MAJOR FINANCIAL CHANGES IN THE HIGHWAY TRUST FUND SINCE 1956

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PREFACE

During the Special Session that starts November 29, the Congress is likely to consider an extension of the Highway Trust Fund beyond its current expiration date of September 30, 1984. Such an extension is necessary if the highway program is to be authorized for the full year. Currently, the Byrd Amendment restricts the level of authorizations.

This Staff Working Paper was prepared at the request of the House Committee on Public Works and Transportation. It is designed to provide a historical perspective on the past changes in the financial condition of the Highway Trust Fund. In particular it describes the various means by which the Congress determines the level of spending from the Highway Trust Fund. In keeping with CBO's mandate to provide objective analysis of issues before the Congress, this report offers no recommendations.

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SUMMARY

The Highway Trust Fund was established in 1956 as the means of financing the new Interstate Highway System as well as other federal highway programs. It receives revenues from a series of taxes on highway users, most importantly a four-cents-per-gallon tax on motor fuel and several taxes on trucks.

Most federal programs pass through four stages: authorization, appropriation, obligation, and outlay, with budget authority not created until the appropriation process. By contrast, the Highway Trust Fund continues the practice started in the early 1920s of creating budget authority (termed contract authority) at the authorization stage. Thus funds are made available to the states for obligation without first being appropriated. The appropriations committees provide liquidating appropriations just prior to the outlay of funds.

The Highway Trust Fund has passed through two stages in its financial history and appears recently to have entered a third. In its first decade, the fund was characterized by a very low cash balance--on average less than $500 million. During the first few years, the Congress added revenues to the fund by increasing highway taxes and was forced to defer temporarily application of the Byrd Amendment. During the late 1960s, a second stage began that saw the cash balance grow to a total of $12.6 billion by the end of 1979. Steady growth in highway use during the 1960s and early 1970s helped to increase revenues, while a series of Presidential impoundments of highway funds held down outlays. Also important was the fact that starting in 1973, the Highway Trust Fund extended for only one year beyond the last year of full highway authorization. (Such an overhang is feasible since there is normally a two- to three-year delay between the authorization of funds and their cash outlay.) This relatively short overhang reduced the amount of funds that could be authorized, so that outlays were lower than they otherwise might have been.

Since 1978, a third stage appears to have started. The cash balance in the fund has dropped (by $3.5 billion), and appears likely to continue to decline for the next few years. There appear to have been two causes for this change: first, a much slower growth in tax receipts as higher fuel prices encouraged more conservation; and, second, the extension of the Highway Trust Fund to 1984, two years beyond the last year of full authorization. This additional year of revenues permitted somewhat higher authorizations.

There are several limits on the amount of contract authority that can be created in the authorization process. Most important, the financing committees determine the funds available by fixing the level of taxes paid

into the trust fund and by setting the number of years for which taxes are to be collected. A second major constraint is provided by the Byrd Amendment--a part of the act that established the Highway Trust Fund in 1956. This requires the Secretary of the Treasury to determine if there will be sufficient funds available to cover expected outlays during the next year and over the remaining life of the trust fund. If there will not be enough cash (including both cash on hand at the start of the year and revenues to be received) the amount of authorizations made available to the states at the start of the fiscal year will be restricted to ensure that adequate cash is available.

This paper contains five sections: a description of the process by which the federal highway program is financed; a survey of major changes in the financial condition of the Highway Trust Fund since 1956; a brief discussion of some of the factors causing these changes; a description of the mechanisms currently used by the Congress to control the level of spending from the trust fund; and finally, a discussion of two highway program options and how they would affect the finances of the Highway Trust Fund.

THE HIGHWAY FINANCING PROCESS

Creation of the Highway Trust Fund

The financing process for federally aided highways was initiated in the early 1920s, under the Federal Highway Act of 1921 and the Post Office Appropriation Act of 1922. These acts required the Secretary of Treasury to set aside amounts certified to be needed for approved projects by the Secretary of Agriculture (then responsible for highway programs). This meant that funds authorized for highway projects became budget authority without first being appropriated. In addition, this legislation stipulated that projects approved by the Secretary of Agriculture were to be contractual obligations of the federal government. The authority to obligate authorized federal funds, known as contract authority, has thus been a key feature of federal highway programs for more than half a century.

Until 1956, funds for federal highway programs were taken from general revenues. While the federal government had imposed some form of taxes on highway users since 1917, including a fuel tax beginning in 1932, receipts from such taxes were paid directly to the Treasury. 1/ There was no formal link between highway tax receipts and federal spending on highways until the establishment of the Highway Trust Fund in 1956. (Before then, however, authorizations appear to have been "geared very largely to the receipt of funds from the gas tax," 2/ and the overall balance between federal highway receipts and federal highway expenditures was taken into consideration when either was altered.)

The 1956 Highway Act specifically earmarked receipts from road user taxes for expenditure on highway programs. Beginning July 1, 1956, receipts from various road user taxes were to be placed in the Highway Trust Fund rather than in the general fund of the Treasury, and when cash was needed to pay for highway construction it was to be taken from the Highway Trust Fund. This approach was used both for the already existing highway programs and for the newly planned Interstate system. During the debate over how to finance the latter project, which was expected to require 13 years to complete at an estimated federal cost of $25 billion, the use of

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1. The 1917 tax was a 3 percent sales tax on new vehicles. In 1932, a 1 cent per gallon tax on gasoline was imposed. Diesel fuel taxes started in 1951.

2. Congressman Henry B. Scudder, National Highway Program, Hearings before the House Committee on Public Works, 84:1 (1955), p. 34. Also, the Hayden-Cartwright Act of 1934 declared that it was unfair for state governments to tax highway users without using the receipts for highway spending.

long-term bonds was rejected in favor of the more conservative "pay as you build" approach embodied in the Highway Trust Fund. 3/

The 1956 Highway Act called for a trust fund extending for 16 years to 1972, three years beyond the last year of authorizations for the Interstate. The three additional years of revenues were to ensure that there would be a balance between total receipts and expenditures over the life of the program. (See the next section for a description of the normal delays between authorization and outlays.) The tax increases called for in the act were relatively modest, however: only a penny increase in the motor fuel tax to three cents per gallon, for example. As a result, the trust fund as proposed in the original House bill was projected to have a cash deficit for most of the 1960s, peaking at $4.8 billion in 1969. These annual deficits were to be financed over the short term by borrowing from the general fund, 4/ and eventually by tax receipts during the three years that the trust fund continued after the Interstate network was expected to be completed. While the trust fund was also to be used to finance non-Interstate programs (the most important at the time being the Primary and Secondary road systems), there was no clear indication of what was to happen to the Highway Trust Fund once the Interstate was completed.

The idea of a debit balance in the trust fund was opposed by many Members of the Congress and by the Secretary of the Treasury. As a result, the Senate passed and the House accepted the Byrd Amendment to the original House bill. In addition to prohibiting a deficit over the life of the trust fund, this amendment prohibited the fund from going into deficit in any particular year. As stated in the Senate Report, it was "designed to give assurance that no deficit will develop in the highway trust fund." 5/ In effect, this would "give assurance of Congressional reconsideration of the highway program at any time in the future that revenues appeared inadequate to meet the highway program presently planned since either new revenues will have to be raised at such a time or the expenditure program will have to be curtailed or postponed." 6/ The Byrd Amendment is discussed in detail in a later section of this paper.

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3. Congressional Budget Office, Highway Assistance Programs: A Historical Perspective, Background Paper (February 1978).

4. The trust fund retains its original authority to borrow from the general fund (termed repayable advances), but incorporation of the Byrd Amendment in the 1956 act makes this of little practical effect.

5. While the Byrd Amendment prohibits a cash deficit at the end of the fiscal year, a deficit during the year is technically permissible.

6. Senate Report 2054, May 25, 1956, accompanying H. R. 10660.

Before moving on to the development of the trust fund since 1956, it will be useful to outline how the financing process created in 1956 operates.

Mechanics of the Highway Trust Fund

Most federal programs pass through four stages: authorization, appropriation, obligation, and outlay. Budget authority is not created until the funds have been appropriated. By contrast, federal funds for highways pass through five steps from the time they are authorized until the time the cash is actually paid from the Highway Trust Fund and budget authority is created in the first step. These steps are:

- Authorization;
- Apportionment;
- Obligation;
- Appropriation; and
- Outlay.

Each step is described briefly below.

Authorization. The highway financing process begins with the passage of an authorization bill. Since the Highway Trust Fund was created, authorizing legislation has generally been passed about every two years, although the interval has sometimes been longer. Almost all the funds authorized to be spent from the Highway Trust Fund are in the form of contract authority--giving the Secretary of Transportation the authority to enter into contracts that obligate the federal government to pay the amounts authorized. Contract authority permits the highway program to bypass the normal appropriations process, an important element providing long-term security to state highway departments. As noted earlier, contract authority has been part of the federal highway program for over 60 years.

Apportionment. Contract authority is usually apportioned among the states on the first day of each fiscal year. For most programs, the share going to each state is determined by legislated formulas. For others, the allocation is determined at the discretion of the Federal Highway Administrator. The Byrd Amendment requires that apportionment not take place until the Secretary of the Treasury determines that the Highway Trust Fund will have sufficient covering funds. Otherwise, apportionments must be reduced to the level of funds projected to be available.

Obligation. Once funds are made available to the states, they may begin to issue contracts for eligible construction activities. They do so secured by a federal commitment to reimburse them for these costs, as long

as the projects have been approved by the Federal Highway Administration or as long as a state's program has been certified by the Federal Highway Administration.

Obligation of highway funds generally takes place gradually, in many small steps, over a period of several years. The time when a state may obligate its apportioned funds varies from program to program. Funds for the Interstate program are apportioned one year in advance of the fiscal year, and are available for obligation for two years thereafter. For example, funds for fiscal year 1984 (October 1, 1983 - September 30, 1984) were apportioned in October 1982 and can be obligated anytime between October 1982 and the end of September 1984.

For other highway programs, apportioned funds are available for obligation throughout a four-year period. Unlike Interstate apportionments, other highway programs cannot be obligated one year in advance of the fiscal year for which they are authorized. Thus, the fiscal year 1983 apportionment for the Primary system, which was made in October 1982, can be obligated anytime between then and the end of September 1986.

Because apportioned funds are available for obligation for more than one year, and because they may be available before the year for which they are authorized (as with the Interstate program) or for several years after they are authorized (as with other programs), the timing of obligations does not coincide closely with that of apportionments or authorizations.

On average, only half of each highway dollar is obligated in the same fiscal year for which it is apportioned. Such delays are a key feature of federal highway finance--as well as of most other programs that involve capital construction. The multiyear window during which apportioned funds may be obligated is needed by the states to ensure continuity of large projects and stability of long-run planning.

Except for the Interstate program, funds lapse if they are not obligated by the end of the period for which they are available. 7/ Histori-

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7. The present two-year period during which Interstate funds can be obligated was created by the 1978 Highway Act, which shortened the period from four years. At the same time, however, the 1978 act provided that funds not used by the states within this two-year period would be deposited in a fund for use by other states that have projects ready to go. Because funds for the Interstate program are apportioned among states in proportion to the cost to complete planned routes within each state, a state that permits Interstate funds to lapse will retain a higher cost to complete, thereby maintaining a higher share of program funds in future years. Thus, any state that permits its Interstate funds to lapse will eventually recover the lapsed funds through increased apportionments, as long as the Interstate program is continued. This is not the case for other highway programs, however, in which lapsed funds are forfeited by the states.

cally, states have not allowed any significant amount of highway funds to lapse.

Appropriation. Because authorization of programs through the Highway Trust Fund permits the obligation of federal funds, the appropriations process is no longer a meaningful way to control these expenditures. (In recent years, the Congress has placed ceilings on the amount of obligations that can be made in any particular year as a way of delaying the outlay of funds.) Nevertheless, the federal government cannot transfer the cash to reimburse states for the vouchers they submit until funds have been appropriated by the Congress. Such "liquidating appropriations" represent a recognition by the Congress of obligations already made, and do not serve as a control mechanism. Rather, separate controls have been established for this program, as will be discussed later.

Outlay. Finally, once states have completed projects (or parts of projects) and submitted vouchers for payment, and once the Congress has appropriated cash for the purpose of reimbursing the states for progress payments or for completed work, the federal government transfers funds to the states. This final outlay step typically comes about two-and-one-half years after the start of the year for which funds were authorized. In addition to the delay between apportionment and obligation discussed earlier, part of this long delay between authorizations and outlays stems from the time consumed during the construction process itself, because federal funds are used to reimburse states only for completed work.

MAJOR CHANGES IN THE HIGHWAY TRUST FUND SINCE 1956

Two major changes have taken place in the trust fund over the last 25 years. First, the maximum life of the fund has decreased considerably from sixteen years in 1956 to seven years in 1970, three years in 1976, and six years in 1978. At the same time, the length of the typical highway authorization has increased from two years to four years. Taken together, these two shifts in timing mean that taxes and program authorizations have increasingly been considered simultaneously by the Congress. Such simultaneous consideration makes for a stronger system of checks and balances among the authorizing and tax committees.

Second, the financial characteristics of the fund have changed considerably. During the 1960s and early 1970s, trust fund revenues grew steadily, mostly in response to growing highway use. Also, the Congress placed more tax revenues in the fund, most significantly through a one-penny increase in the motor fuel tax in 1959. Further, the real value of the fund tended to increase as long as inflation remained at relatively low levels. Given the long life of the trust fund in those years, the authorizing committees of the Congress would have had considerable leeway to make revisions in the program without requiring action by the financing committees, had not the low cash balance in the fund during those years restricted this freedom.

Now, however, trust fund revenues are growing very slowly and inflation is eroding the funds' purchasing power. 8/ This combined with the shorter life of the trust fund, limits the freedom of the authorizing committees as compared to earlier years, even though the cash balance is higher.

Over its first few years, the 1956 Highway Act called for authorizations well in excess of expected receipts. In addition, most of the unpaid authorizations from the pre-1957 highway program were assigned to the Highway Trust Fund for payment. As a result, the Congress suspended the Byrd Amendment (prohibiting deficits) for 1959 and 1960 only two years after it had become law. (See Table 1 for a summary of major highway financing changes since 1956.) A major argument for its suspension was the need to maintain highway spending during an economic recession. During 1960 and 1961, the trust fund exhausted its cash temporarily and was forced to borrow from the Treasury. By the end of 1961, however, the fund had a small, positive cash balance, and has never since shown a negative cash balance.

In 1959, the Congress took stronger action to improve the financial condition of the trust fund. The motor fuels tax was increased from three to four cents per gallon effective in 1960 and half of the 10 percent excise tax on new car sales was ordered to be paid into the trust fund. These changes were temporary, in part because the Congress was waiting for the results of a highway cost allocation study before making permanent tax changes. In order to avoid a projected imposition of the Byrd Amendment, the Congress also reduced the Interstate authorizations for 1961.

This reduction in the Interstate program was not enough, however, and in 1961 the Byrd Amendment took effect for the only time, restricting the apportionment of Interstate funds. (As originally written, the amendment restricted only Interstate funds. Later, in 1978, it was amended to apply equally to all apportioned funds.) In 1961, the Congress also made a number of significant permanent tax changes, including setting the motor fuel tax at four cents per gallon for the life of the trust fund and increasing the taxes on tires, tubes, tread rubber, and heavy vehicles. The truck excise tax was placed in the trust fund but the auto excise tax was removed. These changes increased trust fund revenues by almost 40 percent. The most recent change in trust fund finances occurred in 1965 (effective in 1966), requiring that the existing excise taxes on truck parts and lubricating oil be paid into the Highway Trust Fund instead of the general fund (increasing trust fund revenues by 3 percent). These changes, in particular those made in 1959 and 1961, solved the short-term financial problems of the fund. Steady growth in highway travel and relatively low inflation caused tax receipts to show a positive real growth rate through the early 1970s.

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8. Although highway construction costs have actually declined in the last two years, this trend is not expected to continue.

TABLE 1. MAJOR CHANGES IN FEDERAL LEGISLATION AFFECTING THE HIGHWAY TRUST FUND

Year	Target Date for Interstate Completion	Last Year of Full Authorization	Highway Trust Fund Expiration Date	Other Finance-Related Changes
1956	1969	1959	1972	HTF established with Byrd Amendment; increased taxes on motor fuel, tires, tread rubber, trucks, trailers, set new tax on heavy vehicles.
1958		1961		Byrd Amendment suspended for 1959 and 1960 to ensure full apportionment of authorizations.
1959				To avoid imposition of Byrd Amendment, Interstate authorizations for 1961 reduced; fuel tax increased to 4 cents, and one-half of auto excise tax paid to HTF--both tax changes were temporary.
1960		1963		
1961	1971			Apportionment restricted for 1961 under Byrd Amendment. Taxes increased on tires, tubes, tread rubber, heavy vehicles. Fuel tax increase made permanent, all of truck excise tax placed in HTF, and auto excise tax removed from HTF.
1962		1965		
1964		1967		

(Continued)

TABLE 1. (Continued)

Year	Target Date for Interstate Completion	Last Year of Full Authorization	Highway Trust Fund Expiration Date	Other Finance-Related Changes
1965				Existing taxes on truck parts and lubricating oil paid into HTF.
1966	1972	1969		
1968	1974	1971		First extension of Interstate authorizations beyond end of HTF.
1970	1976	1973	1977	First extension of HTF. Excise tax on light trucks repealed. a/
1973	1979	1976		Fiscal year 1974 started without authorizations for non-Interstate programs. Major decrease in Interstate authorizations--from $4 billion to $2.6 billion.
1976	1990	1978	1979	HTF extended.
1978		1982	1984	HTF extended.
1982		1983		Byrd Amendment forces partial authorizations for 1983 as part of stopgap bill.

NOTE: This is by no means a comprehensive list of federal highway legislation since 1956. It includes only those acts that changed the taxes paid into the Highway Trust Fund or which extended authorizations for the Interstate or major non-Interstate programs. Between 1978 and 1982, the Congress passed four other acts that modified the highway program.

a. Part of repeal of auto excise tax, not part of Highway Act.

Throughout the 1960s and 1970s, there were regular reauthorizations of both Interstate and non-Interstate programs (see Table 2). Typically, these were biennial highway bills that provided for two more years of non-Interstate funding. The current pattern appears to be for four-year authorizations as in the original bills proposed by the House and Senate Committees on Public Works in 1982.

Interstate authorizations have been extended beyond the original completion target of 1969 as the costs of the system have grown in response to inflation, changes in design standards, environmental regulations, and the inclusion of new projects in the system. By 1968, the completion date was advanced to 1974 and for the first time extended beyond the planned expiration date for the Highway Trust Fund.

Over the most recent decade, higher fuel prices and greatly improved fuel economy have contributed to holding the trend of tax receipts below the rate of inflation in highway construction.

OVERVIEW OF CHANGES IN HIGHWAY TRUST FUND FINANCE

There are several ways to measure the financial condition of the Highway Trust Fund. The cash balance is by far the most important, since this is the key factor that determines when and if the Byrd Amendment is to be invoked. A related measure is the number of additional years of receipts required to finance authorizations already made (usually called the overhang). Table 3 shows these measures and the information from which they are calculated, on an annual basis since the start of the trust fund. The change in the cash balance is simply tax receipts minus outlays. The number of years of additional revenues (overhang) is calculated by dividing the level of unfunded authorizations 9/ by the total trust fund revenues (including interest on the cash balance) expected for the next fiscal year. Unfunded authorizations are simply unpaid authorizations (total authorizations that have been apportioned or allocated less total outlays) minus the cash balance available to pay for them.

Since its start in 1957, the trust fund has passed through two phases: a period of tight financial strain during its first decade of existence characterized by tax increases in 1959 and 1961, and a later period during which outlays have lagged behind revenues and a sizable cash balance has built up in the fund. Recently, the Congress has started to draw down the cash balance. Since 1979, the balance has dropped by $3.6 billion to about $9.0 billion.

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9. Excluding out-year Interstate authorizations as well as funds that have lapsed or were not appropriated.

TABLE 2. HIGHWAY TRUST FUND AUTHORIZATIONS, RECEIPTS, OUTLAYS, AND BALANCES (In millions of dollars)

Fiscal Year	Authorizations a/ Interstate	Non-Interstate	Total	Trust Fund Receipts	Outlays	Cash Balance
1957	1,000	155	1,155 b/	1,482	966	516
1958	1,700	880	2,580	2,044	1,511	1,049
1959	2,200	1,305	3,505	2,088	2,613	523
1960	2,500	933	3,433	2,536	2,940	119
1961	1,800	955	2,755	2,799	2,619	299
1962	2,200	958	3,158	2,955	2,784	471
1963	2,400	955	3,355	3,293	3,017	747
1964	2,600	980	3,580	3,540	3,645	641
1965	2,700	1,005	3,705	3,670	4,026	285
1966	2,800	1,030	3,830	3,924	3,965	244
1967	3,000	1,050	4,050	4,455	3,974	725
1968	3,400	1,050	4,450	4,427	4,171	982
1969	3,800	1,050	4,850	4,690	4,151	1,521
1970	4,000	1,575	5,575	5,469	4,378	2,612
1971	4,000	1,653	5,653	5,725	4,685	3,652
1972	4,055	1,917	5,972	5,528	4,690	4,490
1973	4,055	2,064	6,119	5,912	4,811	5,591
1974	2,650	3,016	5,666	6,675	4,599	7,667
1975	3,050	3,546	6,596	6,774	4,844	9,597
1976	3,050	3,964	7,014	6,000	6,520	9,077
TQ	c/	c/	1,710	1,689	1,758	9,009
1977	3,250	3,699	6,949	7,302	6,147	10,164
1978	3,550	3,590	7,140	7,567	6,058	11,673
1979	3,600	4,833	8,433	8,046	7,155	12,564
1980	3,800	5,247	9,047	7,647	9,212	10,909
1981	3,900	5,623	9,523	7,434	9,174	9,259
1982	3,900	4,891	8,540	7,786	8,024	9,021
1983	---	---	---	7,893 d/	8,237 d/	8,677 d/

a. Interstate authorizations have typically been made available to the states (apportioned) one year or more in advance of the year in which they were authorized.

b. In addition, $1,105 million of unpaid authorizations from earlier years were also financed from the Highway Trust Fund.

c. For the Transition Quarter (July 1 to September 30, 1976) funds were not allocated between Interstate and non-Interstate programs.

d. Estimated.

TABLE 3. SUMMARY MEASURES OF FINANCIAL CONDITION OF HIGHWAY TRUST FUND (In millions of dollars)

Fiscal Year	Cash Balance at Start of Year	Receipts	Outlays	Change in Cash Balance	Cash Balance at End of Year	Unpaid Authorizations at End of Year	Unfunded Authorizations at End of Year	Years of Overhang
1957	0	1,482	966	516	516	4,702	4,186	2.05
1958	516	2,044	1,511	533	1,049	6,769	5,720	2.74
1959	1,049	2,087	2,613	(526)	523	7,562	7,039	2.78
1960	523	2,536	2,940	(404)	119	7,300	7,181	2.57
1961	119	2,799	2,619	180	299	7,764	7,465	2.53
1962	299	2,956	2,784	172	471	8,309	7,838	2.38
1963	471	3,293	3,017	276	747	8,866	8,119	2.29
1964	747	3,539	3,645	(106)	641	8,978	8,337	2.27
1965	641	3,670	4,026	(356)	285	8,775	8,490	2.16
1966	285	3,924	3,965	(41)	244	8,856	8,612	1.93
1967	244	4,455	3,974	481	725	9,332	8,607	1.94
1968	725	4,428	4,171	257	982	10,011	9,029	1.93
1969	982	4,690	4,151	539	1,521	11,435	9,914	1.81
1970	1,521	5,469	4,378	1,091	2,612	12,710	10,098	1.76

(Continued)

TABLE 3. (Continued)

Fiscal Year	Cash Balance at Start of Year	Receipts	Outlays	Change in Cash Balance	Cash Balance at End of Year	Unpaid Authorizations at End of Year	Unfunded Authorizations at End of Year	Years of Overhang
1971	2,612	5,725	4,685	1,040	3,652	13,950	10,298	1.86
1972	3,652	5,528	4,690	838	4,490	15,273	10,783	1.82
1973	4,490	5,912	4,811	1,101	5,591	10,462 a/	4,871 a/	0.73 a/
1974	5,591	6,675	4,599	2,076	7,667	17,783	10,116	1.49
1975	7,667	6,774	4,844	1,930	9,597	19,671	10,074	1.68
1976	9,597	6,000	6,520	(520)	9,077	N/A	N/A	N/A
T.Q.	9,077	1,690	1,758	(68)	9,009	16,098	7,089	0.97
1977	9,009	7,302	6,147	1,155	10,164	17,026	6,862	0.91
1978	10,164	7,567	6,058	1,509	11,673	18,035	6,362	0.79
1979	11,673	8,046	7,155	891	12,564	19,000	6,436	0.84
1980	12,564	7,647	9,212	(1,565)	10,909	18,876	7,967	1.07
1981	10,909	7,434	9,174	(1,740)	9,259	18,914	9,655	1.26
1982	9,259	7,786	8,024	(238)	9,021	19,258	10,237	1.30
1983 b/	9,021	7,893	8,237	(344)	8,677	16,602 c/	7,925 c/	1.00 c/

a. Anomalies caused by a change in the date when highway funds were apportioned.

b. Estimates.

c. Based on partial-year authorizations for non-Interstate programs as approved by the Congress in order to avoid imposition of the Byrd Amendment.

The First Decade

Over its first ten years, the cash balance in the trust fund averaged under $500 million. This "cash cushion" was quite modest, equal to only about two months of outlays. In large part, this was due to the relatively modest level of taxes paid into the trust fund starting in 1957 and to the relatively high level of authorizations contained in the early bills. The imbalance was partly intentional, since the highway bill originally assumed a deficit condition during most of the 1960s. The passage of the Byrd Amendment forced the Congress to alter this plan, and accordingly it increased highway taxes or switched existing taxes into the Highway Trust Fund in 1959, 1961, 1965. Also, over time, the number of exemptions from highway taxes has grown, reducing tax receipts by almost 10 percent. 10/

In these early years, the typical overhang was between two and three years. This is not surprising given the high level of authorizations for the Interstate system as the Congress attempted to complete it as quickly as possible. The low cash balance, in turn, meant that future revenues were expected to finance current highway authorizations.

The Period of a Growing Cash Balance

Developments were quite different in the 13-year period from 1967 through 1979. The cash balance grew in every year but one (1976) and totalled $12.6 billion by the end of 1979. Several factors appear to explain this shift. First, the Congress increased highway taxes in 1959 and 1961 and revenues were bolstered further by the steady growth in auto and truck traffic during the 1960s and early 1970s. Second, outlays were held down by Presidential impoundments in the early 1970s. Third, from 1973 until 1978 the trust fund extended for only one year beyond the last year of full authorization. This meant that, to avoid imposition of the Byrd Amendment, total apportionments could not exceed the cash balance by more than one year's worth of trust fund revenue--that is, the number of years of overhang had to be one or less. Given Congressional reluctance to raise highway taxes, a limitation on program growth became the only means to meet the Byrd Amendment targets. Further, as the cash balance in the fund has grown, so has the interest earned on the balance, increasing revenues even further. In fact, interest is now second only to the gasoline tax as a source of revenue for the fund.

Between 1967 and 1979, the cash balance averaged $6.2 billion, providing a cushion equal to 15 months of outlays--a sharp contrast with only two months of cushion in the first ten years of the fund. After 1973, the fund had more than enough cash on hand to pay the next year's outlays (of course tax receipts from future years were still needed to cover outlays

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10. For 1985, this reduction is estimated to total $760 million.

beyond the next year). Overhang dropped steadily to less than one year, compared with the more than two-year overhang during the first decade.

Most Recent Years

Since 1979, the cash balance in the trust fund has dropped from \$12.6 billion to \$9.0 billion and the number of years of overhang has increased from 0.8 to 1.3. (The current level of overhang is still less than the two years permitted by the Congress in 1978.) This reversal in the earlier trend appears to be caused by two factors. First, in 1978 the Congress increased the overlap between trust fund revenues and program authorizations by an additional year. This change accommodated an increase in authorizations that was reflected in higher outlays starting in 1979 and 1980. Second, revenues have stagnated because of greatly improved fuel efficiency and a generally weak economy.

EXISTING MECHANISMS FOR CONTROL

The Congress currently has three ways of controlling the level of highway spending once authorizations have been made. These are the Byrd Amendment, the Section 302 allocation procedure that is part of the Congressional budget process, and a statutory limit on the annual level of highway obligations. Each of these is discussed briefly below.

The Byrd Amendment

Part of the original legislation that established the Highway Trust Fund was added by Senator Byrd when the bill was under consideration by the Senate Finance Committee. This provision, known as the Byrd Amendment, includes the requirement that:

> If the Secretary of the Treasury determines that, after all other expenditures required to be made from the Trust Fund have been defrayed, the amounts which will be available in the Trust Fund (excluding repayable advances) will be insufficient to defray the expenditures which will be required as a result of the apportionment to the States of the amounts authorized to be appropriated from the Trust Fund for any fiscal year--
>
> (A) he shall so advise the Secretary of Transportation, and
>
> (B) he shall further advise the Secretary of Transportation as to the amount which, after all other expenditures required to be made from the Trust Fund have been defrayed, will be available in the Trust Fund (excluding repayable advances) to

> defray the expenditures required as a result of the apportionment to the States for such fiscal year. 11/

This limitation was added to the 1956 act to ensure that the Highway Trust Fund would not go into deficit. The act also contained a statement of policy that required the following balance between receipts and expenditures:

> It is hereby declared to be the policy of the Congress that if it hereafter appears--
>
> (1) that the total receipts of the Trust Fund (exclusive of advances under subsection (d)) will be less than the total expenditures from such Fund (exclusive of repayments of such advances); or
>
> (2) that the distribution of the tax burden among the various classes of persons using the Federal-aid highways, or otherwise deriving benefits from such highways, is not equitable, the Congress shall enact legislation in order to bring about a balance of total receipts and total expenditures, or such equitable distribution, as the case may be. 12/

Together, these two provisions have generally been interpreted to mean that highway funds cannot be apportioned to the states unless the revenues projected to be raised from highway user fees will be sufficient to cover them. As long as the Highway Trust Fund maintains a large cash balance, as it has in recent years, the Byrd Amendment is likely to be triggered only when the taxes feeding the Highway Trust Fund come within two years or so of expiring. At that point, if projected receipts appear inadequate to cover the additional apportionments, the apportionments must be scaled back to fit available revenues. For example, as of September 30, 1982, the Highway Trust Fund had $9.0 billion in cash and $19.3 billion in unpaid authorizations, leaving a difference of $10.3 billion in unfunded authorizations. To offset these unfunded authorizations, trust fund revenues from user fees and interest on the cash balance are projected to yield $7.8 billion in fiscal year 1983 and $9.2 billion in 1984, 13/ for a total of $17.0 billion more in revenue--$6.8 billion more than the $10.2 billion in unfunded authorizations. Thus, existing taxes could only fund up to

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11. Section 209(g)(2) of the Highway Revenue Act of 1956, including technical amendments made in 1978.

12. Section 209b of the Highway Revenue Act of 1956.

13. This includes funds from taxes that would be assessed in 1984 but not actually received by the Treasury until early 1985.

$6.8 billion in programs in 1983 without violating the Byrd Amendment. The Congress used most of this in October, when, it approved $5.1 in highway authorizations for 1983.

In brief, this means that because of the substantial cash balance now accumulated in the Highway Trust Fund, the Byrd Amendment will never be triggered (to force a reduction in apportionments) before the last two or three years for which highway user fees have been extended. As highway taxes approach their expiration date, the Byrd Amendment limits apportionments to fit within projected tax revenues. Although the Byrd Amendment generally plays its most critical role in the final year of apportionment, it nonetheless can have a constraining influence on the overall level of authorizations provided in a multiyear bill.

The influence of the Byrd Amendment thus depends on the period for which highway taxes have been extended. If taxes have one or two years to run, the Byrd Amendment strongly controls all apportionments and the authorizing committees have very little freedom to adjust authorizations; if taxes are to run for a long period of time (to the year 2000, for example), the Byrd Amendment will play a critical role only in the final year or two of apportionments. For the Byrd Amendment to be a controlling factor, the cash balance must be at a low level as it was during the early years of the fund.

In addition, the Byrd Amendment has been interpreted to require that the Highway Trust Fund not carry any short-run deficit, even if projected revenues will eventually cover outlays. The Congress voted to suspend the Byrd Amendment in 1959 and 1960 when it appeared that the trust fund would run a short-run deficit, even though this did not represent an inadequacy in the long-run ability of the fund to generate sufficient revenues to cover outlays. At that point, highway taxes had been enacted covering 16 years into the future, and there was no question that there would ultimately be enough revenue to pay all 13 years of apportionments. Because the Byrd Amendment was interpreted to exclude any deficit in the Highway Trust Fund, it was temporarily suspended. Since the fund now has a large cash balance, this interpretation should not apply over the next several years.

Budget Act Controls

Through the reconciliation process established under Section 302 of the Budget Impoundment and Control Act of 1974 the Public Works Committees, as well as all the other committees that create budget authority, may be directed by the Congress to reduce budget authority by specified amounts. In the case of the Public Works Committees such reductions are usually restricted to cuts in highways or airports or to increases in offsetting receipts.

Annual Obligation Ceilings

Obligation ceilings are another budgetary device for controlling highway spending, which the Congress has employed in every fiscal year since 1975. Under this device, the Congress sets a limit on the total amount that can be obligated in a year. (It will be recalled that each state can obligate apportioned funds over a multiyear period according to program provisions. Thus, in any particular fiscal year, a state might be able to obligate funds from several fiscal years.) When the Congress enacts an obligation ceiling, it is distributed roughtly proportionally among the states, resulting in a limit on the obligational authority permitted to each. Obligation ceilings were originally enacted as a means of preventing surges in obligations (and thus surges in outlays) such as occurred in the early 1970s when Presidential impoundments were released. In recent years, obligation ceilings have also been used to control the overall level of highway spending.

While they are still a crude method of limiting outlays, obligation ceilings offer more fine-tuned control than does the Byrd Amendment. Because obligations are typically made about one and one half years before cash outlays, controls on obligations have more direct and predictable impacts on cash requirements. By contrast, the Byrd Amendment restricts apportionments, which typically occur about two and one half years before outlays. Because it serves only the purpose for which it was created, namely guarding against deficits in the Highway Trust Fund, the Byrd Amendment is not as effective a method of budgetary control as are obligation ceilings.

While obligation ceilings are the only means by which the Congress can control existing highway authorizations short of a rescission, they conflict with authorizing legislation if enacted recurringly. In other words, while the apportionments made under authorizing legislation grant the states the authority to obligate certain sums, the total of these sums can be restricted by obligation ceilings.

FINANCIAL OPTIONS FOR THE COMING FOUR YEARS

Because highway revenues have been relatively static in recent years and will continue to be so under present legislation, the cost of keeping the nation's highways physically and functionally adequate will increasingly exceed the revenues available under existing law. Sooner or later the Congress will need to make more funds available. In the next few years, highway financing practices could move in either of two directions: additional highway user fees could be enacted to finance increased federal spending on highways, as proposed under H. R. 6211, or the cash balance in the Highway Trust Fund could be drawn upon as implied by S. 2579. While other courses of action are possible, these two reflect the most probable ways of coming to terms with current financial pressures. Accordingly, this paper concludes by sketching briefly how the current financial controls on

the Highway Trust Fund would operate in each of these situations. The discussion focuses on two illustrative authorization bills:

1. The $54 billion, four-year highway program reported by the House Public Works Committee, together with passage of the four-cent-per-gallon tax on motor fuels (or equivalent) proposed by Secretary of Transportation Drew Lewis. 14/

2. The Senate's $38 billion, four-year highway proposal, which increases highway program levels so that the balance of the Trust Fund would be drawn down to $4.1 billion at the end of 1986.

Numerous variations of the two approaches are possible.

The House Approach: Increased Program; Increased User Fees

The bill proposed by the House Committee on Public Works and Transportation in 1982 illustrates how the Highway Trust Fund would function if both taxes and spending were increased by roughly equal amounts. Under this proposal, annual authorizations from the Highway Trust Fund would grow from $12.58 billion in fiscal year 1983 to $14.58 billion in fiscal year 1986, representing an average increase of $5.0 billion relative to the 1982 authorization of $8.5 billion. The House bill also proposes an increase in highway user fees equivalent to an increase of 5 cents per gallon in the tax on motor fuels. Of this increase, 80 percent of the proceeds, or about $4.4 billion annually, would go to highway programs.

Allowing for normal delays in outlay rates (and assuming no limitation from obligation ceilings) the balance in the Highway Trust Fund would grow substantially--from $9.0 billion at the start of fiscal year 1982 to $14.4 billion at the end of fiscal year 1986. Over the same period, unpaid authorizations (apportioned funds not yet outlaid) would grow from $19.3 billion to $27.5 billion. This means that unpaid authorizations at the end of fiscal year 1986 would exceed the cash balance in the Highway Trust Fund by $13.1 billion--equivalent to about one year of revenue, assuming the higher taxes included in the House proposal (Table 4). Also, if the tax

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14. As proposed, this tax would raise the same amount of revenue as would a 5-cent-per-gallon increase in the tax on motor fuel. Of this, one cent per gallon would be reserved for capital grants for transit, leaving the equivalent of four cents per gallon as an increase in highway revenues. As this is written the exact form of the tax is unspecified. Rather, specific rates for motor fuels, truck excise taxes, and use of heavy trucks would be developed later in such a way that the taxes levied on each group of highway users would be equitable.

TABLE 4. THE HIGHWAY TRUST FUND UNDER THE HOUSE PROPOSAL (In millions of dollars)

Fiscal Year	Authorizations a/	Outlays b/	Trust Fund Receipts c/	Cash Balance End of Year	Unfunded Authorizations	Years of Cushion (cash balance divided by next year's outlays)	Overhang d/
1982	---	8,020	7,790	9,020	10,240	1.0	0.9
1983	12,580	8,920	12,180	12,280	10,640	1.1	0.8
1984	13,050	11,280	12,860	13,860	10,830	1.1	0.8
1985	13,650	12,340	12,960	14,480	11,520	1.1	0.9
1986	14,580	13,090	13,010	14,400	13,090 e/	1.0	1.0

NOTE: These calculations assume the program became effective October 1, 1982.

a. Total authorizations from the trust fund including programs already enacted into law.

b. Estimated by the Congressional Budget Office on the assumption that obligtions equal authorizations.

c. Based on Treasury forecast of tax receipts with a four-cent-per-gallon increase in the motor fuels tax and on the Congressional Budget Office estimate of interest rates.

d. Unfunded authorizations divided by next year's receipts.

e. The amount of revenues required after 1986.

writing committees limited the duration of future revenues to slightly more than one year, the authorizing committees would have very little freedom to increase authorizations through 1986 without concurrent action by the tax committees. At the end of fiscal year 1982, unfunded authorizations exceeded the cash balance by an amount equivalent to 1.3 years of revenue (at current tax rates). Thus, the degree to which highway finance depends upon future revenues would actually diminish somewhat under the House proposal, and the current two-year overhang could be reduced substantially.

Overall, the House proposal would keep the Highway Trust Fund in strong financial condition. While the cash balance would increase by over $5 billion, this essentially represents a continuation of the current situation. Indeed, allowing for continued inflation and increases in authorizations, the cash balance at the end of fiscal year 1986 would still be able to support about one year of program authorizations, just as at present. The Highway Trust Fund would remain in sound financial condition, maintain adequate cash reserves to cover possible contingencies, and, because of the large cash balance, be capable of sustaining itself for some time if the authorizations and tax rates enacted for fiscal year 1986 were continued thereafter.

The Senate Approach: Drawing Down the Cash Balance

During 1982, the Senate Committee on Environment and Public Works reported a bill that would have authorized modest increases in highway programs during the next four years, growing from $8.71 billion in fiscal year 1983 to $10.25 billion in 1986. Such a four-year program could be financed without an increase in highway taxes by drawing down the balance in the Highway Trust Fund. This approach would leave the Highway Trust Fund with a balance of about $4.6 billion at the end of 1986 (Table 5). Relative to current conditions, this would represent a substantial shift. Although the $4.6 billion balance would be sufficient to cover most contingencies, such as an error in predicting revenues or outlays, it would nonetheless be only half the current balance. Relative to outlays in 1986, the cash in the Highway Trust Fund could finance less than one half year of spending as against the current cushion of one year. The dependence upon future revenues would grow as well: by the end of fiscal year 1986 under this approach, the trust fund would need 2.2 years of receipts to pay off its unfunded authorizations, up from the current value of 1.3 years. Most important, the authorizations of the Senate bill could not be sustained very long without increasing taxes. If the 1986 authorizations of $10.25 billion continued in 1987 and after, the balance in the Highway Trust Fund would fall to around $2.5 billion at the end of 1987. By the end of 1988, the Congress would be forced to increase highway taxes or reduce the authorizations: the Highway Trust Fund would be out of cash. While no one has proposed such a future course of action, this example illustrates the risk inherent in drawing down the cash balance in the fund. This approach would be feasible for a few years but could not be sustained indefinitely.

TABLE 5. THE HIGHWAY TRUST FUND UNDER THE SENATE PROPOSAL (In millions of dollars)

Fiscal Year	Authorizations a/	Outlays b/	Trust Fund Receipts c/	Cash Balance End of Year	Unfunded Authorizations	Years of Cushion (cash balance divided by next year's outlays)	Overhang d/
1982	---	8,020	7,790	9,020	10,240	1.1	1.3
1983	8,710	8,260	7,820	8,580	11,130	1.0	1.4
1984	9,800	8,740	8,010	7,850	12,920	0.8	1.6
1985	9,800	9,410	7,950	6,390	14,770	0.7	1.9
1986	10,250	9,710	7,920	4,600	17,100 e/	0.5	2.2

NOTE: These calculations assume the program became effective October 1, 1983.

a. Total authorizations from the Highway Trust Fund including certain programs already enacted into law and programs (such as safety grants) under the jurisdiction of other committees.

b. Estimated by the Congressional Budget Office.

c. Based on Treasury forecast of tax receipts and on the Congressional Budget Office estimate of interest rates.

d. Unfunded authorizations divided by next year's receipts.

e. The amount of revenues required after 1986.

Conclusion

Increased highway authorizations must be paid for, sooner or later, by increased highway user taxes. If taxes and outlays are increased by roughly equal amounts, the Highway Trust Fund will remain financially sound. An alternative would be to increase authorizations without increasing taxes immediately, by drawing down the cash balance. While such an approach is feasible for a few years, it reduces the financial security of the Highway Trust Fund and ultimately forces the Congress to increase taxes or cut programs in some future year when economic conditions and highway needs are less certain than at present.