

# **BUDGETING FOR CAPITAL INVESTMENT**

Statement of

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Mr. Chairman, Mr. Mica, and other members of the committee. Thank you for the opportunity to testify.

It is difficult to properly handle investments in public budgets. The rewards are spread out over an extended period of time while the cost or the pain of investing is immediate. That makes it difficult to finance public investments. There are two different situations.

The first occurs when there is a fairly steady stream of investment financed by a dedicated tax. The highway program is a perfect example. It is hampered by strong political resistance to raising the dedicated fuel tax, especially in instances in which the pre-tax price of gasoline has been rising rapidly. The tax has not been raised since 1993, although the last increase, which was originally dedicated to reducing the budget deficit and not to highway spending, has now been redirected into the highway trust fund. It is generally agreed that the current rate of tax of 18.4 percent per gallon is not sufficient to finance conservatively estimated investment needs or to cover the spending levels authorized in 2005.

The second problem occurs when an agency generally has a fairly stable operating budget, but occasionally has to make a sizeable investment. For example, the National Institute of Standards and Technology (NIST) may need an expensive new laboratory. Our budget process is not well designed to handle such lumpy expenditures. The budget resolution makes a spending allocation to the Appropriations Committee which, in turn, allocates spending allowances to its various subcommittees. It is difficult for a particular

subcommittee to get a sudden increase in its allocation, because the increase is likely to come out of the hide of other subcommittees. Similarly, when a subcommittee decides its spending allocation among programs, any sudden increase for NIST must be found in the budget of other programs within the subcommittee's jurisdiction.

The rest of this testimony reviews options for dealing with the two problems. Some are more relevant to one problem than the other.

Fuel taxes, tolls, and congestion fees -- In 2005 and 2006, I had the pleasure of chairing a Transportation Research Board committee on "The Fuel Tax and Alternatives for Transportation Funding." The committee was formed because of a fear among highway interests that the development of alternative fuels and regulatory initiatives, such as CAFÉ standards, would diminish the demand for gasoline and fuel tax revenues. The committee concluded that fuel tax revenues were not in immediate jeopardy, if the Congress continued to increase the fuel tax to approximate the inflation rate, something that has not happened recently. The main reason that fuel tax revenues were unlikely to be eroded quickly by technological and regulatory developments was that it takes so long for the auto fleet to turn over in the United States. Another reason was that Americans seemed to respond to greater fuel economy by demanding more horsepower. Admittedly, the committee reached its conclusions before the recent run-up of gasoline prices and I ruefully admit that we did not predict it, but it probably would not have made a big difference to our conclusions unless we see a dramatic drop in the demand for gasoline.

Although the committee concluded that fuel tax revenues would not erode quickly, it did not believe that fuel taxes were necessarily the best and only way to

finance highway expenditures. The committee did strongly endorse the philosophical principle that in transportation the user should pay. The principle seems equitable and although I referred above to strong political resistance to raising the fuel tax, I suspect that the resistance is less than with other taxes because taxpayers have a better idea what they are getting for their money.

However, the committee believed that it would be more beneficial to link user payments more closely to actual road use. A more extensive use of tolling is now possible since technological advances such as EZ passes and photo imaging have greatly reduced the cost of collection and the inconvenience imposed on motorists. Ideally, tolls should vary with the degree of congestion, so each motorist pays for the delays he or she imposes on others. Moreover, the collection of congestion fees provides a very useful indicator for allocating highway spending. High collections from a particular area provide a pretty good indicator that investments in expanding capacity in that area would be worthwhile whereas low collections would suggest that investment is not badly needed.

GPS technology theoretically opens the door to charging for every mile of highway in the United States and for varying the charge according to vehicle weight and time of day. No one would advocate that degree of coverage, but the technology is there to rationalize highway fees and provide funding for efficient investments. Experiments using this technology are underway and our committee urged much more research into the topic.

Some object to the creation of so-called Lexus lanes, because they would be detrimental to the poor. But highway pricing policy is a very awkward way of achieving

income distribution goals. If the poor are deemed to be suffering, it is much more efficient to give them relief through increasing the generosity of the Earned Income Tax Credit and other similar devices. Moreover, some low income households benefit from congestion pricing, because it is often more important for them to be at work on time and to pick up their kids at daycare before they have to pay a penalty.

Congestion pricing tends to work best where there are alternative routes between the same places, so that people can choose between the slower congested road and the faster lanes that are priced appropriately. And while I am not an expert on air or water transport, I suspect that congestion pricing could play a beneficial role in those areas as well.

Capital Budgeting – Some believe that government spending should be divided into a current operating and a capital component. In a true capital budgeting system, spending on current operating activities would be covered by revenues, that is to say, the operating budget should be balanced while it would be permissible to finance capital investments by issuing debt. Many state and local governments follow variants of these practices.

Assuming that the debt issued to finance the investment is amortized and the amortization is considered part of operating expenditures, this arrangement has the advantage that those residents who benefit from the investment also pay for it. This feature is most valuable when there is a surge in investment and is less important if investment occurs in a fairly steady stream.

It is thought that capital budgeting levels the playing field between current and capital expenditure, because borrowing to fund the investment and then amortizing the debt counters the fact that the pain of investing otherwise comes long before the rewards. There are several practical problems with this approach. First, it requires a balanced operating budget. We often miss that target. If one looks only at direct federal spending on physical capital during 2006, it only exceeded the depreciation of the government's capital stock by \$30 billion. That is the total deficit that would be allowed under a strict capital budgeting framework. The actual federal deficit was \$248 billion. If one adds the capital stock indirectly financed through Federal grants, one can add another \$29 billion to the permissible deficit, but that does not help much. Moreover, it is not clear that federal capital grants add to the nation's capital stock dollar for dollar. There is, in fact, considerable evidence that a one dollar increase in federal grants allows states to reduce their own investment by some portion of a dollar. I shall return to this topic later, because it is very important.

Some would add Federal research and development and education expenditures to the nation's capital stock. It is extremely difficult to know how to depreciate this stock and to know whether the Federal monies supporting these activities increase them dollar for dollar or are to some extent substitutes for other forms of public or private financing. The president's 2008 budget makes some very crude estimates and states that in 2006 the net stock of R & D increased \$35 billion and education increased \$68 billion. If one adds 100 percent of the increases in the stock of capital defined to include R & D and education, -- and this is most surely an overestimate -- one gets an increase in the stock of \$162 billion which would be the maximum allowable unified deficit under true capital

budgeting. That is less than two-thirds the actual deficit. If the whole point of capital budgeting is to give investment some advantage in the budget process to offset the disadvantage that it has because of high upfront costs, then allowing it to be financed with debt does not work if you also allow the marginal operating expenditure to be financed with debt.

A last practical problem with true capital budgeting is that if it does actually favor capital by allowing borrowing while insisting that current expenditures be paid for with taxes, all sorts of current expenditures start to be redefined to be investment. It is said that during New York City's budget problems of the 1970s, even janitors got to be defined as capital because they worked on physical structures. When there are rules requiring that the current operating budget be balanced, one also often sees a proliferation of off-budget agencies and activities – a common practice at the state and local level.

Infrastructure Banks – It is thought that a new financial institution might provide additional funds for financing infrastructure investment. Such an institution can take many different forms. It can be wholly controlled by the federal government, lend money to state and local governments and perhaps to the private sector, and issue Treasury debt, like the Export-Import Bank. It may also have a loan guarantee program. It can be totally self-financing or operate with a subsidy or be capitalized with a subsidy. In any case, a fully federal entity should be fully reflected in the federal budget and the present value of any subsidy it provides should be appropriated according to the rules of the Credit Reform Act of 1990.

It is not clear that such a facility would provide much of an advantage to borrowers. Generally, infrastructure can be financed with regular tax exempt municipal bonds or private purpose bonds and they typically earn lower rates than fully taxable Treasuries. The U. S. government could provide subsidies and the one advantage would be that the borrower would finance a larger share of the total cost than with our current system of highway grants, but the same goal could be accomplished by restructuring the current grant system. Guarantees might be helpful, but there is already an active private market selling municipal bond insurance. That industry is facing many troubles at the moment, but there is no reason to believe that it will not again be healthy in the long run.

An infrastructure bank could be set up as a government sponsored enterprise (GSE) with private shareholders, some directors appointed by government, and a charter that required it to carry out some public purposes. Fannie Mae is an example of such an entity. Its bonds do not bear the full faith and credit of the U. S. government and it has only a tiny line of credit from the U. S. Treasury. However, investors believe that the government will bail it out if it gets in trouble. That allows it to borrow at slightly lower interest rates than if it were fully private and to take much more risk by increasing its leverage. Those advantages have allowed it to become dominant in mortgage markets, thus squeezing out a lot of private activity. It has now become too big to fail and it is essentially certain that the Fed or Treasury would intervene if it gets into trouble. We are now struggling with the issue of how to regulate it, so that it is forced to follow less risky practices.

You can tell that I am not a fan of GSEs. The Congress should think long and hard before it creates another one.

I suppose that Congress could create a fully private entity that is subsidized either with an initial infusion of capital or an annual interest subsidy, but any subsidy should, of course, be appropriated and fully on budget.

A Revolving Fund to Finance Agency Investments – This proposal is meant to address the problem of lumpy agency investments discussed at the beginning of this testimony. The Appropriations Committee would provide a regular investment allowance to an agency based on its historic need to make investments. The allowance would be deposited in a fund and the deposit would earn interest at the Treasury rate. If the agency felt the need to make an investment, it would include it in its budget request to OMB which would make a recommendation to the appropriation committee. If the Appropriations Committee approved, the investment would be financed by drawing down the agency's deposit, or if the deposit is not big enough, borrowing from the fund.

A similar idea was floated by President Clinton's Commission to Study Capital Budgeting on which I served. They did not recommend it as a permanent device, but thought it a promising idea that deserved some experimentation.

A similar device is used to charge rent to government agencies that are located in government-owned buildings. It was thought that if they had to pay rent, they would economize on space. Admittedly, it has not worked very well, but I think that is because rent is appropriated routinely every year. Investments would occur less frequently and I would hope that they would be more thoroughly scrutinized.

Public-Private Partnerships – Selling existing facilities to private owners or having private owners build infrastructure from scratch has become more common in recent years. For example, Chicago and Indiana have sold or leased facilities, and locally, we have the extension of the Dulles toll road.

This is a device for bringing in private money for infrastructure investment and it may become more important as public budgets are squeezed severely by the retirement of the baby boom generation. The squeeze is particularly important federally as Social Security, Medicare, and Medicaid are growing far faster than tax revenues and the economy and now absorb almost one-half of non-interest spending.

The attractiveness of public-private ownership varies from case to case and each deal must be scrutinized carefully. Private investors often gain something approaching a natural monopoly and must, therefore, be regulated. State and local governments must be careful to use the proceeds from sales for further investment or debt repayment and not fritter the proceeds away on current expenditures. Nevertheless, public-private partnerships may be a very useful approach to bring more money into infrastructure investment and increasing the efficiency of managing the facilities.

Improving the Efficiency of Grants and Subsidies – The federal highway grant structure is incredibly complicated and it is difficult to generalize about its effects, but to a considerable degree it simply allows states and localities to reduce their highway expenditures by some portion of the grants and so does not increase capital investment dollar for dollar. That is because much of the money is distributed by formula with

minimum effort requirements placed on states that are not very rigorous. It is said that most states can meet the requirements without breathing very hard.

An effort should be made to increase the state and local share of investments, perhaps by increasing minimum effort requirements or experimenting with different types of cost sharing grants. This is a complex area and most options have considerable disadvantages, but the topic is worth an intense study.

Much infrastructure investment is financed by issuing tax-free municipal bonds. The Federal tax expenditure is extremely inefficient in that the tax loss endured by the federal government is far greater than the interest savings for the issuers of the bonds. CBO reports that any taxpayer buying these bonds who has a marginal tax rate greater than 21 percent enjoys a gain that typically is not fully passed on to states and municipalities. A carefully designed tax credit would equalize the subsidy to state and local governments and the tax loss faced by the federal government.

Conclusions – The outlook for federal infrastructure investment is not good. The inexorable growth of Social Security, Medicare, and Medicaid is putting a squeeze on all other government activities and infrastructure investment is particularly vulnerable because its benefits are so far in the future.

Among the ways of correcting this bias, I do not think that options like capital budgeting or infrastructure banks are very promising. Private-public partnership may bring some more money to infrastructure investment and some sort of revolving fund might help smooth out the lumpiness that occurs when ordinary agencies try to do some investing.

With regard to the very big question of highway financing, the arguments for raising the fuel tax are very strong if political resistance can be overcome. But there is even a stronger case for relying more on tolling and congestion fees which could provide very large amounts of revenue while improving the efficiency of the system.