Miles to Go

A Report on Maine's Highway Fund and Its Future

Maine Better Transportation Association

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Several times each decade, the Legislature debates increasing fuel taxes and fees to make up for chronic shortfalls in the Highway Fund — the principal support of the Maine Department of Transportation's highway, bridge and local road programs.

Most discussion has focused on restoring and stabilizing highway funding at previous levels, but it should be recognized that there is significant public support for expanding and upgrading the road network. Voters approve the biennial transportation bond issues by large margins, often 2-1 or more. In fact, bond issues including highway and bridge improvements regularly outpace all other referendum questions, even surpassing borrowing for such popular causes as education, public lands and environmental protection. Building projects such as a northern route from I-95 to the St. John Valley will not be feasible without identifying significant new sources of funding, over and above what's needed to keep existing programs running. In fact, there are projects in all parts of Maine that have been extensively discussed and debated — from the Gorham bypass to a new Calais bridge — that will not be built anytime soon unless new revenue sources are identified.

In recent years, funding debates have become more contentious, as concern about Maine's tax burden becomes greater among both lawmakers and the public. The tax burden is not high because of Maine's tax rates, which are about average, but because of the state's lower than average personal income. Calls for tax reform and an overhaul of the state system, have become increasingly insistent. Several prominent reports have linked an improved state economy to a more modern and efficient tax system. Proposals to improve the health of the Highway Fund should be seen in the broader context of a potential overhaul of the entire state revenue system.

The rates of the major state taxes — income and sales — have not changed much in recent years, but the gasoline and diesel taxes have been increased no less than four times since 1988. When MDOT proposed a *five-cent increase in 1999, the first change since 1991, it faced serious skepticism from lawmakers, who wondered — at a time of record-breaking revenues from the broad-based taxes — how the Highway Fund could be falling short.*

It was a good question, but there is a good answer. Except for years in which fuel tax rates were increased, revenue from these sources has barely grown at all — just 1 percent, well below even the modest rates of inflation since the 1980s. First observed during the 1970s amid the OPEC price hikes for Middle Eastern petroleum, the problem of under-performing revenues from motor vehicle taxes and fees has now become chronic.

Everyone is in the same boat. Nearly every state has struggled with its motor fuel taxes, and the federal government has also experienced serious shortfalls. In the current budget cycle, the Bush administration proposed a 25 percent reduction in apportionments to the state from the Federal Highway Trust Fund, based on revenues it determined to have fallen well below projections. Though Congress will apparently restore some funding, most states, including Maine, may receive substantially less in 2003 than they did this year.

This report analyzes the basic problem — why the mismatch between highway needs and available revenue has occurred, and why it persists. It also proposes solutions, both short and long-term, that can change the dreary picture of frequent budget battles, and put the Highway Fund on a more stable course. Since a key goal of tax reform should be a better match between needs and resources, it is important that transportation funding — which affects every county and every town — be on the reform agenda.

This study is intended for legislators, candidates, and state and local officials who want to know more about their available choices, and for members of the public seeking to understand this most basic of public services, in which governments have played the key role since the founding of the nation.

The Problem

Maine's fuel taxes function differently than the other major state and local taxes because they have been based not on a certain percentage of income, sales or property value, but on a flat fee on each gallon of gasoline or diesel fuel sold. While the personal income tax, the general sales tax, and the automobile excise tax all rise automatically with inflation, fuel taxes have not.

In the early decades of automobile travel, this didn't seem to matter. Steadily increasing rates of car ownership and of vehicle miles traveled, combined with the gas-guzzling cars of yore, contributed to robust highway fund revenues. The original interstate highway system was financed with a 5-cent federal gas tax initiated in 1956; before that, only states taxed the sale of gasoline.

Then, in the 1970s, everything changed. The two oil price shocks in that decade sent fuel tax revenues plunging, and the much higher pump prices set in motion another great change — fuel-efficient vehicles. Not only were the flat fees levied on sales falling farther and farther behind the rate of inflation, but the rate of increase in fuel consumption slowed markedly as well. These two factors — no automatic adjustment for inflation, and fuel consumption rising far more slowly than vehicle miles traveled — have created a shortfall in highway budgets everywhere.

In Maine, the effects were seen most clearly in the reconstruction program, which came virtually to a halt. Despite a long-standing legislative mandate to make improved highways a priority, it is only during the last four years that reconstruction efforts have returned to a brisk pace.

Even though the fuel efficiency boom seems to have stalled momentarily, it may only be a matter of time before state and federal highway funds face further difficulties. Mileage standards may be raised and super-efficient vehicles like gas-electric hybrids are beginning to catch on with consumers. These are the trends that cause highway officials to worry about the future and make legislators nervous when their constituents talk about their desire for better roads without, of course, any eagerness to pay higher taxes to achieve this goal.

The difficulties facing the Highway Fund are apparent when fuel taxes are compared to the other major revenue lines in the state budget.

Motor fuel tax revenue increased by only 41 percent over 12 years from fiscal 1990 to 2001, the two economic peaks of recent decades — and, in fact, the actual increase was even less. A fiscal 1999 accounting change had the effect of boosting apparent revenues by $15 million. Without that adjustment, fuel taxes increased only 29 percent — an amount less than inflation, which averaged about 3 percent a year. In real terms, fuel tax revenues actually declined over this period.

It is even more significant that this stagnation occurred despite two separate increases in the fuel tax rates, totaling 5 cents per gallon. The second increase came only after a bitter battle at the Legislature.

Yet it's clear that the underlying annual growth in fuel tax revenue, without such increases, is barely detectable even in nominal terms. To put it bluntly, without periodic increases the fuel taxes do not pull their weight, and even with previous legislated increases they have failed to keep pace with inflation or with infrastructure needs.

The Highway Fund

Like many states, Maine has chosen to create a dedicated fund to finance construction and maintenance of major roads and bridges. In the 1920s, not long after adoption of a local excise tax on motor vehicles (imposed in lieu of a personal property tax), Maine began allocating all funding from motor fuel taxes to the Highway Fund. It was part of a nationwide effort to create better roads in recognition that the automobile was no longer a luxury, but rapidly becoming a necessity.

At about the same time, the first federal route system was devised, including such famous roads as Routes 1 and 2, which begin (or end) in Maine. Until the advent of the Interstate Highway System in 1956, however, all gasoline and excise taxes were imposed by state and local governments, and all road construction was carried out by them.

The dedication of fuel taxes plus "fees, excises and license taxes relating to registration, operation and use of vehicles on public highways" is contained in Article IX, Section 19, of the Maine Constitution. The Highway Fund is by far the largest dedicated fund employed by state government, and it will amount to about $241 million in the current fiscal year.

Maine imposes a tax of 22 cents per gallon of gasoline and 23 cents for diesel fuel, included in the pump price. These taxes raise about two-thirds of Highway Fund revenue, with the remainder coming from registration and title fees, plus a small amount from fines for overweight truck infractions.

Actual use of the fund goes beyond the planning, design, construction and maintenance of highways and bridges, however. Some 60 percent of the State Police budget is funded with Highway Fund dollars, as is administration of the Secretary of State's Motor Vehicle Division. At various points the fund has also supported a portion of district attorney salaries, agricultural inspections and clean air programs.

The Highway Fund, designated primarily for the Department of Transportation, is administratively and financially separate from the Maine Turnpike Authority, which operates a 106-mile toll road. The two agencies cooperate on cost-sharing, however, and also are working together on joint projects, such as new turnpike interchanges.

By contrast, other state revenues, pegged to the growth in the overall economy, have increased much more rapidly. From 1990-2001, individual income tax revenues increased by 123 percent, corporate income tax revenues rose 77 percent and sales tax revenues 78 percent. While tax reductions may be appropriate elsewhere, when it comes to highway funding the clear need is to buttress and fortify revenues.

When considering the future of fuel taxes and other Highway Fund revenues, it is important to recognize that these are true user fees, assessed on a particular group (motor vehicle users), and whose sole purpose is to raise revenue for government programs (highways and bridges) benefiting them. Taxpayers generally seem more comfortable with initiatives, like the road and bridge program, where there is a clear relation between revenues and spending, and a clearly identified purpose — improving the transportation network and the economic lifeline it represents. But without sufficient revenues from fuel taxes and vehicle fees, it is impossible to expand or even maintain MDOT programs. In recent years, the continuing shortfalls have prompted the Legislature to make several transfers from the General Fund to keep the Highway Fund solvent — transfers that will be more difficult to continue now that General Fund surpluses have evaporated.

There is no doubt that this long-term erosion of MDOT's ability to gain a reliable revenue stream has forced significant cutbacks in programs, beginning in the 1970s. The amount of road mileage being reconstructed each year plunged rapidly, until it reached just 17 miles a year in the mid 1990s. This meant it would take 133 years to bring all state roads up to standard. During the King administration, the state has expanded its reconstruction efforts, mostly by using its budget more efficiently, but the backlog has only been reduced to the point where it will now take 60 years to complete the cycle.

State Highway Reconstruction Backlog

	1999*	2001	2003	% Change, 99-03
Major Arterials	141 miles	116	95	-32.6
Minor Arterials	290	268	216	-25.5
Major Collectors	2,071	1,922	1,797	-13.2
Minor Collectors	1,701	1,686	1,656	-2.6
Total	4,203	3,992	3,764 **	-10.4

Notes:

*Backlog mileage for 1995 was 4,352 and for 1997, 4,306 (not available by highway category).

**Total state mileage is about 8,650. About 50 percent had been reconstructed in 1995, and 57 percent will be reconstructed by 2003.

Source: Maine DOT

Even within the King administration, the pace has varied. At the rate of construction from 1995-99, it would take 116 years to finish the job; during the second term, from 1999-2003, just 34 years. But maintaining the pace of reconstruction during economic downturns has always been a problem.

The experience of the gasoline tax, which provides two-thirds of the revenues for the Highway Fund, contrasts sharply with the other major tax which funds much local road maintenance and construction, the motor vehicle excise tax. The initial excise tax rate of 24 mils ($24 per $1,000 of the purchase price) is set by the state, but revenues go entirely to the municipalities in which the vehicle owners reside.

A new rumble strip on Route 9 near Bangor. Bringing the backlog of Maine roads and bridges up to modern safety standards should be a priority in future funding decisions. MDOT photo

While fuel taxes increased just 29 percent over 12 years, the excise tax recorded a healthy 78 percent increase over the same period — comparable to the sales tax. It raises substantial amounts of money — $154.8 million in 2000, compared with $179.8 million raised by state fuel taxes.

The Legislature took account of the persistent weakness in fuel tax revenues in April 2002 when it enacted legislation that indexes the tax to the Consumer Price Index (CPI) — the average rate of inflation — retroactive to 1999 when the most recent increase took effect. The vote was provisional — MDOT is required to submit legislation next year, and every two years following, to repeal the increase, so the new Legislature also will have to vote on this provision — meaning that the increase isn't automatic, nor will it be in the future. The Legislature will have to vote each time MDOT submits legislation. If indexing does take effect on July 1, 2003, as now specified, both the gasoline tax rate of 22 cents and the diesel rate of 23 cents will increase an estimated 2.6 cents. The increase is expected to fill about half of a projected $86 million shortfall in the fiscal 2004-2005 biennium; it is anticipated the rest would be covered by bonding. MDOT estimates that in a typical year, an indexing increase will cost the average Maine driver about $5 over the previous year.

Maine Gasoline Tax Revenues
1988-2002 *(in millions)*

Year	Revenue	% Increase	Tax Changes
1988	$82.3	———	
1989	95.4	15.9	2-cent increase
1990	101.4	6.3	
1991	98.8	-2.6	
1992	109.5	10.8	2-cent increase
1993	112.4	2.6	
1994	114.8	2.1	
1995	115.7	0.8	
1996	117.7	1.7	
1997	118.7	0.8	
1998	121.5	2.4	
1999	133.6	10.0	Accounting change adds $10 million
2000	143.1	7.1	3-cent increase
2001	145.1	1.4	
2002	148.2*	2.1	

Source: Maine Revenue Services
Note: All figures are for state fiscal years, July-June.
*Estimated.

It is vital that the Legislature retain indexing or enact a comparable source of funding. This legislation will create no net increase in the transportation budget, but will prevent at least part of the continued erosion in funding that has created so much deferred maintenance, and delayed needed reconstruction projects.

In many areas where both state and federal programs exist — for health care, education, welfare and environmental protection — federal spending can make up for deficiencies in state revenues. This is particularly important for a state like Maine, which has personal incomes substantially below the national average, and where funding formulas for programs like Medicaid reflect these realities.

Unfortunately, this is not true for highway funding. Even when measured per capita, Maine does not do well when the federal pie is divided, and when assessed against the actual road mileage that must be maintained, it does worse. New Hampshire receives twice as much money as Maine in federal aid per federal aid mile, and Vermont receives 50 percent more. Rhode Island, with a smaller population and a road system a mere fraction of Maine's, also receives more federal money than Maine.

So it was understandable that state officials were alarmed when the Bush administration unveiled a budget proposal this spring which would have effectively reduced highway apportionments by 25 percent from levels previously agreed to under the current six-year transportation agreement called TEA-21 (Transportation Equity Act), which covers fiscal years 1998-2003. Maine, which had benefited from a relatively higher share of federal funding under the previous law, known as ISTEA (Intermodal Surface Transportation Efficiency Act), saw its share reduced significantly, particularly in relation to its contributions to the Federal Highway Trust Fund. The abrupt reduction in federal aid represents a double whammy for a small state that is already getting substantially less assistance than many other states. Maine now sends more federal fuel tax dollars to Washington than it gets in return.

It now appears that Congress will restore much of the funding which would have been lost under the current administration budget proposal, but even under the most favorable original budget resolution, it would receive only $134 million next year, about $10 million less than in the current budget. The Senate recently voted to restore funding at last year's level, but the outcome remains uncertain. The exact amount of funding may not be known even when the fiscal year begins in October, since Congress continues to debate many departmental appropriations bills.

Congress will write a new six-year federal authorization bill next year, so it is important that both congressional candidates and state officials focus on creating a more equitable formula for Maine. The state traditionally has representation on both House and Senate transportation committees, and a strong push from MDOT to dramatize Maine's needs could be an important ingredient in success.

The fiscal problems facing the Highway Fund are large and seemingly daunting. But there are solutions that are both financially sound and acceptable to the public.

Federal Funding

The Federal Highway Trust Fund was created in 1955 as part of the Interstate Highway Act. It provided the first major federal funding of highway construction in the U.S., and built much of the 46,000-mile interstate system that has transformed life, development and travel over the past five decades. Initially, the interstate system was financed with a 5-cent-per-gallon federal gasoline tax; it now stands at 18.4 cents, and is added to the various state and local levies. In Maine, just over 40 cents of the price of a gallon of gasoline represents state and federal taxes.

Money from the Highway Trust Fund is apportioned each year by Congress, reflecting each state's role in the 256,000-mile National Highway System including all interstates plus designated arterial and collector roads. In Maine, these include most of Route 1 and Route 2, Route 9, and various other state-maintained roads. In addition to the specifics of the funding formulas, each state is granted a minimum guarantee of annual distributions.

Neither funding component is particularly advantageous to Maine. Because Maine is considered one of the "small states" lumped together under the minimum guarantee, it is granted only marginally more money than its much smaller neighbors, New Hampshire and Vermont. Because many of its interstate miles are lightly traveled, its funding per mile is low — even though maintenance costs for those miles are relatively high. Despite having the second longest interstate mileage in New England, Maine ranks fourth in New England in federal highway funding, behind Massachusetts, Connecticut and Rhode Island, and just ahead of New Hampshire and Vermont.

Each federal highway authorization bill contains different formula adjustments, and, when combined with discretionary funding for special projects, Maine received about $1.06 for every $1 in gasoline tax money sent to Washington under the ISTEA legislation which ran from 1992-1997. Under its successor, TEA-21, covering 1998-2003, Maine gets substantially less — about 92 cents on the dollar, making it a "donor" state to the Highway Trust Fund.

Next year, a new six-year authorization bill will be created by House and Senate transportation committees and enacted into law by Congress.

The Solution

There are five broad areas which can contribute to a better match between the Highway Fund and the programs it finances: greater efficiency, state taxes and fees, realignment of budget responsibilities, federal funding, and alternative revenue sources.

Efficiency

One way of meeting the funding shortfall is to make MDOT's dollars work harder. The department has already made significant progress.

The department has roughly the same number of employees as it had 20 years ago — about 2,400 — yet it is responsible for far more projects covering a greater number of miles. Although state government is sometimes criticized for the size of its bureaucracy, MDOT has been able to do more without increasing the size of its workforce.

There's evidence that its efforts are resulting in measurable improvements to the road system. A respected ongoing study from the University of North Carolina last year ranked Maine 15th among the 50 states in ensuring adequate roads and bridges — up one place from its 1999 ranking.

Since 1992, the key division, the Bureau of Project Development, has declined from 509 to 380 employees, but the number of projects undertaken has risen from 341 to 538, with the mileage involved increasing from 323 to 622. Total value of the annual project list has gone from $177 million to $426 million. These are some of the benefits of running a tight ship, though it is unrealistic to expect that such efficiency gains can continue to make up for funding shortfalls.

Some specific techniques have helped the department respond to increasing financial pressures.

- A "salt priority" program for winter maintenance has greatly reduced the use of sand on most state roads while improving winter driving conditions. This has created substantial savings, both through lower material costs and a reduction in spring cleanup efforts.
- MDOT has saved money by paying for new heavy equipment in cash rather than by borrowing. A new lease-purchase system for light equipment has so far saved about $1 million.
- A more ambitious financial overhaul aims to reduce the Highway Fund's debt ratio to the same level as the General Fund. This will take some time; by the early 1990s, MDOT was using nearly 13 percent of its annual revenues for debt service; the General Fund uses less than 5 percent. Largely because the Legislature approved General Fund support for the highway portion of two recent transportation bond issues, as well as its traditional backing for non-road projects, the debt ratio will decline to 10.5 percent for fiscal 2002, and 9.1 percent for fiscal 2003. Further reductions will depend on continued General Fund support or a reduction in biennial borrowing.
- Other initiatives will have longer-range payouts. Road access management will prevent excessive numbers of driveways from reducing driving speeds on major high-

ways, thus relieving the need and demand for new construction.

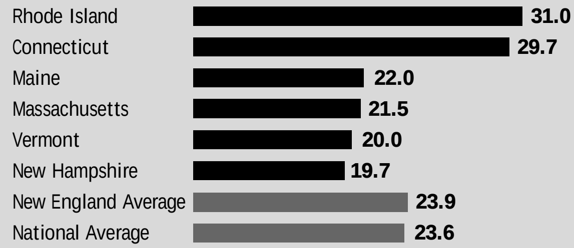
- A new fine system for overweight trucks substantially increases penalties for heavily overloaded vehicles and should increase the useful life of pavement markedly, especially on major bridges, which are exceedingly costly to replace.

Design-build, used for the Sagadahoc Bridge, reduces inflation cost allowances and speeds project completion. MDOT photo

- The design-build method for new road and bridge projects speeds completion. First used for the Sagadahoc Bridge over the Kennebec River, it will also be employed on the new I-295 connector in Portland and considered for a variety of other new projects. While direct savings is not the primary goal, design-build can cut months and even years off project development time, increasing the state's ability to plan and carry out more work. By reducing time to project completion, design-build decreases cost allowances for inflation and delivers quicker benefits to drivers.
- General Fund bond support for highway projects has substantially reduced interest costs, saving a total of $20 million in the next biennial budget.
- Finally, MDOT is creating a stronger partnership with the municipal public works departments that frequently assist with and sometimes carry out state projects. MDOT has turned over management of urban projects to cities with adequate management capabilities. A new bridge agreement — the state takes on spans over 20 feet, municipalities the shorter bridges — simplifies and rationalizes a previously confusing program. And a new grant program for long-neglected minor collector roads, with towns and cities covering one-third of the capital cost, has significantly increased annual reconstruction mileage for smaller state-owned roads.

Even the best efforts to improve efficiency will not make up for funding shortfalls on the scale of those experienced by the Highway Fund, however. The state must consider new or enhanced taxes and fees as part of the answer.

State Gasoline Taxes (cents per gallon)



Source: American Petroleum Institute, July 2002
Note: Includes local taxes and related fees.

State taxes and fees

When the Legislature voted to index the gasoline and diesel taxes to inflation, it took one step toward a long-term funding solution. If made effective next year, Maine will join at least 13 other states that have chosen to adopt variable fuel tax rates.

Indexing has the key advantage of converting a flat fee on the sale of each gallon of fuel — a commodity whose use has increased much more slowly than vehicle miles traveled — to allow an annual inflation adjustment. While some observers have dubbed indexing an "automatic tax increase," it is more properly seen as putting the Highway Fund's main revenue source on an equal footing to the income, sales and automobile excise taxes, all of which have de facto inflation adjustments. Gasoline tax indexing simply creates a similar mechanism. The Legislature has to approve each increase, so it is far from "automatic."

It is not yet known whether the CPI will be an accurate indicator of costs for highway construction and maintenance — those prices sometimes rise more rapidly, and at other times more slowly than overall inflation — but it is at least a start toward a long-range plan. Each one-cent increase in fuel taxes produces about $8 million in new revenue.

Fuel tax indexing is not the only means of providing more consistent Highway Fund revenues. The Legislature also considered diverting 25 percent of the sales tax revenue derived from motor vehicle sales (not to be confused with the local excise tax) from the General Fund to the Highway Fund. But its appeal diminished without a continuing General Fund surplus. Ultimately, the General Fund allocation plan did not receive sufficient support.

Unlike the Federal Highway Trust Fund, which is almost entirely supported by fuel taxes, the Maine Highway Fund gets substantial revenue from motor vehicle registration and title fees; the title fee was increased from $15 to $23 in 2001. Two-thirds of Highway Fund revenue comes from fuel taxes and about 30 percent from fees.

State Vehicle Registration Fees

Connecticut	$70.00	Vermont	42.00
New Hampshire	31.20	Rhode Island	30.00
Massachusetts	30.00	Maine	25.00
New England Average	38.03	National Average	34.75

Source: Federal Highway Administration, July 2002

To maintain those proportions, the Legislature may need to increase fees that also do not have any inflation adjustment. The vehicle registration fee, currently $25, is the most likely target. It is now substantially below the national average of $34.75, and even further below the New England average of $38.03.

The Excise Tax

The municipal excise tax on motor vehicles, which has been levied in Maine since 1929, was the subject of a study commission chaired by Secretary of State Dan Gwadosky that reported to the Legislature in January 2002. One key observation of the report is that this tax is not well understood by the public. Many are unaware that it is a municipal, not a state tax, and that its revenue helps support local road programs.

The confusion may stem in part because the tax rate is set and administered entirely by the state; nationally, most vehicle excise taxes have a state component and a local option portion going to municipalities. The combination of a state-controlled tax that only benefits municipalities is unusual, but in Maine the vehicle excise tax has a long pedigree. It's far older than the sales tax, enacted in 1951, and the income tax, adopted in 1969. It is a significant source of revenue, providing about 10 percent of the tax money raised by towns and cities.

The principal recommendation of the report was that the top excise tax rate of 2.4 percent be gradually reduced to the national median of 1.8 percent. In Maine, the excise rates decline gradually over six years, reflecting the decreased value of the car, until they reach a minimum rate of 0.4 percent. The Legislature took no action on this recommendation.

The commission's figures also show that while Maine (with Arizona) does have the highest uniform rate, other states have higher actual rates once local option formulas are added in. In Connecticut, for instance, the actual excise rate can be as high as 5.2 percent, and in Rhode Island, 5.4 percent.

The Maine excise tax rate has changed little in its 73 years. The only adjustment came in 1969, when the original 23 mil rate was increased to 24 mils.

Realignment

Another way of lightening the burden on the Highway Fund is to realign the responsibilities for its various programs, some of them not strictly related to basic MDOT functions.

One of them is particularly large — the State Police budget. This has long been part of the Highway Fund, under the theory that State Police spend much of their time patrolling highways and enforcing motor vehicle laws. Troop G, for instance, which patrols the Maine Turnpike, is entirely paid for through the Maine Turnpike Authority budget.

The proportion of the police budget paid by the Highway Fund has varied widely, and is not fixed in law but is a matter for biennial negotiation at the Legislature's Appropriations Committee. During the state fiscal crisis of 1991-92, the Highway Fund was assessed a huge and clearly unsustainable portion of State Police costs, at one point paying 87 percent. Since fiscal 1997, the Highway Fund charge has been gradually reduced to the historic 60 percent level, where it is currently. This 60/40 split with the General Fund is supposed to represent an assessment based on actual State Police duties.

The matter remains subject to debate however, with leaders of both political parties advocating full General Fund responsibility, and some members of the Transportation Committee have proposed such a move.

Policing is certainly a significant item in the Highway budget; even at the 60 percent level, it contributes $23 million in the current fiscal year. State Police costs took a significant jump of some $4 million in 2000 due to a new collective bargaining agreement, plus increases to make State Police pay comparable to other law enforcement officers. As State Police are called upon for more sophisticated crime investigations and regional policing, the Legislature should reconsider whether the Highway Fund is still the appropriate source for the bulk of this funding. Should the state's best-trained and best-equipped law enforcement force concentrate on writing traffic tickets? Or should it be engaged in higher-priority criminal law enforcement?

A budget realignment that adds to the Highway Fund's burdens was imposed through a recent law that allocates more gasoline tax revenue to state off-road vehicle recreation programs, for boating, snowmobiles and all-terrain vehicles (ATVs). A commission estimated that these users contribute about $4 million to gasoline tax revenues, but are allocated only $3 million for state programs. The new law will gradually increase that portion to the total of estimated receipts. While not a major drain on the Highway Fund, these diversions must be treated with caution, since many gasoline-burning devices, from lawnmowers to chainsaws, also produce gasoline tax revenues. The basic purpose of the tax is to finance roads, not to fund other programs, however desirable, that are more logically funded by other revenues.

Another important relationship is that between Highway Fund and General Fund spending. While there is a constitutional dedication of fuel taxes to the Highway Fund, in practice the wall between the two funds is permeable, if not porous.

At various points, there has been considerable "borrowing" between the two funds, and different calculations for functions (such as the State Police) are open to interpretation. In the 1980s, the Legislature made various small transfers between the two funds to meet short-term budget exigencies. By the early 1990s, the "borrowings" flowed heavily away from the Highway Fund and toward the General Fund. While "raid" might be too strong a term, the Governor and Legislature, facing a $1 billion General Fund shortfall, repeatedly diverted Highway Fund money. It ended with the state "selling" a section of I-95 to the Turnpike Authority for $16 million.

By the mid-1990s, cash began flowing in the opposite direction, as fuel taxes continued to under-perform. Since then, the General Fund has backed the highway portions of two transportation bond issues, including the most recent one approved by voters in 2001. The second bond issue resulted in effective savings of $8 million in interest costs for the Highway Fund. In fiscal year 1998, a General Fund surplus permitted $12 million in direct transfers to the Highway Fund. Another $5.7 million was transferred in 2000, and another $20 million in 2001. By the most recent Legislative session, however, the General Fund surplus had disappeared, and it's unlikely to reappear any time soon. The Highway Fund is effectively on its own again.

From fiscal 1988 to 2001, there have been no fewer than 41 separate transfers, with the General Fund transferring $64.5 million to the Highway Fund, and the Highway Fund returning $52.9 million. These transfers do raise questions about the consistency of state budgeting, and about the integrity of the dedicated Highway Fund. Transfers on this scale should be avoided in the future, and the needs of each fund addressed directly.

Meanwhile, the frequency and size of fund transfers have led to suggestions that there no longer needs to be a constitutional dedication of revenue to the Highway Fund.

The Urban-Rural Improvement Program has clarified the role the state and municipalities have for the maintenance of local roads. MDOT photo

Since the public, however, does seem to expect that the taxes they pay at the pump will in fact support the roads they drive on, this remains a valuable distinction.

The state and municipal governments have long cooperated to build and maintain Maine's 22,600 miles of designated highways. There are some 8,650 miles of state roads and 13,950 miles of local roads. The state has historically had responsibility for all arterial roads, and both major and minor collectors. This is relatively unusual, but reflects the absence of any county road program, which in many states maintains much of the minor collector system.

In recent years, the state and municipalities have made changes to increase efficiency and provide clear responsibilities for different kinds of roads and bridges. The Urban-Rural Improvement Program (URIP) and other local road funding in MDOT's budget highlight this collaboration. Recently, MDOT and municipalities rationalized the bridge program, by defining which spans are town or state responsibilities. The minor collector program, where towns share the cost of improving smaller state roads, also has succeeded in increasing the amount of reconstruction in this category.

Many towns already do winter maintenance on minor collector roads, so continued cooperation between state and local authorities is important to maintaining and improving the statewide network. As always, the match between funding and system needs should be an important part of the discussion.

The experience of the URIP program has shown that municipalities can sometimes carry out small projects more cost-effectively and efficiently, while MDOT helps ensure that consistent reconstruction standards are maintained.

The deficiencies in existing state roads are long-standing. Only 58 percent of the system has been reconstructed or is scheduled for updating. The least-likely candidates for state reconstruction projects are the minor collectors; progress has been much more rapid on the arterial system than the collector system. Of the 3,765 miles of the state system now rated as deficient, 1,656 miles, or 44 percent, are minor collectors.

Attacking this part of the backlog will take persistence and innovation. Local initiatives plus expanded state assistance may be the best means to get the job done.

Maine's Federal Highway Funding *(1992-2002)*

Year	Funding	% Change
1992	97.1	—-
1993	108.3	11.5
1994	117.6	8.6
1995	123.3	4.8
1996	124.0	0.6
1997	130.4	5.2
1998	116.5*	-10.7
1999	135.1	16.0
2000	139.9	3.6
2001	147.8	5.6
2002	151.5**	2.5

Source: Maine DOT
Notes: All figures are for federal fiscal years (Oct.-Sept.)
*1992-1997 represents ISTEA funding; 1998-2003 TEA-21.
**Estimated.

Federal Funding

Few sources of revenue are as crucial to adequate road programs, or as difficult to decipher, as federal support for state DOTs. While the federal gasoline tax itself is easy to understand — we send 18.4 cents per gallon to Washington every time we fill the tank — the distribution of it is not.

Federal aid is based on a complex set of categories that cover such items as interstate highway maintenance, national highway system funding, congestion mitigation, air quality, and bridge replacement and rehabilitation. In theory, these are all separate programs in which states must meet strict criteria; in practice, use of federal funds is fairly flexible, given prior Federal Highway Administration approval. In addition, receipts from gasoline taxes are added into the mix. Only a few of these formulas benefit Maine. Its relatively small population works against it, and though its long interstate stretches would seem to be a significant advantage, they, in fact, are not.

That's because the historical bottom line of federal funding occurs with a minimum guarantee for each state. Maine's is 0.5263 percent, meaning that Maine is guaranteed just 1/2 percent of all the money distributed nationally — scarcely higher than the guarantees offered to Vermont and New Hampshire, much smaller states with proportionately smaller federal networks.

Maine is laboring under a number of inherent and unique disadvantages. It is the largest state in New England and has a harsh climate that creates higher maintenance costs, summer and winter. It also has the lowest median income in New England. Yet the process of allocating funds is an inherently political process that can work for the state as well as against it. This suggests why, when the late Sen. John Chafee headed the Environment and Public Works Committee, Rhode Island managed to garner a larger share of the pie than Maine.

With the six-year reauthorization of federal highway funding coming up in 2003, Maine has another chance. With representation on the key committees, a strong case for a higher guarantee can be made — probably in concert with other states that can convincingly demonstrate underfunding.

A second opportunity comes in the form of categorical or "high priority" grants — funding for specific projects. The granddaddy of all earmarks is the Boston Central Artery project, or "Big Dig," which has absorbed some $9 billion in federal funding to date and made Massachusetts a leading recipient of federal dollars for many years running.

While no one is suggesting a Maine "Big Dig," the state could be more ambitious in seeking funding for big projects. The annual "wish list" compiled by MDOT and usually agreed to by the entire congressional delegation, is often a modest affair. While Maine is unlikely to obtain full federal funding for a project like a new road north from I-95 to the St. John Valley, or an east-west highway, it can certainly raise its sights when congressional lobbying begins.

Maine did considerably better under ISTEA from 1992-1997 than it did under its successor, TEA-21. According to the latest figures, Maine's share has declined perilously close to the minimum 90 percent return of fuel tax funds sent to Washington. Now is the time to be planning strategy; the Bush administration is scheduled to present its proposal early next year.

A higher federal fuel tax rate may be part of the future as well. The same forces that have constricted funding for state highway programs affect the federal budget, too. While the current administration budget proposal would have cut apportionments below what's being collected — thanks to a process called "budget realignment" — it's also true that receipts have fallen short of expectations.

There has been no programmatic increase in the federal gasoline tax since 1989; it was only the reallocation to the highway trust fund of a 4.3 cent increase in 1993, the remains of a "BTU tax" sought by President Clinton, that made possible passage of TEA-21.

One recent report notes that TEA-21 did manage a significant overall increase in funding, but only because of decisions "to spend down part of the backlog of cash in the Trust Fund, and to spend all future highway-related tax revenues on transportation. Since there will be no opportunities in the future for such 'house cleaning,' any future in federal funds will require a significant increase in federal taxes."

A higher federal tax rate will not be popular. Yet the Highway Trust Fund is also falling short, and a tax increase or indexing proposal may be inevitable.

Alternatives

Given the chronic weakness and uncertainty of fuel taxes as the primary support of the Highway Fund, it is not surprising that there have been attempts to find a new way of financing highway budgets. Some 20 years ago, some states decided to make their gasoline taxes a fixed proportion of retail or wholesale prices — only to find out that prices continued to fluctuate widely, making it unreliable in generating consistent revenues.

More recently, an Oregon study commission optimistically vowed that it would "design a new revenue collection system for road funding to ultimately replace the gas tax."

Yet coming up with such a system has not been easy. Not only tradition, but the clear relationship between gasoline sales and road construction has proven difficult to replicate. Perhaps the most intriguing idea has been to replace gasoline taxes with a tax on vehicle miles traveled. As vehicles became more fuel-efficient during the 1970s — a trend that may soon return — VMT increased much faster than gasoline sales. From 1975-95, VMT increased 83 percent nationwide, but gasoline use increased only 18 percent. Maine's experience is similar.

The question is how such a tax would be assessed and collected. Road use taxes on trucks in some states are assessed in part through logbook reporting, but it's doubtful that such a cumbersome system would be embraced or accepted by automobile drivers.

Tax Alternatives

Considerable effort has been expended in searching for a replacement for the gasoline and diesel fuel taxes, since the same problems with stability and adequacy have been experienced at both the state and federal levels. Although totaling only about 20 percent of fuel tax proceeds, the diesel fuel tax has been even less predictable than the gasoline tax. While gasoline tax revenues in Maine have increased at least 1 percent a year, in some years diesel proceeds have actually fallen. In 1991, diesel plunged 20 percent from the previous year, and in 2000 receipts fell 5 percent. Both represented troughs in business activity in advance of recessions.

Yet for all the brainstorming, the list of possible alternatives is not particularly long.

Usually included on the list, even though it's a modification rather than a replacement, is indexing fuel taxes to inflation. If Maine does this next year it will join at least 13 other states that have adopted variable fuel tax rates. Another possible benchmark for indexing would be the Construction Price Index, which, however, tends to be more volatile than the Consumer Price Index.

Other ideas include:

- *Excise tax on tires and batteries (the federal government now levies such a tax on large truck tires).*
- *Tax on drive-up service windows, reflecting their demand on the road system.*
- *Separate and additional first-time registration fee for new residents and for cars added to a household.*
- *Temporary visitor access fee, which would target tourists. How such a fee would be assessed is not yet clear, and it may violate the federal Constitution's interstate commerce provisions.*
- *Emission fees, based on the polluting potential of different cars and trucks.*
- *Impact fees on new developments. Such fees are now collected by some Maine municipalities, usually to reflect the increased cost of providing public services. Some states have considered using part of these fees to support highway budgets.*
- *Surcharge on rental car fees.*
- *Bicycle fees. These road users now escape taxation, since they buy no fuel.*
- *"Soft financing" for borrowing, using techniques other than general obligation bonds.*
- *Public-private partnerships, where investors would help fund new roads.*

Some observers believe combining new toll collecting technology with GPS tracking devices could produce an accurate record of vehicle travel that could be recorded without "meter reading" or manual reporting.

Such a system might be fairer than the gasoline tax, and it would certainly be a more reliable source of revenue. But it would also require a substantial new investment in monitoring equipment, and might not be readily accepted by the driving public. One need only recall the fate of the CarTest auto emissions inspection program in Maine in 1994 to realize that there can be significant resistance to new and unfamiliar government programs, however sophisticated the technology involved.

One alternative to gas taxes and motor vehicles fees that's been used in Maine for five decades is the use of tolls to pay off major construction bonds. Many large bridges, such as the Memorial Bridge in Augusta, were financed by tolls, which were collected until the bonds were retired. Toll bridges have fallen out of favor here, however, and there are no toll bridges anywhere in Maine. There is a flaw in the policy of removing tolls after the initial bonds are paid, though. While the original construction is paid for, continuing maintenance is not, and in the case of bridges, this is a major cost.

The 106-mile Maine Turnpike from Kittery to Augusta is Maine's only toll road, but because it is the major gateway to the rest of New England, it carries large amounts of traffic and produces significant revenue. Because of its toll status, it does not qualify for regular federal highway funding.

Widening and maintenance of the Maine Turnpike is financed by user fees. Some recommend funding major new road construction, such as the east-west highway, with tolls. MTA photo

When the original turnpike bonds were retired in 1982, the Legislature considered removing the tolls as it did for bridges, but ultimately decided to keep them and use some of the Maine Turnpike Authority's surplus revenue to support the Highway Fund for connections to the turnpike system. For about 10 years, significant transfers were made, usually $8.7 million a year.

In 1991, when the Sensible Transportation Policy Act was passed by referendum and a proposed widening of the turnpike de-authorized — temporarily, as it turned out — the requirement was changed so that "all" of the Authority's surplus would be paid to MDOT. But the new law did not recognize the actual nature of these transfers, which were achieved only by the Turnpike Authority borrowing larger amounts than would be needed to support its own operations. In 1996, MDOT and the Authority agreed to end the annual transfer. In exchange, the Authority took out a $35 million bond to benefit MDOT, representing what would otherwise have been contributed over the next 10 years.

While it would be possible to revive transfers as an alternative to fuel taxes, this would require an increase in turnpike tolls and bonding authority. Given the 1997 decision by voters to widen the turnpike, necessitating significant new borrowing, and the overall revenue structure of the Maine Turnpike Authority, it may make more sense to reserve its fiscal contributions for future improvement of toll roads.

Construction of a new turnpike interchange. New interchanges in Westbrook and Sabattus will ease traffic on local roads. Dean Abramson Photo

The Authority is already financing new turnpike interchanges in several locations that have the effect of relieving traffic congestion elsewhere. It could, potentially, oversee toll collecting operations on limited access roads in other parts of the state. Both the east-west highway and the north-south Aroostook County road have been mentioned as possible toll projects. If either were built as a two- or four-lane, limited access highway, similar to existing interstates, tolls might be necessary to make the roads financially feasible.

To date, the possibilities for replacing major revenue sources such as fuel taxes, the excise tax and title and registration fees appears limited. Until someone comes up with a magic bullet, it seems likely these taxes will continue to be a mainstay of transportation funding — unless the public and lawmakers decide that highways require consistent and long-term appropriations from general revenues.

Recommendations

There are a variety of responses to the funding crisis. The following seem the most feasible and important.

1) The Legislature should confirm indexing of fuel taxes on July 1, 2003, as enacted by the 120th Legislature, or adopt an equally substantial and reliable alternative. Although this will not cover the entire shortfall in existing programs, it will make a substantial contribution, now and in future years. At a future date, it can consider raising vehicle registration fees, currently among the lowest in the country.

2) In coordination with MDOT, the Congressional Delegation should make a major effort to win more favorable treatment for Maine when a six-year transportation authorization bill is passed in 2003. By nearly all objective measurements, Maine receives less funding than some neighboring states. A united approach by MDOT, other stakeholders and the delegation to pursue grants for specific projects also will help, and relieve pressure on state and local revenues.

3) Stabilizing state and federal revenues — the first two recommendations — will help bridge the Highway Fund's current structural gap. But this will not fund numerous major projects now in the planning stages that may have to wait many years to gain funding. Lawmakers need to look for further alternatives to help fund some of these projects, which will improve a transportation system directly connected to the state's future growth and prosperity.

4) State and local governments should continue to cooperate to expand reconstruction of the minor collector roads that are being rebuilt much more slowly than the major arterial roads.

5) General Fund support for the highway portion of transportation bond issues should continue, at least until MDOT debt service becomes more manageable. To make up for persistent shortfalls, the department began borrowing far more than the state guideline of 7 percent of annual revenues; at one point MDOT was paying almost 13 percent. Two more biennial bond issues with General Fund support should reduce debt service to acceptable levels.

6) Legislative committees, and the Governor, should investigate whether majority funding of State Police through the Highway Fund reflects current and future law enforcement priorities, and whether General Fund support for this department should be increased.

7) The Legislature should provide strong oversight of MDOT operations and spending. While the department has achieved considerable efficiencies in recent years, a driving force has undoubtedly been its failing revenue stream. Along with the assurance of a more adequately funded budget, the public needs to be confident that the search for efficiencies continues.

Challenges Ahead

Recent legislative debate has focused on keeping the Highway Fund solvent — providing enough revenue to meet current obligations and plugging a projected "structural gap." But it must be recognized that Maine has significant infrastructure needs that cannot be accommodated in the existing biennial transportation improvement plan (or BTIP) produced for each legislative session by MDOT.

In fact, of the $450 million or more MDOT spends each year, only a relatively modest portion goes directly toward highway reconstruction and major bridge improvements — though various other projects are included under local road and bridge funds. The bulk of MDOT spending goes for maintenance, paving and program management. Funding of large new projects will either take many years to carry out — as with the 15-year, $65 million reconstruction of Route 9 from Brewer to Calais — a major special grant from the federal government, or substantially increased state revenues.

According to MDOT's Bureau of Planning, the following nine major projects — many of which have already had corridor studies, public hearings, and a high degree of expectation from drivers and taxpayers — have yet to find an identified source of funding in the next biennium, fiscal 2004-2005. Collectively they would represent a commitment of $500-$756 million. By far the biggest project under active consideration is a major limited-access road through Aroostook County to the St. John Valley — the proposed extension or "completion" of I-95. At present budget allocation rates, these projects would consume the entire capital budget for years to come. And they are by no means the only major projects MDOT is considering or being urged to take on.

Aroostook Transportation Study:
$400-$600 million*

Easton Industrial Access Road:
$6.6 million

New Calais-St. Stephen Border Crossing:
$7-$8.5 million

I-395/Route 9 Extension:
$18.5-$30.6 million

Skowhegan River Crossing:
$7-$25 million

Norridgewock Concrete Arch Bridge:
$7-$12 million

Route 2 - Bethel/Gilead Reconstruction:
$14 million

Augusta Memorial Bridge:
$14.2-$29.2 million

Gorham Bypass Study:
$25-$30 million*

**Includes estimated cost of construction.*

Reconstruction of a section of Route 1 in Presque Isle. Currently only a small portion of MDOT's annual budget goes toward reconstruction. MDOT photo

About the author

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