year by year changes in the state tax revenues that are the basis of the FHWA estimates of Ohio’s federal highway taxes paid into the Highway Account of the HTF. Consequently, this discussion will focus in a general sense, on reasons for changes in the ratio.

**Figure 2. Ohio Contributions to and Receipts from the HTF ($ Millions)**

![Figure 2](image-url)

**Figure 2** displays Ohio’s payments (estimated Ohio tax payments to the HTF) and receipts (total federal apportionments and allocations to Ohio) for fiscal years 1981 to 2003. Overall trends coincide roughly with the authorization cycles. Under STAA (FY1983-FY1986) both Ohio’s payments and receipts trended upward and Ohio’s average return ratio was 1.028. Ohio was a net donee during STAA. Under STURAA (FY1987 to FY1991) Ohio was a donor state all five years with an average return ratio of 0.86. Increases in Ohio’s Federal-Aid Highway funding were modest under STURAA. Under ISTEA (FY1992-FY1997), Ohio was a donee state in FY1993 and FY1994 and a donor state during the other four years averaging a 0.97 return ratio over the life of the authorization. By the last year of ISTEA, Ohio’s
estimated taxes paid to the HTF had grown 42% over the last year of STURAA. Allocations and apportionments distributed to Ohio had grown 38%. During the first three years of TEA-21, Ohio has been a donor state, averaging a 0.85 return ratio. The growth trend during the first three years under TEA-21 has been significant with Ohio taxes paid to the HTF growing 28% and allocations and apportionments to Ohio growing 27% from the level of the last year of ISTEA.\(^\text{18}\) In FY2001 Ohio’s estimated contributions to the HTF fell by almost 13% from the FY2000 level. Apportionments and allocations, however, increased slightly. Together these changes made Ohio a donee state for the year. In FY2002 both payments and apportionments and allocations increased somewhat and Ohio remained a donee state. According to preliminary data for FY2003, Ohio again became a donor state. Its rate of return dropped to 0.90.

According to FHWA the quality of the estimates of highway user tax revenues paid by users in each state is poorer the farther back in time the estimates go. With the increased importance of the estimates under ISTEA and especially under TEA-21 accuracy of the estimates has improved. However, as previously discussed, because federal fuel taxes are imposed at the point of distribution, rather than at the point of sale, the estimates of federal revenue derived from fuel use in each state is extrapolated from data on state fuel taxes.

Table 1, below, sets forth, for the fiscal years 1981 to 2003, the annual estimates of Ohio’s payments into the highway account of the HTF, the total federal-aid highway apportionments and allocations to Ohio, and the revenue return ratio on each dollar paid by Ohio users. Also, as mentioned earlier, designating a state as a donor or donee based on whether a state’s ratio is below or above 1.0 is controversial. When the minimum guarantee was calculated the estimates of Ohio’s payments to the highway account of the HTF, as discussed, were based on data from two fiscal years earlier. The use of non-current data may skew the ratios and lead to conclusions about donor-donee status that may be unwarranted.

As is shown by both Figure 2 and Table 1, Ohio has had a ratio of apportionments and allocations to tax payments to the HTF above 1.0 (been a donee state) for six of the last twenty-one years (FY1983, FY1985, FY1993, FY1994, FY2001, and FY2002). The rest of the years Ohio’s return ratio has been under 1.0 (been a donor state).

\(^{18}\) 1998 while nominally the first year of TEA-21 is viewed by some as an extra year of ISTEA.
Table 1. Comparison of Federal Highway Trust Fund Highway Account Receipts from Ohio and Federal-Aid Apportionments and Allocations from the Highway Account to Ohio, Fiscal Years 1981 - 2002

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Payments from Ohio into the HTF ($ 000)</th>
<th>Apportionments and Allocations from the HTF to Ohio ($ 000)</th>
<th>Ratio of Ohio Apportionments and Allocations to Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>308,116</td>
<td>223,082</td>
<td>0.72</td>
</tr>
<tr>
<td>1983</td>
<td>354,523</td>
<td>425,407</td>
<td>1.20</td>
</tr>
<tr>
<td>1984</td>
<td>462,146</td>
<td>395,541</td>
<td>0.86</td>
</tr>
<tr>
<td>1985</td>
<td>522,923</td>
<td>579,557</td>
<td>1.11</td>
</tr>
<tr>
<td>1986</td>
<td>536,533</td>
<td>505,152</td>
<td>0.94</td>
</tr>
<tr>
<td>1987</td>
<td>489,938</td>
<td>441,646</td>
<td>0.90</td>
</tr>
<tr>
<td>1988</td>
<td>531,419</td>
<td>460,873</td>
<td>0.87</td>
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<tr>
<td>1989</td>
<td>587,133</td>
<td>472,436</td>
<td>0.80</td>
</tr>
<tr>
<td>1990</td>
<td>533,373</td>
<td>505,593</td>
<td>0.95</td>
</tr>
<tr>
<td>1991</td>
<td>583,961</td>
<td>456,358</td>
<td>0.78</td>
</tr>
<tr>
<td>1992</td>
<td>626,031</td>
<td>599,016</td>
<td>0.96</td>
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<tr>
<td>1993</td>
<td>622,462</td>
<td>677,122</td>
<td>1.09</td>
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<td>1994</td>
<td>582,104</td>
<td>691,176</td>
<td>1.19</td>
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<td>1995</td>
<td>754,572</td>
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<td>1996</td>
<td>834,049</td>
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<td>1997</td>
<td>830,660</td>
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<td>1998</td>
<td>1,072,245</td>
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<td>1999</td>
<td>1,065,614</td>
<td>1,024,515</td>
<td>0.96</td>
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<td>2000</td>
<td>1,158,013</td>
<td>1,015,735</td>
<td>0.88</td>
</tr>
<tr>
<td>2001</td>
<td>1,011,436</td>
<td>1,075,276</td>
<td>1.06</td>
</tr>
<tr>
<td>2002</td>
<td>1,056,707</td>
<td>1,111,280</td>
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</tr>
<tr>
<td>2003</td>
<td>1,097,194</td>
<td>983,401</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Appendix II (A): Websites for Table FE-221 for FY1998-FY2003

FY1998-FY2003 Cumulative

FY2003

FY2002

FY2001
[http://www.fhwa.dot.gov/ohim/hs01/pdf/fe221.pdf]

FY2000
[http://www.fhwa.dot.gov/ohim/hs00/pdf/fe221.pdf]

FY1999

FY1998