EFFECTING CHANGE IN PUBLIC POLICY:
FINANCING URBAN TRANSPORTATION IN
THE NEW YORK, NEW JERSEY,
AND CONNECTICUT REGION

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systems in any metropolitan area. This approach to accounting for
regional transportation systems reflects the view that an overall, coordinated
effort is required to obtain a balanced transit network in metropolitan
regions. Both the methodology and the statistical findings should be of in­
terest to transportation specialists and to those involved in public ad­
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process of influencing public policy. It provides an 8-year history of both
successful and unsuccessful efforts to achieve change in transportation
financing in the New York metropolitan region.

THIS STUDY (1, 2) was undertaken to provide basic financial data and to make recom­
men­dations to the Tri-State Transportation Commission (now the Tri-State Regional
Planning Commission) for its development of immediate-action and long-range pro­
grams for financing transportation services in the New York metropolitan region. In­
traurban facilities and related activities to be financed in the region include streets,
roads and highways, bridges, tunnels, commuter railroads, buses, public transit, street
cleaning, parking, lighting, sidewalks, storm sewers, and traffic and highway police.
The study does not include facilities devoted solely to interregional travel or to the
shipment of goods.

We adopted an "enterprise" approach that is applicable to the study of financing
urban transportation systems in any metropolitan area. This approach to accounting
for regional transportation systems reflects the view that an overall, coordinated effort
is required to obtain a balanced transit network in metropolitan regions. Thus, both
the methodology and the statistical findings should be of interest to transportation
specialists and to those involved in public administration. [There is, in fact, a paucity
of comprehensive data relating to the sources and uses of funds for transportation in
metropolitan areas. Some of these sources are cited (3, 4, 5).] In addition, the study
sheds some light on the more general process of influencing public policy. It provides
an 8-year history of both successful and unsuccessful efforts to achieve change in
transportation financing in the New York metropolitan region.

We present in this paper an analysis of the sources of transportation funds, the ex­
penditures on transportation, and the difference between the sources of funds and ex­
penditures. We elaborate on our general approach to the study of financing transporta­
tion and the implications of the specific findings for public policy. We then summarize
the study recommendations, the institutional constraints that influenced their implemen­
tation, and subsequent events.

**SOURCES OF TRANSPORTATION FUNDS**

The Tri-State region generated $2.6 billion in 1962 to finance transportation (Table 1).
The 3 major sources of funds are classified as direct users, indirect users, and borrowing.¹

Direct users are those who contribute to the transportation system in direct relation to the use they make of transportation facilities. Their payments for transportation services are direct and their benefits are also direct. All funds provided by direct users are recorded at the level of government that initially receives the funds. The following funds are provided by direct users.

1. User taxes include federal and state motor fuel taxes, motor vehicle license fees, and other motor vehicle-related excise taxes. These taxes are viewed as direct payments for the use of transportation services and, insofar as possible, the allocation procedures attempted to estimate the user charges actually earned in the region. For example, motor vehicle taxes were allocated to the region on the basis of gasoline sales, an index that would be expected to reflect the amount of mileage driven and, therefore, the user taxes paid by motorists for traveling on the region's roads and highways.

2. User charges consist of fares, tolls, and parking fees paid to local governments for the use of transportation facilities.

3. Related income consists predominantly of income from concessions directly associated with the operation of some transport facilities. Interest on investments is also included in this category of funds.

Indirect users include persons, firms, and entire communities—all deriving an indirect benefit from the transport facilities. The contributions of indirect users usually do not bear a direct relation to the use they make of transportation facilities. These contributions are considered to reflect the payments for the social benefits received by localities from the transportation system. The present level of economic and social activity in the region would, of course, be impossible without the vast transportation system entwined throughout the region, and those who may not actually use the facilities or those who make less than average use of them nevertheless benefit from the system. In the absence of a more precise measure, the statistical analysis assumes that the following sources of funds represent the contributions of indirect users.

1. General fund appropriations for transportation services in excess of local government user charges and related income are included in indirect user funds. Local user charges and transportation-related income of local governments are considered as payments by direct users. However, most local governments in the region channel such payments by direct users into their general funds. Therefore, these amounts are excluded from general fund appropriations in order to avoid double counting. The amount recorded under indirect users as general fund appropriations of local governments is the net amount of these direct revenue sources.

2. Special assessments, theoretically, are generally imposed in rough proportion to benefits directly received by the property owner. However, actual methods of assessment vary widely among local governments in the region, and many governments report only one total for special assessments and real property tax yields. Therefore, special assessments are included in measuring the contributions by indirect users. However, this practice tends to understated the contributions of direct users.

A resident of the region, then, contributes to the transportation system in a dual capacity. For example, each time he registers his automobile or purchases gasoline, he contributes as a direct user. Each time he pays his real property tax or a sales tax, he contributes as an indirect user to the extent that these payments may be allocated to transportation.

This system of classifying funds and the methods for allocating them to the region have the advantage of giving a clear picture of the flow of funds generated by the transportation system. It offers a more meaningful basis for evaluating financial policy

¹The original manuscript of this paper included an appendix that explains the methods of allocation and sources of data for Tables 1 and 2. The appendix is available in Xerox form at the cost of reproduction and handling from the Highway Research Board. When ordering refer to XS-48, Highway Research Record 476.
than a system that restricts sources of funds to those that are actually made available for transportation purposes. Even though certain user payments flow directly into general funds and are then appropriated "back" to transportation, either wholly or in part, it is essential to provide a measure of the total contribution of the users to the region's transportation system.

This approach is at variance with the view that all user taxes returned to a region by the federal and state governments constitute subsidies to its transportation system. It is reasoned that, if user taxes and charges are earned in a region, calling them a subsidy when they are returned is inappropriate. Transportation in a region is considered subsidized only to the extent that federal and state expenditures exceed user taxes earned there. Any particular region may, therefore, have a surplus or deficit of user taxes over federal and state expenditures on transportation.

Although transfer payments among individuals and governments are used to promote equity for all regions, it is important to identify the sources of all such transfer payments. If it is found that the donor is ailing, the transfer payment may not be justified on equity grounds; in fact, it may make no economic sense at all.

Out of the total of $2,579.4 million raised to finance transportation, direct users provided 65.6 percent, indirect users provided 16.9 percent, and borrowing accounted for 17.5 percent. As the source of funds, government roads and highways accounted for 46.9 percent, transit for 24.5 percent, authority toll roads, bridges, and tunnels for 17.0 percent, private bus companies for 6.0 percent, and commuter railroads for 5.6 percent.

EXPENDITURES FOR TRANSPORTATION

More than $2 billion was expended in 1962 to operate, maintain, and expand transportation facilities in the region (Table 2). Operation and maintenance of facilities accounted for 51.3 percent, debt service for 14.7 percent, and capital outlay for 34.0 percent.

In addition to expenditures made by local governments in the region, maintenance includes money spent by the state in the region on state highways including maintenance of condition, snow removal, traffic services, general administration expense for highway-related items of appropriate state departments, and budget appropriations made to the region for highway purposes. Similarly, capital outlay expenditures include money from local, state, and federal governments for right-of-way, engineering, and construction expenses. Thus, the accounting system used here considers all capital outlays in the region financed by the states and federal governments as user taxes that are returned to the region. Because such capital outlays vary substantially from year to year, an attempt was made to ascertain whether the 1962 figures are representative. It was found that capital outlays financed with federal and state user taxes in 1962 overstated average annual expenditures for such purposes. To this extent, the estimate of a typical "transportation surplus" is understated.

In New York State, the average amount ($166.4 million) of contracts let in the region for the 3-year period from 1961 to 1963 was used as the estimate of construction expenditures, the major component of capital outlay. The remaining expenditures for capital outlay in New York include $33.8 million for right-of-way and $8.1 million for engineering.

This figure is apparently high because it reflects the atypical $230 million of contracts let in 1961, primarily for highways relating to the World's Fair. For example, the 6-year average for the period from 1958 to 1963 for contracts let was only $130.9 million. As a further test, both the Tri-State Transportation Commission and the New York State Department of Public Works made estimates of capital expenditures on the basis of work completed during the year. The commission's estimate was approximately $170 million, and the department's estimate was $140 million. Thus, the estimate of $166.4 million for construction costs is toward the upper end of the range.

In New Jersey, the state highway department's estimate of $88.2 million was included as the capital outlay in the region. This figure compares favorably with the average of $90 million of capital outlay for the 3 fiscal years ending in 1962. In
Connecticut, the state highway department's estimate of $39.8 million was included as the capital outlay in the region. This figure is approximately $8 million above the average outlay in Connecticut for the 3 years ending in 1962.

In terms of transportation facilities, roads and highways and allied services accounted for 55.7 percent of all disbursements, public transit for 29.7 percent, commuter railroads for 7.4 percent, and private bus companies for 7.2 percent.

TRANSPORTATION SURPLUS

The data presented above indicate that, although $2,577 million was provided to finance the region's transportation "enterprise," only $2,110.4 million was applied to secure facilities and finance operations. Therefore, from the regional point of view, a transportation surplus of $467.0 million existed in 1962. The composition of this surplus is given in Table 3.

The major components of the regional surplus are $203.1 million of state and $154.9 million of federal user taxes earned on government roads and highways but not expended on transportation in the region. This basic finding concerning the disposition of user taxes is in agreement with research conducted in other metropolitan areas in the United States. User taxes earned in high-density areas are often used to finance transportation and other government services outside of the area (6, 7, 8, 9).

The seemingly profitable position of the private bus industry ($14.4 million surplus) is in part due to numerous tax concessions granted by various government agencies (10). The deficit for public transit ($10.3 million) would have been substantially larger had it been adjusted for $16.1 million provided by New York City to finance the operating deficit.

The last item given in Table 3 ($71.9 million) is a residual that results mainly from temporary differences between sources and uses of funds provided from bond issues and applied to capital construction. An illustration is the temporary increase in funds of the New York City Transit Authority as a result of bond sales that were $19 million in excess of the capital projects undertaken during the year under study. This residual is, therefore, not meaningful for this analysis and is not considered in the study. (A similar increase of $60.5 million is reflected in the operations of authority roads, tunnels, and bridges and one of $3.5 million in operations of local governments. The balance reflects a decrease in accumulated surplus of private bus companies to finance capital outlays during the year.)

An analysis of the $395.1 million current transportation operating surplus by type of facility is given in Table 4. The current operating surplus is computed on a cash-flow basis indicating the excess of current sources of funds over current expenditures. Because bond issues are viewed as noncurrent transactions, neither the funds provided by borrowing nor the capital outlay financed with borrowing is considered as a current transaction. However, debt service on borrowing is viewed as a current expenditure. Where capital outlay is financed out of user taxes, it is regarded as part of current expenditures.

POLICY IMPLICATIONS

This overall approach to the financial analysis of a region's transportation system differs from those that seek to measure the economic profit or loss earned on particular transportation facilities. Such calculations involve a great deal of conjecture with respect to the magnitude of implicit costs and benefits such as depreciation and the value of time. Furthermore, the calculation of economic profits is not of primary importance when the problem of financing transportation is studied. As a practical matter, what is required is an estimate of the system's surplus funds that might be made available to finance the region's transportation needs. This estimate is provided by the procedures outlined in this study.

If the $1,690.9 million of direct user taxes and charges earned in the region had been available to finance all of the $1,731.5 million of current disbursements, i.e., current operating expenses, debt service, and capital outlay financed with federal and state user taxes, the region's transportation system would have operated at a deficit of $40.6 million. This deficit is not distributed evenly among the various facilities. Government
Table 1. Sources of funds by type of facility in 1962.

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>Government Roads and Highways</th>
<th>Authority Toll Roads, Bridges, and Tunnels</th>
<th>Public Transit</th>
<th>Commuter Railroads</th>
<th>Private Bus Companies</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal user taxes earned</td>
<td>375.9</td>
<td>202.2</td>
<td>331.0</td>
<td>122.7</td>
<td>153.3</td>
<td>831.3</td>
<td>32.4</td>
</tr>
<tr>
<td>State user taxes earned</td>
<td>430.2</td>
<td>22.1</td>
<td>9.2</td>
<td>10.3</td>
<td>2.9</td>
<td>53.5</td>
<td>2.1</td>
</tr>
<tr>
<td>User charges earned</td>
<td>22.1</td>
<td>22.1</td>
<td>122.7</td>
<td>122.7</td>
<td>153.3</td>
<td>831.3</td>
<td>32.4</td>
</tr>
<tr>
<td>Related income</td>
<td>7.8</td>
<td>23.3</td>
<td>9.2</td>
<td>10.3</td>
<td>2.9</td>
<td>53.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Subtotal</td>
<td>836.0</td>
<td>225.5</td>
<td>340.2</td>
<td>133.0</td>
<td>156.2</td>
<td>1,690.9</td>
<td>65.6</td>
</tr>
<tr>
<td>Indirect users*</td>
<td>268.9</td>
<td>-</td>
<td>161.1</td>
<td>5.7</td>
<td>-</td>
<td>435.7</td>
<td>16.9</td>
</tr>
<tr>
<td>Borrowing</td>
<td>106.0</td>
<td>309.6</td>
<td>129.7</td>
<td>5.5</td>
<td>-</td>
<td>450.8</td>
<td>17.5</td>
</tr>
<tr>
<td>Total</td>
<td>1,210.9</td>
<td>435.1</td>
<td>631.0</td>
<td>144.2</td>
<td>156.2</td>
<td>2,577.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Percent</td>
<td>46.9</td>
<td>17.0</td>
<td>24.5</td>
<td>5.8</td>
<td>6.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: Amounts are in millions of dollars. Interfacility transfers and tax relief are not included.

*General fund appropriations, special assessments, and other (local).

Table 2. Expenditures by type of facility in 1962.

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Government Roads and Highways</th>
<th>Authority Toll Roads, Bridges, and Tunnels</th>
<th>Public Transit</th>
<th>Commuter Railroads</th>
<th>Private Bus Companies</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating expenses</td>
<td>332.1</td>
<td>67.2</td>
<td>392.8</td>
<td>149.0</td>
<td>141.8</td>
<td>1,082.9</td>
<td>51.3</td>
</tr>
<tr>
<td>Debt service</td>
<td>72.3</td>
<td>114.4</td>
<td>122.6</td>
<td>-</td>
<td>-</td>
<td>309.3</td>
<td>14.7</td>
</tr>
<tr>
<td>Capital outlay</td>
<td>220.8</td>
<td>3.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>223.8</td>
<td>10.6</td>
</tr>
<tr>
<td>State governments</td>
<td>115.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>115.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Borrowed funds and cash reserves</td>
<td>102.5</td>
<td>149.1</td>
<td>110.7</td>
<td>5.5</td>
<td>11.1</td>
<td>378.9</td>
<td>17.9</td>
</tr>
<tr>
<td>Subtotal</td>
<td>438.8</td>
<td>152.1</td>
<td>110.7</td>
<td>5.5</td>
<td>11.1</td>
<td>718.2</td>
<td>34.0</td>
</tr>
<tr>
<td>Total</td>
<td>843.2</td>
<td>333.7</td>
<td>626.1</td>
<td>154.5</td>
<td>152.9</td>
<td>2,110.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Percent</td>
<td>39.2</td>
<td>15.8</td>
<td>29.7</td>
<td>7.4</td>
<td>7.2</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: Amounts are in millions of dollars.

*Includes expenditures on streets, toll and nontoll highways, ferries, parking, street cleaning, lighting, sidewalks, storm sewers, and police. State expenditures for these purposes as well as costs of tax collection have been allocated to the region.

*Financed by state funds, $111.6 million; federal funds, $0.2 million; and local funds, $220.3 million.

*Not available.

*Interest on debt included in operating expenses.

Table 3. Transportation surplus in 1962.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government roads and highways</td>
<td></td>
</tr>
<tr>
<td>Excess of federal user taxes over federal expenditures</td>
<td>154.9</td>
</tr>
<tr>
<td>Excess of state user taxes over state expenditures</td>
<td>203.1</td>
</tr>
<tr>
<td>Increase in current reserves of local governments</td>
<td>6.2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>364.2</td>
</tr>
<tr>
<td>Authority toll roads, bridges, and tunnels net operating surplus</td>
<td>40.9</td>
</tr>
<tr>
<td>Public transit net operating deficit</td>
<td>-14.1</td>
</tr>
<tr>
<td>Commuter railroads net operating deficit</td>
<td>-10.3</td>
</tr>
<tr>
<td>Private bus companies net operating surplus</td>
<td>14.4</td>
</tr>
<tr>
<td>Total current operating surplus</td>
<td>395.1</td>
</tr>
<tr>
<td>Change in working capital due to capital transactions of public authorities, local governments, and private bus companies</td>
<td>71.9*</td>
</tr>
<tr>
<td>Total surplus</td>
<td>467.0</td>
</tr>
</tbody>
</table>

Note: Amounts are in millions of dollars.

*Includes $3.5-million surplus of borrowings over capital expenditures of local governments.
roads and highways, authority facilities, and private bus companies earn surpluses. The deficits of transit and commuter railroads more than offset these surpluses. Thus, transportation facilities may be classified as "winners" and "losers" and, because of the nature of the present underlying demand and the cost structure of each of these facilities, the same pattern will probably continue. However, if all the facilities are viewed as parts of a single enterprise, users alone would appear to contribute almost enough funds to finance all disbursements.

In addition, indirect users contributed $435.7 million to maintain and improve the transportation system. Of this amount, $268.9 million was provided for the maintenance of local streets and roads and the operation of allied services. The remainder, $166.8 million, was provided primarily for transit.

It is, of course, difficult to determine whether the funds provided by indirect users would have been provided to the transportation system if all direct user taxes earned in the region were returned to it. Nevertheless, it is also clear that communities should help to finance the transportation system in return for the social and economic benefits provided to the community at large.

Based on direct user charges and taxes and the assumption that continued financial support for those "externalities" or benefits accrue to the community at large, it can be stated that the transportation system more than pays for itself. In fact it appears to have "earnings" that justify expansion or improvement or both.

The major policy implications of the statistical findings are that adequate funds for financing all public transportation services in the region would be ensured if:

1. All funds earned in transportation at each level of government were pooled;
2. Transportation services had priority in the use of funds earned in transportation;
3. The allocation of funds earned in transportation to a region were in rough proportion to the money earned in it; and
4. All transportation planning and administration were coordinated in one agency for the region or in a group of cooperating agencies.

IMPLEMENTATION OF RECOMMENDATIONS

A series of recommendations incorporating these policy implications were made in 1965 and are given in Table 5. These recommendations reflect the legal and institutional constraints that impinge on the decision-making process. Thus, no overall regional agency was proposed because of the legal difficulties in creating an interstate compact among 3 states, and the resistance that the then-existing state and local organizations had to such an arrangement. To date, all the organizational changes have been implemented.

1. A federal department of transportation has been established.
2. Each of the 3 states—New York, New Jersey, and Connecticut—has coordinated the administration of all modes of transportation in one department.
3. In each state a commuter transportation agency has been organized with overall responsibility for transit-facility operations. In fact, the Connecticut Transportation Authority and the New York Metropolitan Transportation Authority have joint responsibility for the operation of the New Haven Railroad, which services both states. The 3 commuter agencies eventually could be combined into a single regional organization responsible for all transit operations in the region.

The recommendations relating to the flow of funds into the transportation system have as yet not been implemented. However, there has been some movement at the federal level in this direction.

1. President Nixon called for the creation of a transportation fund in connection with his special revenue-sharing proposal for transportation, and the requisite legislation was introduced in Congress.
2. The Secretary of Transportation and many senators urged the use of money from the Highway Trust Fund for transit purposes until a transportation trust fund is created.
3. On the regional level, surplus automobile tolls in New York and New Jersey are being used to finance transit.
Table 4. Current operating surplus by type of facility in 1962.

<table>
<thead>
<tr>
<th>Item</th>
<th>Government Roads and Highways</th>
<th>Authority Toll Roads, Bridges, and Tunnels</th>
<th>Public Transit</th>
<th>Commuter Railroads</th>
<th>Private Bus Companies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds provided by direct users</td>
<td>836.0</td>
<td>225.5</td>
<td>340.2</td>
<td>133.0</td>
<td>158.2</td>
<td>1,690.9</td>
</tr>
<tr>
<td>Operating expenses, debt service, and capital outlay financed with federal and state user taxes</td>
<td>740.7</td>
<td>184.6</td>
<td>515.4</td>
<td>149.0</td>
<td>141.8</td>
<td>1,731.5</td>
</tr>
<tr>
<td>Surplus (deficit) funds provided by direct users over expenditures</td>
<td>95.3</td>
<td>40.9</td>
<td>-175.2</td>
<td>-16.0</td>
<td>14.4</td>
<td>-40.6</td>
</tr>
<tr>
<td>Funds provided by indirect users</td>
<td>268.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus (deficit) funds provided by direct and indirect users over expenditures</td>
<td>364.2</td>
<td>40.9</td>
<td>-14.1</td>
<td>-10.3</td>
<td>14.4</td>
<td>395.1</td>
</tr>
</tbody>
</table>

Note: All amounts are in millions of dollars.

*The following adjustments were made in consolidating the statements of the region's facilities: (a) Tax relief granted to commuter railroads in New York State of $12.7 million and in Connecticut of $1 million was not included in operating expenses nor in funds provided by indirect users; (b) tax relief granted to bus companies in New York State of $3.0 million was not included in operating expenses nor in funds provided by indirect users; and (c) user taxes and charges of $7.8 million paid by private bus companies for the use of toll roads, bridges, and tunnels were eliminated from funds provided by direct users and from the operating expenses of these companies.

Table 5. Proposed organizational framework and flow of funds for financing transportation.

<table>
<thead>
<tr>
<th>Governmental Level</th>
<th>Agency</th>
<th>Function</th>
<th>Source of Funds</th>
<th>Use of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>Department of Transportation</td>
<td>Coordinate transportation system for nation</td>
<td>All revenue from transportation-related taxes</td>
<td>Pay states for transportation projects approved by regional planning agencies (surpluses to general fund of federal government)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administer federal transportation trust fund to be set up by federal government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Department of Transportation</td>
<td>Coordinate transportation system in state</td>
<td>All revenue from related taxes</td>
<td>Defray costs of state-operated transportation activities and construction of state highways</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administer state-operated transportation facilities</td>
<td>User charges from state-operated transportation facilities</td>
<td>Transfer to a region of funds from federal transportation fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construct state highways</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administer state transportation trust fund to be set up in each state</td>
<td>Federal transportation trust fund in proportion to funds raised in the region</td>
<td></td>
</tr>
<tr>
<td>Portion of each state in region</td>
<td>Transit Com-</td>
<td>Operate or contract for the operation of transit and commuter service</td>
<td>User charges from operated facilities</td>
<td>Pay region from state transportation funds for transportation projects in proportion to funds raised by states in the region</td>
</tr>
<tr>
<td></td>
<td>muter Authority</td>
<td>Plan for improvement and expansion of transit and commuter facilities</td>
<td>State transportation trust fund (including federal funds)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Receipts from local governments (station maintenance)</td>
<td></td>
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<td>Local government</td>
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<td></td>
<td></td>
<td>Carry out planning, operating, and investment functions relating to transit and commuter operations</td>
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<tr>
<td></td>
<td></td>
<td>Operate and maintain local streets and roads and provide for allied services (including capital outlay)</td>
<td>User charges from operated facilities</td>
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<td>State transportation trust fund</td>
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<td>General funds</td>
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The slowness in implementing financial recommendations is attributable to the greater impact of institutional constraints on such changes rather than those that are purely organizational. Thus, the automobile lobby on the federal and state level is still effective in its opposition to the creation of a single transportation fund, but it has yielded in its blanket opposition to the use of any automobile funds for other transportation purposes. In addition, the majority in the U.S. Senate and the House of Representatives represent other than metropolitan areas; hence, these legislators have resisted the creation of a single transportation fund and oppose any shift in the present balance in the use of funds for highways and transit facilities.

On balance, the major organizational changes that we proposed have been adopted. Although there has been some progress in the direction of the recommended methods of financing, concerted action is still required in this area. Crisis methods of financing, including the use of questionable bookkeeping procedures, are the dominant practice. A unified approach to financing does not yet exist. Thus, the financial data remain essentially the same, and a study conducted in 1971 reveals the same basic needs (11).

The deficit of the region’s transit system increased to $420 million in 1969-70 and can be expected to increase substantially in the future. Although no data are available on the transportation surplus for this period, we would conjecture that an overall surplus existed. Furthermore, even in the absence of a surplus, our financial recommendations would have made it possible to take a more balanced approach to financing transportation and to simplify the problem of allocating funds among individual forms of transportation in order to maximize the effectiveness of the system as a whole. Recommendations for financing public transportation in the 1972 report (11) also reflected this philosophy. Thus, the organizational changes recommended and adopted were only a first step for attaining a balanced and financially sound system.

Studies, however, are only the first step in the slow process of implementing change. One is reminded of the old saying, "You can lead a horse to water but you cannot make him drink." Perhaps if you lead him there often enough he is sure to drink if he wants to survive. The process in government decision-making is similar. Studies of the type presented here may help to show the way. Sooner or later governments must act if metropolitan transportation systems are to remain viable.

REFERENCES
SPONSORSHIP OF THIS RECORD

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