This summary report on the distribution of federal postsecondary education funds in the Western states is presented by the Western Interstate Commission for Higher Education. The basic concerns addressed in the study are: What major federal assistance programs affect postsecondary education? How should federal program assistance to states be measured? How much do WICHE states receive? and Where can additional information be obtained? The major federal programs examined are the Basic Opportunity Grants; the Supplemental Educational Opportunity Grants; College Work Study; National Direct Student Loans; Guaranteed Student Loans; Institutional Development; Social Security Student Benefits; Veteran's Education Benefits; and Federal Research and Development. New gains and losses of federal funds for the entire WICHE region and for each state within the region by program are shown in a series of charts. Various methods of determining a measure for federal program assistance to analyze the impact of programs are given. The method used in this study is to identify reasonable measures of program intent, to develop hypothetical distributions of federal funds using these program intent measures, and finally to compare these hypothetical distributions with actual federal disbursement statistics. (JMF)
Federal Funding of Postsecondary Education in the 13 Western States
Federal Funding of Postsecondary Education in the 13 Western States

by
Kent Weldon and David Makowski

July 1976

A Report by
THE INFORMATION AND ANALYSIS SERVICE
WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION
An Affirmative Action / Equal Opportunity Employer
P.O. Drawer P Boulder Colorado 80302
The Western Interstate Commission for Higher Education (WICHE) is a public agency through which the 13 western states work together—

- to increase education opportunities for westerners
- to expand the supply of specialized manpower in the West
- to help universities and colleges improve both their programs and their management
- to inform the public about the needs of higher education

The program of the WICHE Planning and Management Division was proposed by state coordinating agencies and colleges and universities in the West. The Planning and Management Division designs, develops, and encourages the implementation of management information systems and standard data bases in institutions and agencies of higher education. The specific objectives:

- to provide improved information to higher education administration at all levels
- to facilitate exchange of compatible data among institutions
- to facilitate reporting of information at the state and national levels

The Research and Analysis unit provides the division with a broad range of technical skills and capabilities in the fields of management, science, computer science, statistics, and PSE administration. The unit has these general purposes:

- to develop new technologies, procedures, and products for the division
- to provide analytical services to the PSE community
PREFACE

About the WICHE Information and Analysis Service

Sensing a need for an increased awareness of the purpose and problems of postsecondary education in the West, the WICHE Commissioners instigated, in July, 1975, a special one-year project:

- to make low-cost research capability available to postsecondary education planners and managers in the WICHE region
- to promote better understanding among Western institutions and state agencies through analysis of critical issues
- to provide a basis of standard information upon which the WICHE higher education community can draw on when communicating with elected and appointed government officials

About This Study

In the fall of 1975, the Planning and Management Divisional Committee of the WICHE Commissioners directed the WICHE Information and Analysis Service to study the distribution of federal postsecondary education funds in the Western states. A report on this study was presented to the WICHE Commission in December of 1975. At this time the Commissioners directed project staff to prepare a brochure for wide distribution, summarizing the more detailed report.

The data used in this study to analyze the distribution of federal funds in the WICHE states was transcribed from a variety of government publications and, in several cases, from unpublished manuscripts. A central difficulty in analyzing federal assistance to higher education is that there are no comprehensive reports on data bases to assist in these investigations.

This brochure addresses several basic concerns of the study:

- What major federal assistance programs affect postsecondary education?
- How should federal program assistance to states be measured?
- How much do WICHE states receive? Where can additional information be obtained?

About the Conclusions Reached This Study

The analyses conducted in this study revealed substantial disparities in nearly all federal programs between the funds actually received by states and the funds which would appear to be appropriate, given the intent of the laws creating those programs. Although this conclusion is reached for a variety of major federal programs, a number of caveats should be kept in mind:

- While the legislation creating some federal assistance programs is quite specific concerning the allocation among the states of federal funds, other programs have less specific indication of legislative intent. In these cases, the analysis must make assumptions regarding what distribution of funds
would best match legislative intent as is suggested by public records.

- The data used for these investigations have been transcribed from a number of government publications for fiscal year 1974. These data are not necessarily indicative of the distribution of federal funds in FY 76. Indeed, some programs, such as the Basic Opportunity Grants, have rapidly changing funding patterns.

- This study has examined only major federal program expenditures. A large number of smaller programs could be similarly investigated.

- The distribution of federal program funds in the West is clearly dependent on the extent of participation from states, institutions, and students. In some cases, the Western states do not participate to the extent allowed by legislative intent. Because of this fact, no statements can or should be made concerning possible program administration biases for or against the Western states.

Intended Uses of This Study

Studies of this type often lead to claims of maladministration of programs (at all levels) or, more often, assertions of inequity in distributing public funds. This study is directed toward neither of these claims, but rather is intended to address a number of more immediate and constructive objectives:

- to inform the education community of potential opportunities for federal funding that are not fully utilized at present;
- to encourage state agencies and other public institutions to become more aware of the size and economic impact of federal education programs in the West;
- to provide an information mechanism through which some of the funding relationships among the federal government, states, institutions, and students can be investigated;
- to examine and continually re-examine from a state perspective both the national objectives that various federal programs address and the periodic measurements that permit evaluation of the processes embodied in such programs.

The authors sincerely hope the reader will adopt these perspectives in interpreting the text that follows.
Federal aid to postsecondary education amounted to nearly $9 billion in the 1973-74 fiscal year. The final report of the National Commission on the Financing of Postsecondary Education\(^1\) noted that these funds are channeled to the education community through at least 350 federal programs, each with unique purposes and allocation criteria. Careful study of each of these programs would involve individual information requirements, contacts, and legal interpretations.

By far the greatest share of these funds—in excess of 85%—is distributed through fewer than a dozen programs. Yet even when the scope of investigation is restricted to these programs, a number of questions remain difficult to answer:

- **What federal objectives are being served by the various grant programs?** It is perhaps most accurate to state that each program addresses a unique set of requirements and recipients as defined in its authorizing legislation, rather than addressing a comprehensive set of federal objectives and goals. Indeed, some programs seem to have conflicting or counteracting objectives.

- **What—or who—actually receives federal funding?** Surprisingly, the federal government does not undertake any comprehensive after-the-fact study of exactly who received federal funds. For example, it is virtually impossible to determine the location, socioeconomic status, or career plans of students receiving federally-insured student loans.

- **What constitutes a “reasonable” distribution of federal funds?** Although the distributions for some programs are specified by law, a number of programs are entrusted to a federal department or agency for distribution without specifying what was really intended by Congress.

### Principal Federal Programs

Table I contains a summary of the major federal programs investigated in this study. The selection of these programs was governed by the following guidelines:

- **Include** only those programs disbursing significant (in excess of $100 million in assistance) funds.
- **Exclude** postsecondary education programs dealing specifically with manpower objectives rather than educational objectives.
- **Lump** all federal research and development expenditures into one category of assistance. While detailed research and development funding data (by federal agency and program) is available, these expenditures seem to reflect substantially similar federal objectives and allocation procedures.

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**TABLE I: MAJOR FEDERAL EDUCATIONAL ASSISTANCE PROGRAMS**

<table>
<thead>
<tr>
<th>Program</th>
<th>FY 74 Size (Millions)</th>
<th>For Whom?</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic Opportunity Grants</td>
<td>535</td>
<td>Qualified Undergraduates</td>
<td>This is a need-based program which, at full funding, provides grants to students of $1,400 per year, less expected family contribution. The grant cannot exceed one-half the student's cost of attendance. With information on student costs (tuition, etc.) and the student's expected family contribution, the institution can determine directly the amount of a student's Basic Grant.</td>
</tr>
<tr>
<td>2. Supplemental Educational Opportunity Grants</td>
<td>210</td>
<td>Qualified Undergraduates</td>
<td>SEOG grants are made directly to institutions, who subsequently select students for the awards. Grants awarded to students cannot exceed $1,500 per year or one-half the amount of other student aid provided by the institution. However, each grant must be matched by the institution from any source under its control.</td>
</tr>
<tr>
<td>3. College Work-Study</td>
<td>200</td>
<td>Qualified Students</td>
<td>This program provides grants to institutions for partial reimbursement of wages paid to students working on-campus or off-campus in public or nonprofit organizations. The grants cover 80% of the wages, with the remainder paid by the institution, employer, or other donor.</td>
</tr>
<tr>
<td>4. National Direct Student Loans</td>
<td>286</td>
<td>Qualified Students</td>
<td>This program assists in the establishment of funds at institutions of higher education for making low-interest loans to graduate and undergraduate students. Grants to the institutions make up 90% of the loan fund, with 10% contributed by the institution. Students are limited to $5,000 in undergraduate loans and to $10,000 for graduate and professional students, including loans for undergraduate study.</td>
</tr>
<tr>
<td>Program</td>
<td>FY 74 Size (Millions)</td>
<td>For Whom?</td>
<td>Characteristics</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5. Guaranteed Student Loans</td>
<td>206</td>
<td>Qualified Students</td>
<td>This program provides for low-interest deferred loans. The loan principal is provided by participating lending institutions and this loan is then insured by the federal government. A student may receive up to $7,500 in loans as undergraduates and up to $10,000 as graduate students (including undergraduate loans). Students submit to the lender a recommendation by the educational institution as to the amount of the loan needed.</td>
</tr>
<tr>
<td>6. Institutional Development</td>
<td>98</td>
<td>Developing Institutions</td>
<td>This program (Title III of Higher Education Act of 1965) provides institutional support to strengthen developing colleges through funding programs in faculty growth, curriculum improvement, administrative development, and student services.</td>
</tr>
<tr>
<td>7. Social Security Student Benefits</td>
<td>717</td>
<td>Beneficiaries</td>
<td>These federal outlays are really an extension of a child's benefit which operates in the absence of a principal wage earner. Benefits are dependent on the deceased or disabled worker's earnings, demographic characteristics, and number of other dependents. Cost of the student's educational program is irrelevant.</td>
</tr>
<tr>
<td>8. Veteran's Education Benefits</td>
<td>2500</td>
<td>Beneficiaries</td>
<td>These benefits are paid for student assistance at approved postsecondary education institutions for (1) surviving wives and children, (2) discharged veterans, and (3) active service employees in special programs. Most of these benefits are termed &quot;educational readjustment,&quot; and the dollar benefit is dependent on age, years in service, type of institution, number of dependents, etc.</td>
</tr>
<tr>
<td>9. Federal Research and Development</td>
<td>2300</td>
<td>Qualifying Institutions</td>
<td>Funds for these grants and contracts come from nearly all federal executive departments and agencies.</td>
</tr>
</tbody>
</table>
HOW SHOULD FEDERAL PROGRAM ASSISTANCE TO STATES BE MEASURED?

Analyzing the Impact of Programs

Tabulations of the amount of federal dollars spent in the states tend not to have great utility in themselves, for three reasons. First, it is impossible to guess what distribution of funds is appropriate. Second, it is generally necessary to relate these funds to those who use, or benefit from, the federal program. Computing per-student awards is one effective way of doing this. Third, the distributions pose policy questions, such as what can be done to increase one state’s share of funds?

The primary analysis problem is to develop appropriate methods of comparing statistics on federal program funding. The approach taken in this study is to identify reasonable measures of program intent, to develop hypothetical distributions of federal funds using these program-intent measures, and finally to compare these hypothetical distributions with actual federal disbursal statistics.

Identifying these measures (for example, state population, or high school graduates) is never a perfect process because the measures themselves may not be specified in the law to indicate congressional intent. The process finally used to allocate public funds may be a function of political interests, discretion of federal officials, active (and effective) operations in certain states, and reliability of existing data. Nevertheless, there is considerable merit in investigating these funding distributions and impacts, in order to continually monitor and evaluate the nature of federal funds flowing into a state.

Hypothetical Distributions of Funds

Suppose that an educational revenue-sharing program has $20 million available for distribution in California, Colorado, and Washington. Lacking a more specific indication of program intent, either state population or undergraduate students might be considered reasonable measures. The results of using each method to distribute these funds are recorded below.

<table>
<thead>
<tr>
<th></th>
<th>Using Population 1 to Distribute Funds</th>
<th>Using Undergraduates 2 to Distribute Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Amount Distributed</td>
</tr>
<tr>
<td>California</td>
<td>20,601,000</td>
<td>$15,567,310</td>
</tr>
<tr>
<td>Colorado</td>
<td>2,437,000</td>
<td>1,841,539</td>
</tr>
<tr>
<td>Washington</td>
<td>3,429,000</td>
<td>2,591,151</td>
</tr>
<tr>
<td></td>
<td>26,467,000</td>
<td>$20,000,000</td>
</tr>
</tbody>
</table>

1 Source: 1975 Statistical Abstract of the United States
2 Source: 1974 Opening Fall Enrollments (NCES)
Comparison of Actual and Hypothetical Distributions of Funds

<table>
<thead>
<tr>
<th></th>
<th>Using Population</th>
<th>Using Undergraduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Share</td>
<td>Expected Share</td>
</tr>
<tr>
<td>California</td>
<td>$15,437,501</td>
<td>$15,567,310</td>
</tr>
<tr>
<td>Colorado</td>
<td>1,655,804</td>
<td>1,841,539</td>
</tr>
<tr>
<td>Washington</td>
<td>2,906,695</td>
<td>2,591,151</td>
</tr>
<tr>
<td>$20,000,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The computations above could subsequently be compared with actual distribution of funds in order to make some assessments of the overall actual distribution, relative importance to the individual states, and potential causes of unexpected distributions.

Thus, regardless of whether population or undergraduates was considered to be the more appropriate allocator, both California and Colorado would likely begin asking why their shares, while substantial, are proportionately smaller than Washington's. (Note that while neither $129,809 nor $255,935 is a large “error” for California, a discrepancy for Colorado of $185,735 is a quite significant 11.2 percent. Our example raises several important points:

- Without referring to legislation or relevant regulations, both measures seem reasonable, yet result in substantially different fund allocations.

- Even when discrepancies (gains or losses) are found, the reasons for them are not necessarily obvious. Some states may be more effective than others in obtaining federal funds, the measure chosen may not be appropriate, the federal distribution may be in error, or some states may have decided not to fully participate in some programs.

- Instead of focusing on the gain (or loss) of actual dollars, it may be more appropriate to examine the relative importance of these funds. For example, California might well not worry about $256,000 shortfall in a $15.4 million allocation, whereas a similar shortfall for Colorado would have substantially greater significance.

Measures Used in This Study

Table II contains a description of the measures used for the various federal programs in this study. While these measures appear reasonable given federal law and regulations, the cautions noted above should be used to place interpretations of the findings in the following pages in perspective.

How Much Do the WICHE States Receive?

Using the comparison strategy just developed, the effective gain or loss of federal funds can be calculated for each WICHE state. The results of
TABLE II: MEASURES USED TO CALCULATE STATE SHARES

<table>
<thead>
<tr>
<th>Program</th>
<th>Basis for Computing Expected Share</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic Opportunity Grants</td>
<td>Low-income Undergraduates</td>
<td>This is the “apparent” intended population allotment, based on full-time undergraduate students.</td>
</tr>
<tr>
<td>2. Supplemental Educational Opportunity Grants</td>
<td>Undergraduates</td>
<td>Allotment is based on full-time undergraduate students.</td>
</tr>
<tr>
<td>3. College Work-Study</td>
<td>Undergraduates</td>
<td>Allotment is based on (a) full-time higher education students, (b) high school graduates, and (c) the number of related children under 18 living in families with incomes of less than $3,000.</td>
</tr>
<tr>
<td>4. National Direct Student Loans</td>
<td>Undergraduates</td>
<td>Allotment is based on full-time higher education students.</td>
</tr>
<tr>
<td>5. Guaranteed Student Loans</td>
<td>Undergraduates</td>
<td>Suggested by description of student eligibility.</td>
</tr>
<tr>
<td>6. Institutional Development</td>
<td>Population</td>
<td>There is no specified or suggested basis for allocating these funds.</td>
</tr>
<tr>
<td>7. Social Security Benefits</td>
<td>College-age Population</td>
<td>Benefits should be distributed approximately the same as the total population.</td>
</tr>
<tr>
<td>8. Veteran’s Educational Benefits</td>
<td>College-age Population</td>
<td>Benefits should be distributed approximately the same as the total population.</td>
</tr>
<tr>
<td>9. Federal Research and Development</td>
<td>Graduate Students</td>
<td>Research and development funding should vary with the ability of an institution to perform research.</td>
</tr>
</tbody>
</table>

In each case, a hypothetical distribution of federal program money has been determined by proportioning the total funds available among the states, using appropriate measures (for example, population, undergraduate students) for each program. These hypothetical allocations have then been subtracted from actual program distributions to determine the net gain or loss for each program in each state. These differences have then been displayed in bar chart format. Note that the amount actually distributed to a state is shown along the base line of each bar chart.
FY 74 NET GAINS AND LOSSES OF FEDERAL FUNDS FOR THE ENTIRE WICHE REGION, BY PROGRAM

Sources: Bureau of Postsecondary Education Factbook
Office of Economic Opportunity
FY 74 in Summary
1975 Statistical Abstract of the U. S.
Unpublished Sources
(Data for the individual state bar graphs on the following pages also were derived from these sources.)

Note: The bar chart shows the difference between actual funds received and a hypothetical distribution of funds, based on allocators described previously. Dollar figures on the base line are actual fund obligations.

Legend: BOGS = Basic Opportunity Grants
SEOG = Supplemental Educational Opportunity Grants
CWS = College Work—Study
NDSL = National Direct Student Loans
GSL = Guaranteed Student Loans
DI = Developing Institutions
SSA = Social Security Student Benefits
VA = Veteran’s Educational Benefits
R&D = Research and Development
Observations About Regional Analyses

The process we have used to investigate the distribution of federal funds to the WICHE states obviously can be used to study other states and other regions as well. A summary of program fund distribution across regions appears in Table IV.

As we have noted, such statistics are useful primarily in developing rough assessments of the distribution and impact of federal assistance. Because the measures chosen for this study are simplistic representations of complex legal and operational criteria, there is no reason to expect exact correspondence between hypothetical distributions based on our ad hoc measures and actual federal distributions. On the other hand, these statistics do provide a basis for asking further questions about specific allocation criteria, program interpretation and operations, and relative state-level effectiveness in securing funds.

In the case of regional comparisons, it should be remembered that there is perhaps less rationale for specific comparisons involving groupings of states than for specific state-by-state studies. Regional analyses tend to assume that within individual regions, the states are homogenous and behave in similar ways. Thus data for large and small industrial and agricultural states, or heavily taxed and lightly taxed states, can be grouped together into a regional statistic that effaces the individual peculiarities of component states, counties, institutions, and students.

The following observations are supported by the detailed project research report.

- A substantial proportion of Basic Opportunity Grant dollars is being redistributed
from the Great Lakes and Plains, Northeast, and WICHE regions to support students in the South Atlantic and South Central regions. While there are greater percentages of low-income students in the South Atlantic and South Central regions, there is indication that even greater percentages of federal funds are being used to provide assistance to them.

- Taken as a whole, the WICHE region receives substantially less than the share which its proportion of the nation's undergraduates would suggest as appropriate under the public laws describing Supplemental Educational Opportunity Grants, College Work-Study Grants, and National Direct Student Loans. Some WICHE states appear to be underutilizing the federal funds available to them under these programs.

- In the Guaranteed Student Loan Program, 57 percent of the total federal dollars available are being used by nine states representing roughly 35 percent of the students. No WICHE state receives its apparent proportionate share of funds from this program.

- The WICHE states with the smallest numbers of postsecondary education students (Idaho, Montana, Nevada, Wyoming) clearly are not receiving much in the way of Developing Institutions funding to strengthen their operations. This probably is due primarily to the current interpretations of this law by federal program officers, under which the funds are used mainly to support black institutions in the nation's southeast region.

- The WICHE states account for only 18.3 percent of the college-age population, yet receive 31.8 percent of all Veterans Administration benefits. This percentage difference translates into a net gain of nearly $340 million for the WICHE region. This suggests that the allocator used in this study is a poor representation of the distribution of beneficiaries. It does, however, reveal an unexpectedly large source of student assistance in the WICHE states—primarily California, Oregon, and Washington.

- Using the previously identified set of allocators to represent proportionally the intent of various federal programs, only the WICHE region shows a net gain or advantage from federal outlays. Further, this advantage is accounted for solely by veterans benefits and research and development grants. The WICHE states receive less than a proportional share of dollars in every other major federal program studied.

Related Resource Materials for Educational Planners


- Bureau of Postsecondary Education Factbook. Unpublished document updated yearly and available at no charge from the Bureau of Postsecondary Education. Summarizes the nature of each federal assistance
### TABLE IV: THE NET DOLLAR IMPACTS OF VARIOUS FEDERAL POSTSECONDARY EDUCATION PROGRAMS ON REGIONS OF THE UNITED STATES

(Data reported in millions of dollars)

<table>
<thead>
<tr>
<th>Region</th>
<th>BOGS</th>
<th>SEOG</th>
<th>CWS</th>
<th>NDSL</th>
<th>GSL</th>
<th>Dev. Inst.</th>
<th>SSA Benefits</th>
<th>VA Benefits</th>
<th>R &amp; D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Lakes and Plains</td>
<td>(3.7)</td>
<td>6.6</td>
<td>.2</td>
<td>8.6</td>
<td>4.7</td>
<td>(14.1)</td>
<td>(1.7)</td>
<td>(123.9)</td>
<td>74.2</td>
</tr>
<tr>
<td>Northeast</td>
<td>(1.2)</td>
<td>2.3</td>
<td>(2.8)</td>
<td>(1.9)</td>
<td>33.6</td>
<td>(17.5)</td>
<td>17.9</td>
<td>(185.9)</td>
<td>25.1</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>5.5</td>
<td>(2.4)</td>
<td>5.7</td>
<td>(1.9)</td>
<td>(13.7)</td>
<td>23.8</td>
<td>(9.0)</td>
<td>15.6</td>
<td>3.3</td>
</tr>
<tr>
<td>South Central</td>
<td>9.7</td>
<td>(1.6)</td>
<td>9.1</td>
<td>(1.9)</td>
<td>(13.9)</td>
<td>18.3</td>
<td>(4.5)</td>
<td>(14.6)</td>
<td>57.2</td>
</tr>
<tr>
<td>WICHE</td>
<td>(10.0)</td>
<td>(5.0)</td>
<td>(12.1)</td>
<td>(7.5)</td>
<td>(11.2)</td>
<td>(10.5)</td>
<td>(2.8)</td>
<td>340.1</td>
<td>104.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measure Used in This Study</th>
<th>Low-income Under-graduates</th>
<th>Under-graduates</th>
<th>Under-graduates</th>
<th>Under-graduates</th>
<th>Under-population</th>
<th>College-age Population</th>
<th>College-age Population</th>
<th>Graduate Student</th>
</tr>
</thead>
</table>

**Note:** Figures in parentheses are negative.

**Note:**
1. Great Lakes and Plains Region contains IL, IA, IN, KS, MI, MN, MO, NB, ND, OH, SD, WI
2. Northeast Region contains CT, ME, MA, NH, NJ, NY, PA, RI, VT
3. South Atlantic Region contains DC, DE, FL, GA, MD, NC, SC, VA, WV
4. South Central Region contains AL, AR, KY, LA, MS, OK, TN, TX
5. West (WICHE) Region contains AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

Program and provides basic statistics (including state allocations) for each program.

- **Student Aid: Description and Options.**

- **Fiscal Year 1974 Federal Outlays in Summary.**
  U.S. Office of Economic Opportunity Publication FIXS-74-53. Available only through NTIS. Summarizes a number of similar individual documents (one per state) and contains a detailed account of federal funds, by program, allocated to states. The more detailed documents contain information on funds distributed to counties and large cities within particular states.

- **Federal Aid to States—Fiscal Year 1974.**