Trends in Federal-Aid Highway Financing

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With the enactment of the Surface Transportation Assistance Act of 1982 (Public Law 97-424), Congress provided significant increases in funding for highways. The immediate impact was to increase the level of the federal-aid highway program, as measured by the obligation ceiling, from $8.0 billion in Fiscal Year 1982 to $12.1 billion (later increased to $12.375 billion in Fiscal Year 1983).

In terms of percentages, the increases was a bit more than 50%. However, this increase was not distributed equally among the states. In Indiana, an extreme example, the availability of federal-aid highway funding more than doubled.

Furthermore, the increase was not distributed equally among the various categories favored by the legislation were those deemed to be of greatest national significance, i.e., the Interstate completion and Interstate reconstruction programs, and the bridge replacement and rehabilitation program.

This paper briefly discusses seven categorical programs, each of which is authorized at a level of more than a half-billion dollars in Fiscal Year 1983. One other categorical program, Interstate Transfers, is not discussed. Depending on decisions to be made by the appropriations committees, that program may or may not reach the $500 million mark in Fiscal Year 1983.

THE HIGHWAY PROGRAM PIE

If the funding levels for the seven major categorical programs were presented on the familiar pie chart, the Fiscal Year 1983 levels would fit, conveniently, into a pie divided into six pieces. (The six slices of pie are not quite equal; however, the division is more nearly equal than the average cutter of a real pie would achieve.

Two full pieces of the six-piece pie (35.1%) are consumed by the Interstate construction program.

Three other programs get one slice of pie each. They are the Interstate 4R program (17.1%), dedicated to the renovation and reconstruction of Interstate segments; the federal-aid primary program (16.5%), and the Bridge Replacement and Rehabilitation program (14%).

Only one other piece of pie remains to be accounted for. Three pro-
grams share that single piece. They are federal-aid urban (7.0%), Federal-Aid Secondary (5.7%) and the Minimum Allocation category (4.5%), designed to ensure state a minimum 85% return on road-user dollars paid into the Highway Trust Fund.

CHANGING RELATIONSHIPS

The relative emphasis given to the major categories of federal aid changes with time, as might be expected. The table below compares the percentages just cited with the percentage split for two earlier years. The year 1973 is selected for this table not only out of respect for the conventional system of numbering in which the decade is a significant period of time, but also because, in constant dollars, the 1983 program is about equal to the 1973 program. The year 1982, of course, reflects the immediate past.

PERCENTAGE SPLIT OF MAJOR FEDERAL-AID PROGRAMS

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>1973</th>
<th>1982</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate Construction</td>
<td>71.7</td>
<td>42.3</td>
<td>35.1</td>
</tr>
<tr>
<td>Interstate 4R</td>
<td>-0-</td>
<td>10.5</td>
<td>17.1</td>
</tr>
<tr>
<td>Primary</td>
<td>10.2</td>
<td>19.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>6.8</td>
<td>5.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Urban</td>
<td>6.7</td>
<td>10.5</td>
<td>7.0</td>
</tr>
<tr>
<td>Bridges</td>
<td>2.8</td>
<td>11.8</td>
<td>14.0</td>
</tr>
<tr>
<td>TOPICS/1</td>
<td>1.8</td>
<td>-0-</td>
<td>-0-</td>
</tr>
<tr>
<td>Minimum Allocation</td>
<td>-0-</td>
<td>-0-</td>
<td>4.5</td>
</tr>
</tbody>
</table>

/1 Traffic Operations Program to Improve Capacity and Safety.

In 1973, no state had completed construction of its Interstate System mileage. Ten years later, the 1983 Interstate cost estimate shows that eight states need no more Interstate apportionments to complete their systems. Other states, including Indiana, are very close to that status. Thus, the very large percentage of federal-aid funding directed toward the Interstate completion program was not generally perceived to be inequitable, since substantial completion needs existed in virtually all states.

By 1983, Interstate completion had assumed relatively lesser importance in numerous states.

The division of funds apportioned to Indiana for Fiscal Year 1983 does not mirror the national distribution profile. Indiana is not unusual in that respect; i.e., only a handful of states come close to fitting the national distribution pattern.

In the case of Indiana, the percentage distribution of funding among the seven major categories is as follows:
The principal variances, obviously, are that Indiana has a relatively small Interstate construction apportionment (because the system is nearly complete in Indiana) and a relatively large funding input from the new 85% floor provision.

Having reviewed this data, we now proceed to brief comment on the individual categories.

INTERSTATE CONSTRUCTION

With authorizations at the level of $4 billion annually, we can now look with some confidence to the completion of initial construction on the Interstate System within the next decade. The program should be substantially complete by 1990, except for a few highly controversial projects. Those surrounded by controversy include two very large ones, the Century Freeway in Los Angeles and the Westway in New York City. Each will cost in excess of $1.5 billion.

Interstate construction is currently the highest funding category in 31 states.

The 1982 STAA provided an annual Interstate discretionary fund of $300 million per year, to be directed toward ready-to-go priority projects. This funding will be helpful in closing Interstate gaps.

The law also provides a minimum apportionment of one-half of one percent. Seventeen states, including Indiana, are now getting the minimum Interstate apportionment.

As we move closer to completion, the number of “minimum” states will increase. In terms of getting the system completed, the allocation of funds to states where the system is already complete is non-productive.

Eventually, perhaps by 1987, we are likely to see a merging of the Interstate Construction and Interstate 4R programs, probably with a provision to ensure that every state will have enough funding to complete the Interstate by the early 1990’s.

INTERSTATE 4R

The Interstate 4R program is presently the largest funding category for eight states, including Indiana. Further increases are projected and needed because of: (1) the aging of many segments of the Interstate System

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 4R</td>
<td>22.2%</td>
</tr>
<tr>
<td>85% Floor</td>
<td>21.1%</td>
</tr>
<tr>
<td>Primary</td>
<td>18.1%</td>
</tr>
<tr>
<td>Bridges</td>
<td>17.0%</td>
</tr>
<tr>
<td>Interstate Const.</td>
<td>8.0%</td>
</tr>
<tr>
<td>Urban</td>
<td>6.9%</td>
</tr>
<tr>
<td>Secondary</td>
<td>6.7%</td>
</tr>
</tbody>
</table>
and (2) the increasing need for major reconstruction due to traffic shifts and overall traffic growth.

There are major disagreements with respect to the apportionment formula which is presently based 55% on Interstate lane-miles and 45% on traffic volume. A study seeking a more equitable apportionment formula is underway. The search is certain to be a difficult one.

If it is true (as many contend) that heavy truck traffic is the leading cause of pavement deterioration, it would seem appropriate to use truck traffic as an apportionment factor. Some contend that climate and/or terrain should be considered. Traffic congestion, obviously, suggests a need for adding lanes and improving or adding interchanges.

At the "bottom line," the equitable solution arrived at through engineering considerations must be a politically acceptable solution if it is to be approved by Congress.

**PRIMARY SYSTEM**

States obligate Primary System apportionments faster than any other category. There are several reasons for this. The program is well established, being in fact, the oldest categorical program. Funds can be applied to a wide variety of projects, and every state has a large backlog of Primary System needs.

The increase in funding in the 1982 STAA (from $1.5 billion to $1.85 billion) was a very modest one, considering the relative needs and the enthusiasm for this program among states.

Again, the apportionment formula poses a problem. In 1982, Congress was confronted with a choice between two formulas, one which would favor large rural states, and one which would favor more densely populated states. The choice was a compromise. A new battle is likely to develop when the next major highway bill comes before Congress.

Federal-Aid Primary is the largest funding category in two states—Alaska and Wisconsin.

**BRIDGES**

Funding for the Bridge Replacement and Reconstruction Program was doubled by the 1982 STAA, reflecting congressional perception of the large magnitude of critical bridge needs. An updated and more sophisticated formula has worked to the benefit of Indiana, where funding from this category approximately quadrupled.

The apportionment is based on estimated needs, as determined by the national bridge inventory. As a funding mechanism, the bridge program has two unique aspects:

1. it is the only major category which directs funds to non-federal-aid roads, thus making it particularly useful to counties and municipalities; and
2. It is the best example of a program which is extremely important in some states and relatively unimportant in others. It is the largest funding category in seven states. However, eight states and Puerto Rico receive the minimum apportionment which, in this case, is one-fourth of one percent.

The national bridge inventory has had the good effect of providing full and reasonably accurate information on bridge deficiencies. This good documentation is undoubtedly a reason for its favorable position in earning public and congressional acceptance.

URBAN AND SECONDARY

Both the Carter and Reagan administrations have proposed turning the urban and secondary programs back to the states, so that the federal involvement can be concentrated on programs of national interest. However, there is a substantial political constituency for both programs.

Congress has been unwilling to turn back these programs. The congressional compromise solution has been to fund the programs at relatively low levels. Barring an unexpected change in political philosophy, this attitude will continue to prevail.

The Secondary program is the No. 2 funding category in Alaska, taking this high rank because area is a factor in the apportionment.

85 PERCENT FLOOR

Ten states benefit this year from the congressional decision to ensure that every state gets back at least 85 cents on the dollar from the highway-user fees collected in that state. This appears to be a matter of simple equity.

In two states, Michigan and Ohio, the 85% Floor is the No. 1 funding category, and it is the No. 2 funding category in Indiana. It is of lesser importance in the seven other beneficiary states.

This provision was added in the legislative battle over the 1982 STAA. Many would have preferred a tidier solution to the equity problem; i.e., adjustments in the regular apportionment formulas. The “tidy solution” proved highly elusive, however, and may never be found.

The provision required an authorization of $515 million in Fiscal Year 1983. It is the most costly of several minimum apportionments. With respect to the Interstate Construction, Interstate 4R, Primary, Secondary and Urban programs, each state is assured a minimum apportionment of one-half of one percent. The minimum for the bridge program is one-fourth of one percent.

These minimum apportionments are particularly important to small states. Delaware receives the minimum apportionment in every category.

CONCLUSION

The 1982 STAA has not fully settled the issue of allocating federal-
aid highway funds among states; an issue which, by its nature, will probably never be settled to the satisfaction of all parties.

Several somewhat competing objectives can readily be identified:

1. To satisfy certain perceived needs, such as the completion of the Interstate System;
2. To provide, in a more general way, a share of the capital funding needed to keep the national highway system in acceptable condition in all states;
3. To distribute funds in a manner which reflects, in a general way, the relative highway needs of the states;
4. To ensure that every state receives a significant amount of every funding category; and
5. To recognize the need for some relationship between money collected in a state and money paid out in a state.

While some simplification of distribution formulas is possible, paying attention to these objectives probably calls for a continuation of fairly complex formulas.