

Will S. Myers, Advisory Commission on Intergovernmental Relations

The number of federal categorical grant-in-aid programs available to state and local governments stood at 481 as of January 1, 1978, according to a tally made by one of my colleagues at ACIR. About one-third of these grants, in numbers not in amount, were formula-based--that is, were either allotted by formula (109), or were project grants subject to formula distribution (41), or open-end reimbursement grants (15). There has been a tendency for the number of formula-based grants to increase--146 in 1975 to 165 in 1978.

Although formula grants have been a staple of American federalism for almost 200 years, they have been the object of intense study for a very short period. The Nixon Administration reacted to the proliferation of project grants by seeking their replacement with general, rather than specific, purpose programs. The result was general revenue sharing and block grants of multi-billion dollar proportions under which federal funds are made available automatically to eligible recipients who meet the requirements and conditions established by statute or regulation. States and localities received a further surge of formula grant funds when Congress and the President enlisted these governments in the effort to stabilize the economy with countercyclical funds.

The major distinction between earlier formula grants and those of today is the nature and number of eligible recipients. Formula grants originally reflected two-tiered federalism--a sovereign national government and the sovereign states. The national government distributed funds to the states according to a formula. It was then up to the states to decide whether and how the funds would get to local government.

Today our federal system is more complex and so are the formulas. The national government has, in effect, opened grant accounts with 38,000 units of local general government, and with numerous school and special district governments, as well as with numerous quasi-governmental institutions.

The premise which makes federal formula-based grants feasible is that Congress can identify state and local governments in such a way as to target funds that will then be distributed to carry out the aided function. The premise and the performance are frequently difficult to square, as the history of general revenue sharing (GRS) illustrates.

#### The General Revenue Sharing Case

Although the formula-based grant approach ostensibly is neutral with respect to how states and local governments are

organized, nothing could be further from the truth. The Census of Governments categorizes local governments under several headings. Units of local general government are counties, municipalities, and towns and townships. Special purpose local governments include school districts and special districts. This useful classification system--for Census purposes--does little justice, however, to the infinitely complex character of our federal system and fails spectacularly, in some instances, to define how responsibility is divided as between state government and local government and which local government is responsible for the delivery of the service.\*

Obviously, there are commonalities among the fifty states with reference to their systems of local government but one is hard pressed to identify them. Clearly, one is not talking about governments with essentially similar responsibilities when referring to counties in Maryland and counties in Maine, nor is one talking about a set of similar service delivery responsibilities when referring to New Jersey townships and townships in the Midwest.

#### Eligibility

The principal policy issues that are raised by formula based grants are easy to identify and exceedingly difficult to resolve. The issues can be catalogued under the headings: determining eligibility, measuring need, measuring capacity and effort, and adjusting for geographic or regional factors.

Variability and complexity of local structural patterns make the task of developing a formula-based federal grant extremely hazardous. The inclusion of governments in federal formula-based grants based on their categorization by the Bureau of the Census lumps unlikes together and puts a major financial obstacle in the way of states that may be seeking to phase out one form of local government or shift functions from one category of local government to another.

We know from a recent special tabulation by the Bureau of Census that no less than 11,600 local units of general purpose government had no full-time employees, close to 2,500 have only one full time employee, and another 3,800 have 2 to 5 full time employees. Some governments are small because they need not be large. Some governments are small because they have little if anything to do. The question is whether they are entitled to federal formula-based aid simply because they are there?

It is not far fetched to suggest that statistics are a major reason why there are so many recipients of federal general revenue sharing. The Bureau of the Census does not differ-

entiate between general purpose townships (New England and New Jersey types) and limited (or special) purpose townships (rural townships that are superseded by municipalities as in many Midwestern states).

The SCOTS (Some Citizens Opposing Township Spending) an intervillage organization working to abolish Illinois' obsolete township government contends that the inclusion of limited purpose townships in a program designed for general purpose governments has subsidized obsolescence, encouraged duplication, shortchanged municipalities and counties and, in general, diminished the efficacy of the revenue sharing program itself. The SCOTS could have gone on to contend that the inclusion of townships introduced further complexity in a complicated formula and probably precluded improvement in the classification and understanding of the role of various governments in the federal system.

The advent of federal-local formula grants raises important questions about statistical series. In the ordinary course of events the formula grant specifies who is eligible. This puts a premium on knowing how functional responsibilities are shared as between state and local governments and among local governments if the grant has a functional purpose--say, community development, or employment training. We have already noted the difficulties of determining that from the main classification of governmental units. The introduction of a population cut off is no assurance that the selection of eligible grant recipients will be improved. Allegheny County, Pennsylvania--with a population of better than 1.5 million--has incorporated governmental units from wall to wall and is largely a service organization for either the state or for the county's fragmented small units of government.

#### Needs Measurement

Assuming a solution (whether or not satisfactory) to the eligibility question, the next issue is to develop a formula that responds to the problem condition. Some measures of need can be developed for the 50 states and for the 48 largest cities, or the 85 largest standard metropolitan statistical areas. But, the larger the number of eligible units and the more localized the problem, the greater the difficulty generally of finding an adequate measure of the problem condition.

Formula-based grants usually embody either of two approaches to the measurement of problem conditions because it is rare indeed to find a single readily available and direct measure of need. One approach is to include in the formula the best available proxy indicator of the problem condition. In earlier times, this proxy frequently was population. With the increasing number of grants and problem conditions, subsets of the population with specified characteristics are frequently used as proxies. Physical features have been used as proxies for need--percentage of housing built before 1939 is one of the factors in the community development block grant program.

Surrogates for need add complexity to an already complex situation. At times there is a lack of congruence between the data base for the surrogate and the recipient government, particularly with local governments. As aid programs focus on more localized measures of need the data base--other than the decennial census--usually thins out. When enactment of the Anti-Recession Fiscal Assistance program required unemployment rates on a tight time schedule for local general purpose governments, the Commissioner of Labor Statistics in testimony before a House Subcommittee described the legislation as "really years ahead of BLS' ability to produce required statistics at reasonable levels of accuracy."

In the case of anti-recessionary fiscal assistance the measure of the problem condition is compounded. The general revenue sharing entitlement is the fundamental allocator which is then modified by the local unemployment rate to determine the ARFA entitlement. Under the circumstances one could suggest that the formula results in compounding formula factors of dubious accuracy.

The use of local unemployment rates to allocate CETA and ARFA funds produces potentially anomalous results since unemployment does not really measure a local government's service responsibilities or its fiscal burdens. Not only are unemployment rates not an indicator of government fiscal need, the available local unemployment rates are also of poor quality and therefore unreliable for the purpose of distributing fiscal assistance. The justification for their use boils down to being, "They are all we have."

#### Measuring Capacity and Effort

Eligibility, problem need, and recipient capability are three concepts that run through formula-based federal grants. Recipient capability can take several forms. In general revenue sharing it translates to tax effort--taxes divided by personal income. In other grants, personal income itself is the proxy for recipient capability. Whatever the measure, its availability thins out as it is sought for smaller municipalities and townships.

The effort and cost of determining personal income below the county level is substantial and varies greatly from state to state. The midwest states with their townships present the most acute problem. Simple governmental structures such as those in Maryland and Virginia and across much of the South are easier to deal with statistically than the situation of overlapping governments as found in the midwestern states.

The Advisory Commission on Intergovernmental Relations has been in the forefront of an effort to improve the measurement of fiscal capacity and tax effort. Researchers who worked with the Commission at one time or another during the past 15 years developed the representative tax system approach to the measurement of fiscal

capacity. More recently, Kent Halstead of the National Institute of Education published Tax Wealth in the Fifty States which generated estimates of fiscal capacity for the state-local systems by computer. Although substantial effort has been devoted to applying the representative tax system approach at the local level, it has never proved feasible because of the complexity and variety of local government structures and therefore their methods of financing and the lack of local data for determining the local tax base.

#### Adjusting for Geographic Bias

When the Frostbelt-Sunbelt controversy erupted in 1976 federal formula-based grants became a center of attention.\*\* It was alleged that the failure of such grants to recognize the variation in cost-of-living as between the two regions leads to a systematic bias against the slow growth regions. Cost-of-living adjustments presumably could be made to measures of local capability such as personal income or the poverty threshold level.

The study of this issue is proceeding along two fronts. One question is whether the cost-of-living data are abundant enough to operationalize an adjustment factor. Secondly, policymakers on advice from statisticians will have to decide whether an adjustment factor would produce measurably better fiscal consequences.\*\*\* This latter question is particularly aggravating because the analysis of the effects of federal grants on regional economic growth and development is still in the embryonic stage. Moreover, it is not at all clear that, for example, federal assumption of welfare costs wouldn't be a substantially greater benefit to the frostbelt states than would be a cost-of-living adjustment.

#### Policy Issues

Concern about the use and abuse of federal statistics has been heightened by federal formula-based aid to states and localities. Statisticians now face the awesome responsibility of gathering and reporting data that will trigger the start and end of substantial money flows between governmental levels, determine which governments receive financial aid, and in what amount. Policymakers will ask statisticians to produce an ever increasing variety and specificity of data as growth in aid decelerates after the surge of the mid 1970's.

New pitfalls and shortcomings in data for formula-based grants will appear as computers arrange and rearrange data to achieve political acceptance. The contribution of formula based grants to the rigidity of statistical definitions and their interpretation--such as whether certain townships are general governments--must be added to the statisticians' traditional concerns for accuracy and availability of data. The statistical policy working papers now emerging from the Office of Federal Statistical Policy and Standards provide new insights on the accuracy and availability concerns.

#### Accuracy

The ultimate concern for the statistician has to be the insatiable appetite of the policy-makers for quantification regardless of its quality. A recent experience suggested to me that statisticians have their hands on the levers of power.

Those of us who have been following the subject content of the 1980 Census have witnessed a most interesting policy problem. Numerous requests came from agencies for data on the incidence and severity of disability. The July 1978 issue of 1980 Census Update begins with the "disability item." Evidence from the National Content Test and a subsequent reinterview suggests that people have very diverse views on what constitutes disability. It has been proposed to the Federal Agency Council that the disability item be omitted. The fear is that eagerness for disability data would overwhelm any explanations of its limitations. It would likely be put to important programmatic use as soon as it was released. The disability question has not yet been resolved. Other collection methods and other data may be developed or perhaps existing data can be massaged to respond to the demand for knowledge on disability. The lesson this experience conveys to me is somewhat disheartening. Statisticians might have to resort to the defense of not collecting data to avoid misleading policymakers.

Policy analysts sometime contend that they only know of three kinds of data, the imperfect, the forthcoming, and the unavailable. The disability question raises an excellent issue that statisticians and policymakers ought to confront. Is it possible for policymakers and statisticians seriously to discuss and develop criteria which will determine whether specific data sets attain that degree of accuracy needed to undergrid sound public policy?

The possibilities for debasing the effort of statisticians in the working of formula-based grants are infinite. If the data set produces a result that is not exactly capable of achieving political acceptability there is no need to worry, another formula can be developed, or weights can be assigned to the formula factors, and grant recipients can be given the option of one or another formula.

Thus, under the Community Development Block Grant program an area with a population over 50,000 that applied to HUD is allocated money according to one of two formulas. The first formula, established by the 1974 version of this act, includes the variables of population (weighted .25), housing overcrowding (weighted .25), and the extent of poverty (weighted .50) in its calculations when determining the amount to be allocated. The 1977 formula calculates the grant amount by using the factors of population growth lag (weighted .2), extent of poverty (weighted .3), and age of housing (weighted .5). Cities and urban counties receive the greater

of the two amounts as computed by these two formulas.

Evidence has already begun to accumulate suggesting that the next phase of formula-based grants will involve factors showing direction and change in the measure of need and in the measure of capacity and effort of eligible aid recipients. As this occurs, formula-based federal grants will be characterized by progressive remoteness from the underlying statistical base.

### Rigidity

Formula-based grants and the rigidity they give to governmental arrangements are a source of concern for those interested in the structure and organization of the public sector.

The lock-in of statistical constructs that have been adopted for formula-based aid programs already thwarts efforts to reflect the variation in institutional arrangements among the 50 state-local governmental systems. The Trenton, New Jersey Sunday Star-Ledger carried a report as recently as February 26, 1978 that officials in Paterson, Montclair, and Trenton are working together to try to change the statewide distribution of federal revenue sharing funds. Why? Because they are losing thousands of dollars through a quirk in the law that lets townships compete for general revenue sharing dollars under a separate pool than the one in which cities, towns, and villages compete.

When a statistic is incorporated in a contract such as a formula-based federal grant program it gains a life of its own, separate and apart at times from its validity as a descriptor of current circumstances.

### Summing Up

Formula grants have fomented what can aptly be described as an analytical revolution. Com-

puters are lined up in grand array to improve formula grant targeting, to better measure need, and to identify fiscal capacity and effort of governments that presumably cope with the problem. Computers are the storm troops in this revolution because they permit the construction of ever more complex formulas and the rapid consideration of the results of applying many more alternative formulations.

The interest in formula grants emanates from both federal bureaucrats who are anxious to get more results from budgets that are unlikely to grow as fast in the future as in the past and from state and local governments that are continuously in pursuit of federal dollars to ease their persistent relative financial stringency.

The advent of the formula grant portends continual pressure on the statistical community to defend current measurement practices, and to develop new data sets and, as is most likely, to maintain existing data series until their last contribution to public policy purposes is finally extracted.

---

\*G. Ross Stephens and Gerald W. Olson, State Responsibility for Public Services and General Revenue Sharing, University of Missouri--Kansas City.

\*\*Special Report: Federal Spending: The North's Loss Is the Sunbelt's Gain, National Journal, June 26, 1976, pp. 878-891.

\*\*\*Poverty Studies Task Force, The Measure of Poverty: A Report to Congress as Mandated by the Education Amendment of 1974, U.S. Department of Health, Education, and Welfare, April 1976, pp. 82, 86, and 90.