BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

Removing Tiering From The Revenue Sharing Formula Would Eliminate Payment Inequities To Local Governments

The 3-factor General Revenue Sharing formula provides a reasonable approach for allocating funds; it generally provides more funds to those local governments most in need and deserving of assistance by reason of relative population, income, and tax effort. However, because of quirks in the distribution calculation procedures, governments in similar circumstances can receive grossly varying amounts of assistance.

This effect is caused by the statutory tiering procedure whereby funds are first allocated to county geographic areas before being allocated by formula to the individual jurisdictions within the county. These funding inequities caused by tiering have motivated some New Jersey jurisdictions to change their governmental classifications to increase their revenue sharing aid at the expense of other local governments in the same county.

GAO recommends that the Congress amend the Revenue Sharing Act to eliminate the geographic tiering procedure for allocating funds within a State.

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APRIL 15, 1982

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

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To the President of the Senate and the
Speaker of the House of Representatives

This report discusses inequities in the distribution of General Revenue Sharing funds which are caused by the statutory tiering procedure. Under this procedure, funds are first allocated to county geographic areas before being allocated to individual jurisdictions within the county. We made the review to provide the Congress with a comprehensive analysis of the effect tiering has on funding distribution patterns.

Copies of the report are being sent to appropriate Senate and House committees; the Director, Office of Management and Budget; the Secretary of the Treasury; the Director of the Office of Revenue Sharing; and the Chairman of the Advisory Commission on Intergovernmental Relations.

Charles A. Bowsher

Comptroller General
of the United States

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

REMOVING TIERING FROM THE REVENUE SHARING FORMULA WOULD ELIMINATE PAYMENT INEQUITIES TO LOCAL GOVERNMENTS

D I G E S T

The 3-factor General Revenue Sharing Program formula is designed to allocate more aid to local governments with large populations, low per capita incomes, and high levels of tax effort. The formula provides a reasonable approach for allocating funds; its overall performance is quite good.

However, in 1980, GAO identified widespread differences in per capita revenue sharing aid to governments within a State although the governments were in similar circumstances. GAO concluded that these funding inequities were easily correctable because they were created primarily by the statutory tiering procedure whereby revenue sharing funds within a State are first allocated to county geographic areas before being allocated by formula to the individual jurisdictions within the county. This review was made to ascertain how the tiering procedure introduced the funding inequities and to determine whether the funding shifts resulting from detiering the formula followed any consistent pattern. (See p. 1.)

Most of the revenue sharing funding inequities GAO identified can be corrected by eliminating the tiering procedure from the allocation process so that all local governments within a State compete for funds on the basis of their own characteristics of population, income, and tax effort. GAO therefore recommends that the Congress amend the Revenue Sharing Act to eliminate the geographic tiering procedures for fund allocations. (See p. 25.)

TIERING INTRODUCES INEQUITIES INTO THE 3-FACTOR FORMULA

Revenue sharing allocations to city and township governments result from three sources: (1) the three formula elements of population, relative income, and tax effort applicable to each unit

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of local government, (2) statutory formula constraints, and (3) the statutory tiering distribution procedure.

In general, the tiering procedure works as follows: within each State, revenue sharing funds are first allocated to county geographic areas using the 3-factor formula of population, per capita income, and tax effort. Once the county area (not government) allocation is established, an amount is set aside for any Indian tribes and Alaskan native villages based on the ratio of their population to the total population of the county area. The remainder is subdivided, on the basis of non-education tax collections, into as many as three separate allocations--one for the county government, one for the cities in the county, and one for the county's townships. Aid is then allocated to each city in the county from the allocation established for cities using each city's three formula elements of population, relative income, and tax effort. Similarly, aid is allocated to each township from the township allocation on the basis of each township's formula elements.

The effect of the three formula elements is well understood; more aid is allocated to units of local government with more people, low per capita income, and high tax effort. What is not generally understood is that the tiering process causes payment inequities at two stages in the distribution process. First, the amount of assistance available for distribution to any one government within a county is affected by the relative income and tax effort of the entire county even though the well-being of the individual governments within the county can differ significantly from this average.

Second, the distribution of assistance among the types of governments within the county is not based on the equity considerations reflected in the 3-factor formula but, rather, on tax collections alone. These collections, on a per capita basis, are generally greater for higher income groups of people. The distorted result of this process is that the relatively deserving and needy governments get a disproportionately smaller share of the funds available to the county.

Because of these two stages in the distribution process, tiering reflects relative differences in the per capita income of a county area and its cities and its townships. It generally provides more revenue sharing funds to a county's cities if their average income is above the county area income. Conversely, it provides less revenue sharing aid to a county's cities if their average income is below that of the county area. Townships are similarly affected. (See pp. 5 to 8.)

ELIMINATING TIERING WOULD BETTER TARGET FUNDS TO THE GOVERNMENTAL TYPE WITH LOW INCOME RESIDENTS

Throughout a State, the tiering procedure reduces funding to the governmental type with residents that, on average, have relatively low income. For example, in New Jersey, low income residents are predominately located in large central cities. This concentration of low income residents causes the average income of all cities located in the same county to be low compared to the per capita income of the entire county area. Tiering reflects this difference in average income and reduces their allocations below what they would receive under a 3-factor formula without tiering. This pattern prevails in States where urban poverty is the predominant pattern.

In several other States, primarily in the South and Midwest, low income people are predominately located in unincorporated county areas or rural townships. For example, in most North Carolina counties, city residents have higher incomes than residents living in the unincorporated areas of the county. This leads to increased allocations to cities in most counties above what they would receive without tiering. Consequently, in States characterized by rural poverty, tiering benefits most cities and penalizes the governmental type with the higher concentration of low income residents.

Therefore, the targeting of revenue sharing funds to those governmental units which on average contain the low income population of the Nation could be enhanced significantly by eliminating the tiering procedure and applying

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the basic 3-factor formula directly to all units of local government within each State. (See pp. 9 to 20.)

SOME NEW JERSEY CITIES HAVE BECOME TOWNSHIPS TO TAKE ADVANTAGE OF FUNDING INEQUITIES

The funding inequities caused by the tiering procedure have motivated some New Jersey jurisdictions to change their governmental classification to increase their revenue sharing aid. For example, the income disparity factor in Essex County, New Jersey, penalizes all cities in the county because the large number of low income residents in the city of Newark produces a very low average income for the county's cities. At the same time, the tiering procedure provides more aid to the county's townships because of their higher average incomes.

A city which changes its classification to township will become grouped with the higher average income of the county's townships instead of the lower average income of the county's cities and will, because of the tiering procedure, get more revenue sharing aid. For example, in 1978 the "city" of South Orange in Essex County changed its classification to "township" and its revenue sharing allocation the following year increased by $248,000--a 351 percent increase. At least 10 other Essex County "cities" have since changed their classifications to "townships."

The resultant increases in revenue sharing aid to those new "townships" are obtained at the expense of other local governments in the same county because their revenue sharing payments are correspondingly reduced. For example, the city of Newark's revenue sharing aid for the year beginning October 1, 1981, was reduced by $1.5 million due to the reclassifications by its suburbs. (See p. 20.)

RECOMMENDATION TO THE CONGRESS

The Congress should amend the State and Local Fiscal Assistance Act of 1972, as amended, to eliminate the tiering procedure, thereby making allocations within States directly to all units of local government based on the three factors of population, relative income, and tax effort. (See p. 25 and app. IV.)

AGENCY COMMENTS AND GAO'S EVALUATION

The Department of the Treasury stated that GAO's report makes many useful technical contributions to an understanding of the revenue sharing formula and that GAO's analysis is clearly among the most significant yet conducted. However, the Department stated that, as useful as the research is, it is incomplete and the recommendation to eliminate the tiering procedure is premature for several reasons. The primary reason for the Department's position is its contention that tiering was developed to help achieve "horizontal equity" among county areas--that is, county areas with the same population, tax effort, and per capita income should receive identical revenue sharing payments as opposed to equity among local governments, the criteria used by GAO. The Department stated that detiering would introduce inequities among county areas.

GAO disagrees. GAO has been unable to identify any discussion of the purpose of tiering in its review of applicable congressional committee reports nor have congressional staff or other program experts been able to identify such statements for GAO. To the contrary, committee reports discussing the rationale for the 3-factor formula identified equity among local governments as a concern in developing the formula.

Furthermore, GAO's report demonstrates that the only difference between a 3-factor formula with and without tiering is that tiering allocates funds based on the geographic location of high income residents within the county. GAO fails to understand what bearing the <u>location</u> of income <u>within a county</u> has on equity among different county areas. Consequently, the tiered approach does not necessarily produce geographic equity and it is not valid for the Department to conclude that detiering would introduce geographic inequities into the distribution of revenue sharing funds. (See pp. 23 to 25, pp. 30 to 31, and app. V.)

C o n t e n t s

CHAPTER 1

INTRODUCTION

Title I of the State and Local Fiscal Assistance Act of 1972, commonly known as the Revenue Sharing Act (31 U.S.C. 1221 et seq.), was enacted to provide general financial assistance to State and local governments. The 1980 amendments to the act extended the program for 3 years, but no payments were authorized for State governments for fiscal year 1981. Payments totaling $4.6 billion were authorized for over 38,000 local governments for fiscal years 1980 through 1982.

The calculations for allocating funds to local governments are based on complex formulas and procedures specified in the act. The three factors used in the formula to determine allocations to local governments within a State are population, per capita income, and adjusted taxes. By measuring taxes collected in relation to the income of its residents, the tax effort factor of the formula measures a jurisdiction's effort to help itself. The relative income factor of the formula adjusts for the fact that identical levels of tax effort would enable a higher income community to purchase more public services. Therefore, the relative income factor serves to give less weight to the tax effort of high income communities and more weight to the tax effort of low income communities, thereby adjusting for the revenue raising advantage of higher income communities. Consequently, the 3-factor formula, on a per capita basis, tends to reduce fiscal disparities among local governments and thus represents a conceptually sound basis for recognizing need in allocating general purpose aid among units of local government.

In a previous report 1/ we concluded that the intrastate formula would work equitably if local governments with the same fiscal effort (combined effect of income and tax effort) 2/ received the same per capita revenue sharing aid. In another report, 3/ we demonstrated that the tiering procedure used in

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1/"The Impact of Tiering and Constraints on the Targeting of Revenue Sharing Aid" (PAD-80-9, June 11, 1980).

2/Our previous report defined "fiscal effort" as the product of the relative income and tax effort factors in order to facilitate the comparison of revenue sharing payments.

3/"Changes in Revenue Sharing Formula Would Eliminate Payment Inequities; Improve Targeting Among Local Governments" (GGD-80-69, June 10, 1980).

applying the 3-factor formula caused widespread differences in per capita revenue sharing aid to governments within a State although the governments had equivalent fiscal efforts. For example, of two small towns in Virginia with populations of about 8,000 and nearly identical fiscal efforts, one town received $19.92 per person while the other received $13.44. The total difference in their annual revenue sharing allocations amounted to $55,000.

Such funding inequities whereby similar governments are treated differently were prevalent in almost all States. Revenue sharing aid to cities with equivalent fiscal efforts differed by as much as $45.61 in Alaska and as little as $2.52 in Rhode Island. We concluded that in almost all States the funding inequities were due primarily to the tiering procedure whereby revenue sharing funds within a State are first allocated to county geographic areas and then to groups of the same type of government in a county before being allocated to the individual jurisdictions within the county.

Elimination of tiering would result in funding shifts with some governments losing and some gaining funds. Although the total amount of shifted funds represented less than 3 percent of the total revenue sharing aid going to local governments, the shifts would total $136 million annually. Furthermore, there appeared to be no consistent pattern in the shifts of funds. In some areas, detiering of the formula resulted in funds being shifted from cities to counties whereas, in other areas, funds were shifted from counties to cities. Funds for townships were similarly affected. We therefore made a further analysis of the formula and the funding shifts.

While this report presents evidence that the tiering procedure introduces instances of very severe inequities among units of local government, the overall performance of the formula is quite good. In fact, if we were to measure the efficiency with which the current formula targets more per capita funds to low income/high tax effort governments, the current formula is roughly 85 percent successful.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to (1) ascertain how the tiering procedure created the funding inequities we reported earlier and (2) determine whether the funding shifts resulting from detiering the formula followed any consistent pattern.

The data used in this report are the official data elements used by the Office of Revenue Sharing, Department of the Treasury. The current formula was simulated by Data Resources, Incorporated, to guarantee that the allocations produced by the Department of the Treasury were replicated. Once this was verified, the computer program was altered to eliminate the county area step and the subsequent division of the county area funds into three separate funds for the county, city, 1/ and township governments.

The legislative formula constraints which influence funding allocations to local governments are:

--145 percent maximum which limits per capita payments to county areas, cities, and townships to 145 percent of the State per capita payment to local governments.

--20 percent minimum which ensures a minimum per capita payment to county areas, cities, and townships to 20 percent of the State per capita payment to local governments unless the 50 percent maximum would be exceeded.

--50 percent maximum limits payments to county, city, and township governments to no more than 50 percent of their adjusted taxes and intergovernmental transfers.

--$200 minimum which eliminates payments to units of local government below the county government level if their allocation were to fall below $200.

Since detiering eliminates the county area allocation, we eliminated the constraints which apply to county areas and, instead, applied them to county governments directly. With the elimination of the county area allocation, Indian tribes and Alaskan native villages received their allocations based on their percentage of the State's population.

The proof that tiering is equivalent to introducing a fourth factor into the allocation process is demonstrated by algebra in appendix I. The remainder of the report is based on comparisons of results of the current formula and the detiered simulation.

The results reported apply to all States except Hawaii and Rhode Island unless stated otherwise. The results do not apply to these States because there are too few local governments. This precludes us from making meaningful comparisons to determine the

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1/ Throughout this report the term city will be used to identify all governments in the Census Bureau's municipality classification, which includes villages, boroughs, towns, and cities.

impact of tiering in these States. 1/ Although illustrations demonstrating the impact of tiering are confined to North Carolina, New Jersey, and Minnesota, the results reported are illustrative of the various distribution patterns which exist in the remaining States. North Carolina was selected because it is representative of many southern States which are characterized by rural poverty; New Jersey because it is typical of States characterized by urban poverty. Minnesota was included to provide a contrast with New Jersey because tiering benefits New Jersey townships while Minnesota townships are adversely affected by tiering.

Unless otherwise stated, all data used to illustrate the impact of the fourth factor is from entitlement period 10 (October 1, 1978, through September 30, 1979). This entitlement period was chosen because our previous report 2/ used this time frame and using the same data therefore provides continuity in our analyses. In addition, the basic demographic patterns displayed by the data elements used in the formula change very slowly and therefore the general pattern of differences described in this report will persist into the future.

Our review was done in accordance with the Comptroller General's "Standards For Audit Of Governmental Organizations, Programs, Activities, And Functions."

1/ The national scope of these inequities was presented in our earlier report (GGD-80-69, June 10, 1980). See p. 1. Additional illustrations for each State are presented in appendix II.

2/ ibid.

CHAPTER 2

REVENUE SHARING FUNDING INEQUITIES ARE CREATED BY A FOURTH FACTOR INTRODUCED BY THE TIERING PROCESS

The 3-factor General Revenue Sharing formula is designed to allocate more aid to local governments with low per capita incomes and high levels of tax effort. However, our analysis reveals that the tiering procedure is equivalent to introducing a fourth factor into the allocation process which, for many governments in different counties, produces the opposite result--more aid is given to some high per capita income/low tax effort jurisdictions than is given to other relatively lower per capita income /higher tax effort jurisdictions. The fourth factor reflects the relative difference in income between the cities in a given county and the county area income. Townships are similarly affected.

Throughout a State, the fourth factor reduces funding to the governmental type with people who, on average, have relatively low income. Consequently, where low income people are predominately located in unincorporated county areas or rural townships, such as in the South and Midwest, those types of government tend to receive less revenue sharing aid than they would if tiering were eliminated. In States like New Jersey where urban poverty is the predominant pattern, cities receive less aid than they would without tiering. Some New Jersey cities have taken advantage of the tiering process by changing their governmental classification to townships, and their revenue sharing aid was significantly increased. These increases in aid have been obtained at the expense of other local governments in the same county whose aid was reduced.

FORMULA DESIGNED TO ALLOCATE MORE AID TO LOW INCOME/HIGH TAX EFFORT JURISDICTIONS

The 3-factor formula for cities and townships is based on each community's population, per capita income, and tax effort. Communities with larger populations and tax effort and lower per capita incomes were to receive larger revenue sharing allocations.

An explanation of the distribution formula by the Joint Committee on Internal Revenue Taxation gave the rationale for each of the three factors as need indicators. 1/

> "Population was selected as one factor * * * because a considerable part of community financial needs varies directly with the size of its population." The use of inverse per capita income is used because it "* * * recognizes that poorer communities generally have greater difficulty in providing adequate services than rich communities. This is a consequence of the fact that communities that have relatively low per capita incomes generally have a relatively small tax base. In addition, communities with relatively low per capita incomes tend to have additional problems in providing services for their poorer inhabitants that are usually not encountered in wealthier communities." The tax effort factor was included to encourage eligible governments to "* * * meet their needs out of all available tax sources * * *" and "* * * channel more funds to urban areas (especially core cities) * * *."

Revenue sharing allocations to units of local government result from three sources: (1) the three formula elements of population, per capita income, and tax effort applicable to each recipient government, (2) statutory formula constraints, and (3) the tiering procedure.

In general, the tiering procedure works as follows: within each State, revenue sharing funds are first allocated to county geographic areas using the 3-factor formula of population, per capita income, and tax effort. Once the county area (not government) allocation is established, an amount is set aside for any Indian tribes and Alaskan native villages based on the ratio of their population to the totral population of the county area. The remainder is subdivided, on the basis of noneducation tax collections, into as many as three separate allocations--one for the county government, one for the cities in the county, and one for the county's townships. Aid is then allocated to each using each city's three formula elements of population, relative income, and tax effort. Similarly, aid is allocated to each township from the township allocation on the basis of each township's formula elements.

1/General explanation of the State and Local Fiscal Assistance Act and the Federal-State Tax Collection Act of 1972, Joint Committee on Internal Revenue Taxation, February 12, 1973.

TIERING INTRODUCES THE INCOME DISPARITY BETWEEN A COUNTY AND ITS CITIES/TOWNSHIPS INTO THE ALLOCATION

Our analysis reveals that the tiering procedure has the effect of introducing a fourth element or factor into the 3-factor revenue sharing formula. The fourth factor primarily reflects the relative difference in income between the cities in a given county and the county area and between the townships in a given county and the county area. Furthermore, the fourth factor receives more weight than the three factors which were specifically included in the formula.

The mathematical derivation showing how the fourth factor--income differences between a county and its cities and townships--is introduced into the allocation process with greater weight is contained in appendix I. The following discussion is a simplified discussion of how the income disparity between the county and its cities and townships is introduced into the allocation process by tiering. Subsequent sections of this chapter will demonstrate various manifestations of the inequities created by the existence of the income disparity factor.

As mentioned earlier, revenue sharing allocations are first allocated to county geographic areas within a State. The county area fund is based on (1) the county areas's population, (2) the county area's income relative to State income and (3) the aggregate tax effort for the county area. The aggregate tax effort includes all noneducation taxes collected in the county area divided by county area income.

After the amount for Indian tribes and Alaskan Native villages is calculated on the basis of population and deducted from the county area allocation, an amount for the county government and separate pots for cities and townships are established on the basis of the percentage of total taxes collected by each of the three types of government within the county. 1/ Each city and township receives a share of the city or township fund respectively, based on their individual populations, relative income, and tax effort.

More funds are made available for distribution within those county areas that have larger populations, lower incomes, and higher tax efforts than other county areas. The formula includes data for all governments in the county area in determining the county area allocation, and this process benefits or hurts an individual government depending on its three data items relative

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1/Collections in absolute dollars which do not take income differences among the different types of government into account.

to the governments in the county. When the amounts of taxes collected are used to divide the county area allocation into three pots available for distribution to the county government, city governments, and township governments, the type of government that has higher income residents will benefit because of the direct relationship between taxes and income. In essence, if low income residents are primarily located in one type of government, this draws revenue sharing funds into the county area, but the type of government with the highest income tends to receive more funds because of the direct relationship between taxes collected and income.

The fourth factor results from the combination of the county area allocation and the percentage share of tax collections. This can be seen by considering two contrasting situations. First, suppose a county area has a relatively low per capita income. Then, given its tax effort, the county will receive a relatively large county area allocation because of the county area relative income factor. This result is well understood. What is not generally realized is that, if low income residents are predominantly located outside of cities (and city residents therefore have relatively high incomes, albeit in a low income county area), then cities will have collected proportionately more taxes in absolute terms and will receive a proportionately <u>larger</u> share of the county area allocation.

Conversely, if the low income residents are predominantly located in cities (and noncity residents therefore have relatively high incomes), then cities will have proportionately lower tax collections and will receive a proportionately smaller share of the county area allocation. Therefore, the amount of revenue sharing funds allocated to a local government depends not only on its three factors but also on the income disparity between a county area and its local governments.

On the basis of the logic above, and demonstrated algebraically in appendix I, the size of a city's allocation in each county therefore depends on the average income of all cities located in the same county compared to the income of the county area. The larger the average income of cities relative to the county area, the larger will be the allocation for each city in that county. Consequently, the tiering process can be viewed as introducing a fourth factor (city-county income disparities) into the allocation process.

Because allocations to township governments are made in a similar fashion, the fourth factor applies to them as well.

INCOME DISPARITY FACTOR CREATES FUNDING INEQUITIES

This average difference in income--which we call the income disparity factor or fourth factor--creates the funding inequities we identified in our 1980 report. These inequities occur in many forms. For example, similarly situated governments are treated differently under the current tiered formula. Our previous report 1/ demonstrated that local governments with the same fiscal effort (equivalent relative incomes and tax effort) received widely differing allocations. We have since determined that inequities created by the income disparity factor take several other forms which are reported below.

The income disparity factor varies widely among counties in the same State. For example, the map of North Carolina on page 11 shows the income disparity factor for cities in each county of the State. Warren County, located in the northeast-central part of the State, has the greatest income disparity. Cities in Warren County unaffected by maximum and minimum constraints receive revenue sharing allocations 273 percent greater than what is justified on the basis of their population, relative income, and tax effort when competing with other local governments throughout the State. 2/ The lowest income disparity factor occurs in Avery County, located in the northwest part of the State, with a disparity factor of 074 which means that unconstrained cities in Avery County have their allocations adjusted downward by 26 percent (i.e., 74 - 100 = -26%). In surveying the entire State, five counties have a disparity factor below 100 (i.e., their allocations are reduced by the disparity factor) and in 91 counties the disparity factor increases allocations to cities as in Warren County.

North Carolina is characterized by low income residents being located in the unincorporated rural areas of the State, which explains why the disparity factor exceeds 100 in most counties. It is representative of many southern States with rural poverty. To provide a contrast, the map on page 12 displays the disparity factor for New Jersey cities. New Jersey is characterized by urban poverty which is reflected in disparity factors being less than 100 in most counties. For example, Essex County, which encompasses the city of Newark, has a disparity factor of 57 which means all Essex County cities receive 43 percent less than justified by their respective populations, relative incomes, and tax efforts.

1/GGD-80-69, see p.1.

2/The disparity factor adjusts allocations based on each community's population, relative income, and tax effort. Thus the percentage increase or decrease is equal to the disparity factor minus 100 percent. For Warren County this is 373 percent minus 100, or 273 percent.

In only 4 of the 21 counties does the disparity factor exceed 100.

If the 3-factor formula were applied statewide directly to units of local government, more aid would be given to lower income communities which have the same tax effort. Many instances exist in every State, except Hawaii and Rhode Island 1/ where precisely the opposite result occurs. That is, more aid is given to higher income communities.

To illustrate, table 1 on page 13 lists several local governments with the same tax effort according to their per capita incomes in North Carolina, New Jersey, and Minnesota. In North Carolina, Rich Square's per capita income exceeds Maysville's by 39 percent. According to the 3-factor formula, Rich Square's per capita revenue sharing payment should be below Maysville's, instead it is 35 percent higher. In New Jersey, Maplewood's per capita income exceeds Mount Ephraim's by 71 percent but instead of receiving a smaller per capita revenue sharing payment, it receives a revenue sharing payment nearly 2 1/2 times greater. Similar results exist in Minnesota and in all remaining States across the nation except Hawaii and Rhode Island.

1/See p. 3.

NORTH CAROLINA

INCOME DISPARITY FACTOR FOR CITIES IN NORTH CAROLINA

NEW JERSEY

INCOME DISPARITY FACTOR FOR CITIES IN NEW JERSEY

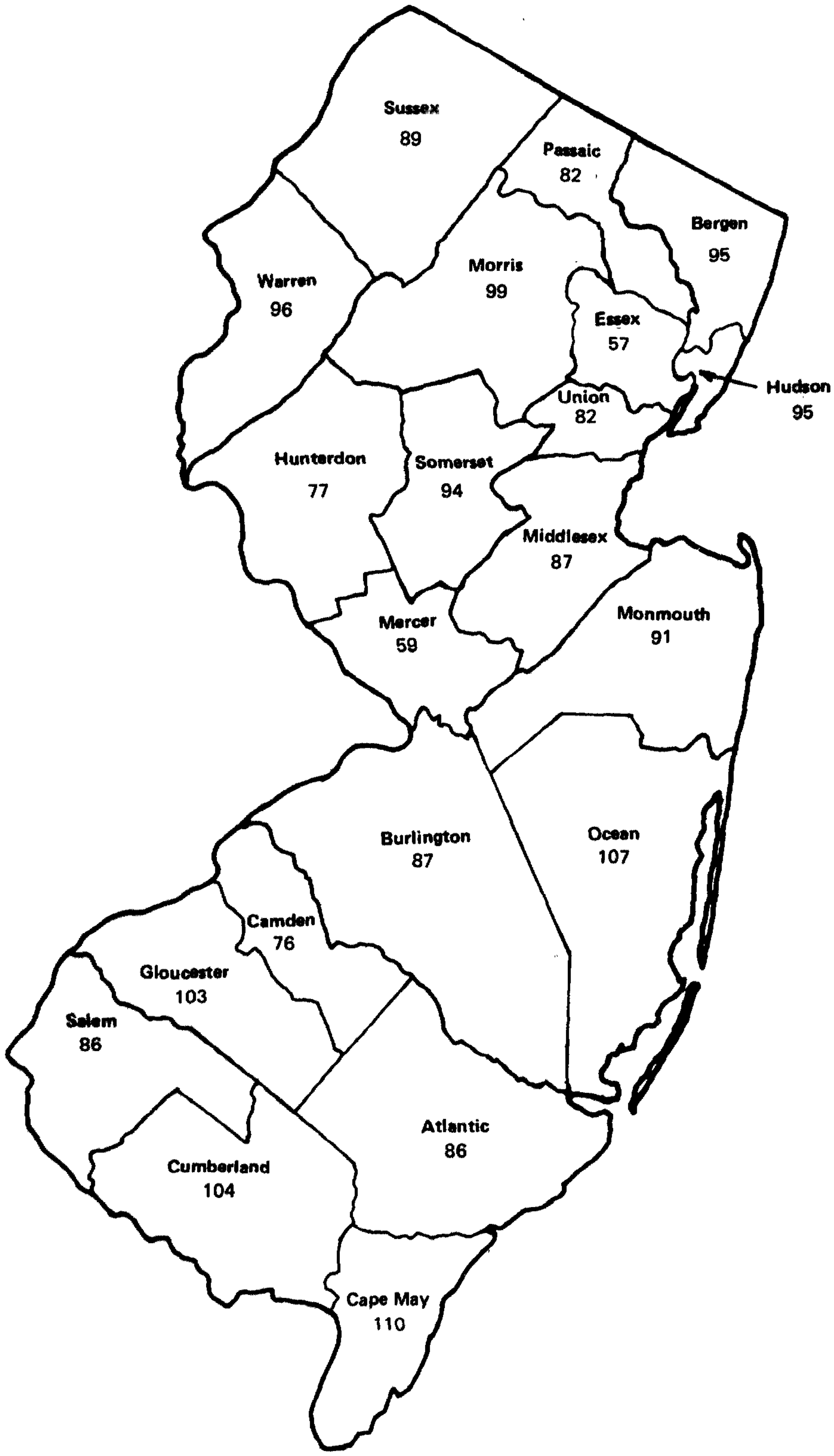

Table 1

Examples of Revenue Sharing Payment Differences Among Governments with Equal Tax Effort North Carolina, New Jersey, and Minnesota

Government	County	Per capita income	Income disparity factor	Per capita payment (tiered)	Per capita payment (detiered)
North Carolina					
Rich Square	Northampton	$3,654	211	$21.11	$10.34
Scotland Neck	Halifax	3,432	189	18.74	10.57
Bunn	Franklin	3,183	155	17.53	11.68
Maysville	Jones	2,629	113	15.63	14.29
New Jersey					
Maplewood	Essex	8,444	a/276	19.28	6.31
Lawrence	Mercer	6,205	a/113	10.39	8.27
Bordentown	Burlington	5,482	87	9.38	9.69
Mount Ephraim	Camden	4,950	69	7.96	10.46
Minnesota					
Dawson	Lac Qui Parle	4,433	134	16.37	12.02
Milaca	Mille Lacs	4,196	131	16.20	12.55
Osakis	Douglas	3,955	118	15.98	13.33
Mahnomen	Mahnomen	3,492	130	13.56	15.49

a/City and township governments have different disparity factors. Therefore the disparity factors for the townships of Maplewood and Lawrence differ from the disparity factors for New Jersey cities shown in the map on page 12.

These inequities exist because of the differing income disparity factors among counties within a State. Rich Square is located in Northampton County which has a disparity factor that adjusts payments to Northampton cities upward by 111 percent, whereas the cities in Jones County have their allocations increased by a much smaller 13 percent as shown in table 1. Thus, the large income disparity factor in Northampton County produces much larger revenue sharing payments to its cities compared to Jones County. When the formula is detiered, the lower income communities receive larger payments as shown in the last column. Examples of payment inequities in each State are listed in appendix II.

Some States have both township and city governments. In many instances the two types of governments have very different average income levels. For example, townships in Minnesota have per capita incomes 24 percent below the State average while the income of city residents exceeds the State average by 7 percent. In Minnesota the income disparity factor therefore rewards the States' cities and penalizes the township governments. Townships with the same fiscal effort as cities receive lower revenue sharing allocations. In Minnesota, if tiering were eliminated, the total allocation to the State's township governments would increase by 20 percent. 1/

In New Jersey the average income levels of cities and townships are reversed. Statewide, the per capita income of townships in entitlement period 10 was $5,788 compared to $5,466 for cities. As a result of these income disparities, New Jersey cities received $6.1 million less than they would have if the 3-factor formula had been applied directly to all units of local government. Conversely, the townships received $4 million more by virtue of their higher average income levels. 2/

To facilitate comparison of revenue sharing payments to local governments in different governmental classifications, 3/

1/The townships which would have their allocations increased are moderately active governments. The relatively inactive township governments we have earlier recommended be eliminated from the program are affected by the 20 percent minimum constraint and therefore are unaffected by elimination of the tiering. "Revenue Sharing Fund Impact on Midwestern Townships and New England Counties" (GGD-76-59, Apr. 22, 1976).

2/The reader should recall that all unconstrained cities/townships (both high and low income) have their allocations reduced by the same percentage based on their average income relative to the county area.

3/A discussion of Census' classification methods is contained in appendix III.

we have grouped them according to the product of their relative income and tax effort factors. In our earlier report we referred to the product of these two factors as fiscal effort. The 3-factor formula would make the same per capita payments to units of local government with identical levels of fiscal effort.

The following tables group North Carolina, New Jersey, and Minnesota counties, cities, and townships according to their fiscal effort. The per capita payment for each class of local government is shown for each fiscal effort grouping. For example, in North Carolina the county governments with a fiscal effort between 1.2 and 1.6 percent receive an average payment of $11.39 per person. Cities with the same fiscal effort receive an average payment of $14.27. This inequity occurs because the income disparity factor differentially rewards cities because their average income exceeds the average income of the county in which they are located. In each fiscal effort group, North Carolina cities receive higher payments than county governments with similar incomes and tax effort.

In New Jersey, townships have the highest average income and cities the lowest. Comparing governments with similar fiscal effort, townships receive the highest average payment, cities the lowest. In Minnesota, city-township income levels are reversed and cities receive higher payments.

Table 2

Average Revenue Sharing Payments to Unconstrained North Carolina County and City Governments with Similar Levels of Fiscal Effort

		Average Per Capita Payment			
		4-Factor formula (tiered)		3-Factor formula (detiered)	
Fiscal Effort		Counties	Cities	Counties	Cities
0.4	0.8	$ 5.90	$ 6.74	$ 6.08	$ 5.66
0.8	1.2	8.17	11.12	8.43	8.42
1.2	1.6	11.39	14.27	11.75	12.23
1.6	2.0	13.91	18.31	14.31	15.00
2.0	2.4	17.55	18.87	18.17	18.16
2.4	2.8	19.81	21.59	21.25	21.23
2.8	3.2	23.61	26.59	25.24	24.94
3.2	3.6	a/ 22.00	28.40	28.63	27.33

a/The average payment to county governments in the highest fiscal effort group(s) is less than the next lowest group because the county area 145 percent maximum constraint indirectly reduces payments to county governments in those groups.

Table 3

Average Revenue Sharing Payments to Unconstrained New Jersey County, City, and Township Governments with Similar Levels of Fiscal Effort

Fiscal Effort		Average Per Capita Payment: 4-Factor formula (tiered) Counties	Cities	Townships	3-Factor formula (detiered) Counties	Cities	Townships
0.8	1.2	$ 4.71	$ 4.42	$ 6.69	$ 4.25	$ 4.41	$ 4.37
1.2	1.6	6.21	5.52	7.62	5.60	5.55	5.62
1.6	2.0	7.50	6.60	8.91	6.76	7.02	7.11
2.0	2.4	9.18	8.24	9.90	8.66	8.63	8.48
2.4	2.8	a/9.04	9.31	11.76	9.56	9.92	10.18
2.8	3.2	(b)	10.57	12.42	(b)	11.48	11.66
3.2	3.6	a/7.70	12.19	14.72	12.89	13.06	12.92
3.6	4.0	(b)	14.80	15.29	(b)	14.83	14.89
4.0	4.4	(b)	14.38	15.97	(b)	16.17	16.13
4.4	4.8	(b)	17.34	19.35	(b)	17.80	17.87
4.8	5.2	(b)	17.56	19.93	(b)	19.51	19.62
5.2	5.6	(b)	18.52	23.94	(b)	20.92	20.44

a/County governments in high fiscal effort classes are indirectly affected by the 145 percent maximum constraint on county areas. Therefore, allocations to these county governments are influenced by formula constraints rather than tiering and receive lower allocations than cities or townships.

b/No government in this fiscal effort group.

Table 4

Average Revenue Sharing Payments to Unconstrained Minnesota County, City, and Township Governments with Similar Levels of Fiscal Effort

Fiscal Effort		Average Per Capita Payment: 4-Factor formula (tiered) Counties	Cities	Townships	3-Factor formula (detiered) Counties	Cities	Townships
0.4	0.8	$ (b)	$ 5.43	$ 4.93	$ (b)	$ 5.46	$ 5.34
0.8	1.2	8.08	8.11	5.72	7.95	7.84	7.52
1.2	1.6	10.84	12.11	7.51	10.67	10.98	10.78
1.6	2.0	14.12	15.73	9.30	13.98	13.94	13.88
2.0	2.4	17.48	18.61	10.96	17.33	17.73	17.10
2.4	2.8	19.62	21.84	13.49	19.33	20.11	19.91
2.8	3.2	23.02	20.45	15.01	23.85	22.72	23.29
3.2	3.6	26.83	29.15	18.21	26.43	26.89	25.54
3.6	4.0	a/25.57	31.01	20.21	29.59	29.78	30.07
4.0	4.4	a/21.48	(b)	21.34	31.78	31.71	32.45

a/See Table 2, footnote a/.

b/See Table 3, footnote b/.

ELIMINATING THE INCOME DISPARITY FACTOR WOULD BETTER TARGET FUNDS TO GOVERNMENTS WITH LOW INCOME RESIDENTS

Throughout a State, the income disparity factor reduces funding to the governmental type whose residents have the lower average income. When low income people are predominantly located in unincorporated county areas, such as in the South and Midwest, those types of government receive less revenue sharing aid than they would without tiering. In States where urban poverty is the predominant pattern, cities receive less aid than they would without tiering.

Table 5 shows the percentage change in revenue sharing allocations to counties, cities, and townships when the tiering procedure is removed. The States have been ranked by the percentage gain or loss experienced by county governments.

Table 5

Percentage Changes in Revenue Sharing Allocations by Governmental Classification if Tiering Were Eliminated

State (note a)	Counties	Cities	Townships
Alaska	13.2	- 1.7	23.1
New Mexico	11.7	-10.5	
West Virginia	9.0	- 3.2	
Alabama	7.7	- 4.2	
Arkansas	7.6	- 8.9	
Mississippi	7.5	-13.6	
South Carolina	6.0	- 7.2	
Illinois	5.8	- 1.6	- 0.9
North Carolina	5.5	- 7.6	
Montana	5.2	- 6.1	
Kentucky	5.1	- 4.0	
Utah	4.2	- 3.2	
Louisiana	4.2	- 2.2	
Oklahoma	3.5	- 1.5	
South Dakota	3.1	-13.1	34.0
Oregon	2.8	- 1.6	
North Dakota	2.7	- 9.7	23.6
Missouri	2.4	- 1.5	9.0
Tennessee	2.4	- 1.7	
Washington	2.3	- 1.7	
Virginia	2.1	- 1.4	
Idaho	2.0	- 2.5	
Texas	1.9	- 1.1	
Iowa	1.6	- 2.0	
Wyoming	1.3	- 3.0	
Florida	0.8	- 0.9	
Colorado	0.8	- 0.4	
Nebraska	0.7	- 1.7	17.1
Wisconsin	0.2	- 2.5	14.4
Maryland	b/0.0	- 0.1	
Arizona	b/0.0	0.3	
Georgia	-0.3	0.4	
Michigan	-0.5	0.2	0.4
Minnesota	-0.5	- 2.0	20.4
Kansas	-0.6	- 0.4	9.6
New York	-0.7	0.2	0.1
California	-1.0	1.2	
Delaware	-1.8	3.0	
Indiana	-2.0	1.2	1.3
Pennsylvania	-2.4	1.8	- 1.4
Nevada	-3.1	5.5	
Ohio	-3.4	2.0	- 0.3
New Jersey	-4.2	9.6	-11.0
Connecticut	(c)	13.5	-12.5
Rhode Island	(c)	1.1	-2.4

a/The New England States of Maine, Vermont, New Hampshire, and Massachusetts have been excluded because, in the untiered simulation, the county governments are affected by the 20 percent minimum. Therefore, allocation changes reflect a change in constraint (since county governments are currently exempt from the constraints) rather than the impact of detiering. Hawaii was excluded because it has only one city which is treated as a unified city-county.

b/Less than .05 percent.

c/These States do not have county governments.

The demographic pattern of rural poverty results in increased revenue sharing payments to relatively high income cities compared to county governments. This pattern is prevalent in most southern States where the city-county income disparity factor works to the advantage of cities. Consequently, if this factor were removed, by applying the 3-factor formula directly to all units of local government, revenue sharing funds would be redirected to county governments in these States. Table 5 shows that the largest increases in allocations to county governments occur in southern States characterized by rural poverty, including such States as West Virginia, Alabama, Arkansas, Mississippi, South Carolina, and North Carolina. The data also show that funds would also be redirected toward many of the midwestern townships which are also characterized by relatively low incomes. 1/ This includes townships in South Dakota, North Dakota, Nebraska, Wisconsin, Minnesota, and Kansas.

The demographic pattern of urban poverty characterizes many of the more industrialized States. In those instances the income disparity factor reduces revenue sharing allocations to cities in favor of the higher average income of county governments and townships. For example, States with the largest shift of funds away from county governments include New Jersey, Ohio, Pennsylvania, Indiana, Delaware, California, and New York. Similarly, funds are retargeted to cities away from the relatively high income townships in Rhode Island, Connecticut, New Jersey, and Pennsylvania.

SOME NEW JERSEY CITIES HAVE BECOME TOWNSHIPS TO TAKE ADVANTAGE OF FUNDING INEQUITIES

The funding inequities caused by the fourth factor have motivated some New Jersey cities to change their governmental classification to increase their aid. The significant increases in aid resulting from such classification changes are obtained at the expense of the remaining local governments in the same county as their revenue sharing payments are correspondingly reduced.

New Jersey law allows cities and townships to change their governmental classification. South Orange made this change in 1978 and their revenue sharing payment for the next year (October 1, 1978, to September 30, 1979) increased by $248,000--a 351 percent increase. In 1978, the community of Fairfield became a township and its revenue sharing payment effective for entitlement period 11 (Oct. 1, 1979, to Sept. 30, 1980) increased by $160,000--a 207 percent increase. 2/

1/These are townships providing a significant level of public services and not the limited service townships discussed in an earlier report. (See footnote on p. 14.)

2/The 160,000 increase brought Fairfield up to the 145 percent maximum; otherwise the increase would have been larger.

On November 4, 1980, the communities of West Orange and Montclair voted a change to their township classification beginning in entitlement period 13 (Oct. 1, 1981, to Sept. 30, 1982). The communities of Belleville, Bloomfield, Nutley, Essex Fells, Verona, Caldwell, and West Caldwell have since become townships.

The impact of the West Orange and Montclair reclassification is shown in the table on page 22 on the basis of preliminary data for entitlement period 13. Between entitlement periods 12 and 13, West Orange's allocation will increase by $677,663. The reclassification increased their allocation by $711,906 while changes in formula data elements reduced their allocation by $34,243. Similarly the reclassification increased Montclair's allocation by $534,067 while data element changes resulted in a $3,282 decrease.

Of course, West Orange and Montclair's gain is someone else's loss. 1/ Allocations to remaining unconstrained cities declined by approximately 9 percent, amounting to a $679,938 loss for Newark and a $99,751 loss for East Orange. The other townships each lose roughly 16 percent of their allocations. The impact of the reclassification on all Essex county communities is shown in table 6.

With the additional seven cities listed above reclassified as townships, similar gains and losses will occur. For example, with these seven communities reclassified as townships, Newark lost a total of $1,517,000 in entitlement period 13 due to reclassifications by its suburbs. In the extreme, if all of Newark's suburbs had become townships, Newark would have lost a total of $2.8 million due to the reclassifications. 2/

1/Appendix III details efforts by Mr. Richard Bonsal, ex-Commissioner of Montclair, to correct the city-township inequity before advocating that Montclair reclassify itself to take advantage of the inequity.

2/Coincidentally, Newark is losing $1.5 million between entitlement period 12 and 13, largely because of a decline in its tax effort resulting from the Census Bureau no longer including uncollected taxes in the tax effort factor.

If the income disparity factor were eliminated by detiering the formula, Newark would compete equally with all other communities based on its three factors of population, relative income, and tax effort. Because of its low income and high tax effort, Newark would be constrained at the 145 percent maximum and its revenue sharing allocation would no longer depend on whether its suburbs were classified as townships or not.

Table 6

IMPACT OF THE WEST ORANGE AND MONTCLAIR RECLASSIFICATION ON REVENUE SHARING ALLOCATIONS TO ESSEX COUNTY GOVERNMENTS

Townships	Change in allocation between EP12 and EP13	Impact of classification change (note a)	Impact of data element changes (note a)
West Orange	+ $ 677,663	+ $711,906	- $ 34,243
Montclair	+ 530,785	+ 534,067	+ 3,282
Cedar Grove	- 61,498	- 42,995	- 18,503
Livingston	- 28,384	- 36,368	+ 7,984
Maplewood	- 76,604	- 57,756	- 18,848
Millburn	- 24,180	- 31,906	+ 7,726
South Orange	- 77,144	- 36,481	- 40,663
Fairfield	- 9,881	- 17,875	+ 7,994
Cities			
Belleville	- 39,053	- 24,421	- 14,632
Bloomfield	- 42,120	- 28,641	- 13,479
Caldwell	- 8,518	- 3,026	- 5,492
East Orange	- 181,162	- 99,751	- 81,411
Essex Fells	- 517	-0-	- 517
Glen Ridge	- 1,766	- 3,130	+ 1,364
Irvington	- 110,731	- 48,427	- 62,304
Newark	- 2,177,769	- 679,938	- 1,497,831
North Caldwell	- 4,026	-0-	- 4,026
Nutley	- 17,561	- 15,808	- 1,753
Orange	- 68,046	- 40,242	- 27,804
Roseland	- 3,982	- 3,536	- 446
Verona	- 3,668	-0-	- 3,668
West Caldwell	- 12,141	- 871	- 11,270

a/These figures are subject to refinement by computer simulation.

CONCLUSIONS

The fourth factor (which we call the income disparity factor because it measures the income disparity between a county and its cities and between a county and its townships) is the cause of widespread inequities in revenue sharing payments among units of local government. The 3-factor formula is intended to allocate more aid to low income/high tax effort jurisdictions. However, there are many instances where the opposite result occurs when the formula is applied statewide with the geographic and type of government tiering that the allocation process currently requires; high income/low tax effort jurisdictions often receive larger payments than lower income/higher tax effort jurisdictions.

The income disparity factor generally penalizes cities (or townships) if their average income is below the average income of the county in which they are located. Elimination of the tiering procedure would resolve the problem. If communities within a State competed for funds directly on the basis of their own characteristics of populations, relative incomes, and tax efforts, the relatively low income governments would be allocated more revenue sharing aid.

New Jersey law allows cities and townships to take advantage of the inequity created by the income disparity by simply changing their governmental classification. This does not eliminate the inequity but rather shifts funds away from the other units of local government which do not change their classification. Thus, in New Jersey, the income disparity factor has created an incentive for local governments to change their governmental classification to increase their revenue sharing allocation.

AGENCY COMMENTS AND OUR EVALUATION

The full text of the Department of the Treasury's comments on our report are in appendix V. The Department stated that our report makes many useful technical contributions to an understanding of the revenue sharing formula and that our analysis is clearly among the most significant yet conducted. However, the Department stated that, as useful as the research is, it is incomplete and our recommendation to eliminate the tiering procedure is premature.

The Department stated that extensive studies by GAO, Treasury, and private analysts reveal that the formula is conceptually sound and the problems identified by such research are relatively minor. For example, the Treasury points out the formula modification proposed would shift about 3 percent of all funds allocated.

We agree that the formula is conceptually sound and have so testified before the Congress. However, although the formula's overall performance is quite good, funding inequities do exist and most of these are caused by the tiering procedure. While it is true that elimination of tiering would shift only 3 percent of the funds allocated, this gross percentage misleadingly obscures the extent of the existing inequities. Our reports demonstrate that the inequities are widespread and that the formula's good performance could be further enhanced simply by detiering the formula. In addition, the dollar value of the shifted funds is hardly insignificant--$136 million in terms of authorized funding levels for fiscal years 1981 through 1983.

The Department also stated that the tiering procedure was developed in 1972 to accommodate the extraordinarily complex patterns of overlying and underlying local governments within counties. According to the Department, tiering ensures that Revenue Sharing payments are not affected by these subcounty variations in local government structure. Thus, the key consideration implicit in the current formula is "horizontal equity" among county areas--that is, county areas with the same population, tax effort, and per capita income should receive identical revenue sharing payments. The Department stated that our research focused exclusively on the equity of payments among individual jurisdictions and failed to acknowledge the possible relevance of other criteria such as horizontal equity among county areas. The Department concluded that, although the report's proposed formula modification would eliminate interjurisdictional inequities, Treasury's research suggests that the modifications would introduce inequities among county areas.

We disagree with the Department's argument. Although the Department states that tiering was developed to accommodate subcounty variations, we have been unable to identify any discussions of the purpose of tiering in our review of applicable congressional committee reports nor have congressional staff or other program experts been able to identify such statements for us. Furthermore, there is no generally accepted criterion to measure equity among county areas into either the current or a fully detiered formula.

We used the criteria of equity among local governments in our analysis because congressional committee reports discussing the rationale for use of the 3-factor formula identified equity among local governments as a concern in developing the formula. More importantly, our analysis demonstrates that tiering does not necessarily respond to subcounty variations. In fact, the tax effort factor in the 3-factor formula performs this function.

Finally, our report demonstrates that the only difference between a 3-factor formula with and without tiering is that tiering allocates funds based on the geographic location of high income residents within the county. We fail to understand what bearing the location of income within a county area has on equity among different county areas. Consequently, the current tiered approach does not necessarily produce geographic equity, and it is not valid for the Department to conclude that our proposed formula modification would introduce geographic inequities into the distribution of revenue sharing funds.

RECOMMENDATION TO THE CONGRESS

We recommend that the Congress amend the State and Local Fiscal Assistance Act of 1972, as amended, to eliminate the tiering procedure thereby making allocations within States directly to all units of local government based on the three factors of population, relative income, and tax effort. Appendix IV contains suggested language for revisions to the act.

MATHEMATICAL DERIVATION SHOWING HOW THE FOURTH FACTOR IS INTRODUCED INTO THE REVENUE SHARING FORMULA

NOTATION

The following notation is used in describing the 4-factor revenue sharing formula:

k = 1, ...K = county area identifier (K = number of counties).

i = 0, 1, ...N_k = local government identifier (N_k = number of jurisdictions in county k; i = o denotes the county government). 1/

P_{ik} = Population of jurisdiction i in county k (P_{ok} represents the population of both the county area and county government).

T_{ik} = Tax collections of jurisdiction i in county k.

Y_{ik} = Aggregate personal income of residents of jurisdiction i in county k.

y_{ik} = Y_{ik}/P_{ik} = Per capita income of residents in jurisdiction i in county k.

y_s = Per capita income of residents in State s.

G_s = Revenue sharing fund to be distributed to local governments in State s.

G_k = Revenue sharing allocation to county area k.

G_{mk} = Revenue sharing fund to be distributed among cities in county k.

G_{ik} = Revenue sharing allocation to jurisdiction i in county k.

1/In order to simplify the derivation it is assumed there are no Indian tribes, townships, or constraints. These simplifying assumptions do not affect the conclusions.

COUNTY AREA ALLOCATION FORMULA

Using the above notation the county area 3-factor formula can be expressed as:

$$(1)\quad G_k = G_s \left[\frac{P_{ok}\left(\frac{y_s}{y_{ok}}\right)\left(\frac{\sum_{i=o}^{N_k} T_{ik}}{Y_{ok}}\right)}{\sum_{k=1}^{K} P_{ok}\left(\frac{y_s}{y_{ok}}\right)\left(\frac{\sum_{i=o}^{N_k} T_{ik}}{Y_{ok}}\right)} \right]$$

The expressions in both numerator and denominator can be rewritten as follows:

$$\sum_{i=o}^{N_k} P_{ok}\left(\frac{y_s}{y_{ok}}\right)\left(\frac{T_{ik}}{Y_{ok}}\right) = \sum_i \left(\frac{P_{ok}}{Y_{ok}}\right)\left(\frac{y_s}{y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{Y_{ik}}{P_{ik}}\right) P_{ik}$$

Since $P_{ok}/Y_{ok} = 1/y_{ok}$ and $Y_{ik}/P_{ik} = y_{ik}$ this can be expressed as:

$$\sum_i P_{ok}\left(\frac{y_s}{y_{ok}}\right)\left(\frac{T_{ik}}{Y_{ok}}\right) = \sum_i P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{1}{y_{ok}}\right)\left(\frac{y_{ik}}{y_{ok}}\right) y_{ik}$$

$$(2)\quad \sum_i P_{ok}\left(\frac{y_s}{y_{ok}}\right)\left(\frac{T_{ik}}{Y_{ok}}\right) = \sum_i P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2$$

Therefore, the formula for county area allocations can be expressed in the following equation:

$$(3)\quad G_k = G_s \left[\frac{\sum_{i=o}^{Nk} P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2}{\sum_{k=1}^{K} \sum_{i=o}^{N_k} P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2} \right]$$

This result demonstrates that the county area 3-factor formula based on county area population, relative income and tax effort is identical to a 4-factor formula based on the population, relative income and tax effort of the local governments located in the county area. In addition to these three factors, the county area step also contains a factor which measures the income disparity between the local governments within the county and the county area itself, this factor is squared and therefore receives greater weight than the other three factors. (See p. 7.)

FUND FOR CITIES

The fund for cities (G_{mk}) is obtained by multiplying the county area allocation (G_k) by the share of county tax collections raised by cities $\left(\text{i.e., } \sum_{i=1}^{N_k} T_{ik} \Big/ \sum_{i=o}^{N_k} T_{ik}\right)$. Multiplying the numerator of equation (1) by the percentage share of taxes raised by cities will result in the fund for cities:

$$(4) \quad G_{mk} = G_s \left[\frac{P_{ok}\left(\frac{Y_s}{Y_{ok}}\right)\left(\frac{\sum_{i=1}^{N_k} T_{ik}}{Y_{ok}}\right)}{\sum_{k=1} P_{ok}\left(\frac{Y_s}{Y_{ik}}\right)\left(\frac{\sum_{i=o}^{N_k} T_{ik}}{Y_{ok}}\right)} \right]$$

Substituting the result from equation 2 into equation 4, the fund for cities can be expressed as:

$$(5) \quad G_{mk} = G_s \left[\frac{\sum_{i=1}^{N_k} P_{ik}\left(\frac{Y_s}{Y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{Y_{ik}}{Y_{ok}}\right)^2}{\sum_{k=1}^{K}\sum_{i=1}^{N_k} P_{ik}\left(\frac{Y_s}{Y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{Y_{ik}}{Y_{ok}}\right)^2} \right]$$

CITY ALLOCATIONS

The 3-factor formula for cities can be expressed as:

$$G_{ik} = G_{mk} \left[\frac{P_{ik}\left(\frac{y_{ok}}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)}{\sum_{i=1}^{N_k} P_{ik}\left(\frac{y_{ok}}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)} \right]$$

The relative income factor $\left(\frac{y_{ok}}{y_{ik}}\right)$ can be rewritten relative to State per capita income in both the numerator and denominator because y_{ok} can be factored from the denominator and cancelled with the same term of the numerator. Thus, we obtain the following:

$$(6) \quad G_{ik} = G_{mk} \left[\frac{P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)}{\sum_{i=1}^{N_k} P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)} \right]$$

Each city's allocation is determined by multiplying equation 5 by equation 6.

$$(7) \quad G_{ik} = G_s \left[\frac{\sum_{i=1}^{N_k} P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2}{\sum_{k=1}^{K} \sum_{i=1}^{N_k} P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2} \right] \left[\frac{P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)}{\sum_{i=1}^{N_k} P_{ik}\left(\frac{y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)} \right]$$

The first term in brackets establishes the county area allocation to be distributed to cities. It is composed of four factors: population, relative per capita income, tax effort, and the city-county income disparity.

The expression in equation 7 can be rearranged in the following form:

$$(8)\quad G_{ik} = G_s \left[\frac{\sum_{k=1}^{K} P_{ik}\left(\frac{Y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)}{\sum_{i=1}^{N_k} P_{ik}\left(\frac{Y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2} \right] \left[\frac{\sum_{i=1}^{N_k} P_{ik}\left(\frac{Y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)\left(\frac{y_{ik}}{y_{ok}}\right)^2}{\sum_{i=1}^{N_k} P_{ik}\left(\frac{Y_s}{y_{ik}}\right)\left(\frac{T_{ik}}{Y_{ik}}\right)} \right]$$

The last term in brackets represents a weighted average of the squared income disparity between each city and the county area. If cities have predominantly higher incomes than counties, y_{ik} will be greater than the county per capita income y_{ok} and the expression in brackets will generally exceed one, thus increasing allocations to cities in that county. Alternatively, if cities tend to have lower incomes than counties, y_{ik} will be less than y_{ok} and the expression in brackets will generally be less than one, reducing allocations to those governments. The last expression in brackets is defined as the income disparity factor and is shown for North Carolina and New Jersey counties on pages 11 and 12.

The first term in brackets represents the elements of the 3-factor formula expressed as a fraction of the sum of these three factors except that the denominator includes the square of the city-county income disparity. Since this expression is summed over all governments throughout the State, the denominator reflects the <u>statewide</u>-income disparity between cities and counties. If, statewide, cities have higher incomes than counties, the denominator will be larger than it otherwise would be and allocations to all cities are proportionately lower than if there was no tiering. If the city-county income disparities were reversed, all cities would proportionately gain as a result of tiering. The net effect on allocations to individual cities, of course, represents the impact of both expressions.

COMPARISON OF ALLOCATIONS TO COUNTY AREAS WITH A TIERED AND DETIERED THREE FACTOR FORMULA

The Department of the Treasury agreed that a fully detiered formula (that is, one which eliminates both the county area step and the creation of "pots" for the different types of government) eliminates inequities among units of local government but that this may introduce inequities among geographic areas. Treasury's position is that the seriousness of this inequity should be assessed and found to be of little consequence before fully detiering the formula can be recommended.

In order to assess whether the current formula or a fully detiered formula provides an equitable distribution of funds among county areas, it will be useful to compare allocations to county areas under both formulas. Allocations to county areas under the current formula is given by the expression shown in equation 3. Under a fully detiered formula, allocations to county areas is simply the sum of the allocations to all governments within a county under the three factor formula. In terms of the notation used above, allocations to county areas under a detiered formula is given by:

$$(9) \qquad G^*_k = G_s \left[\frac{\sum_{i=o}^{N_k} P_{ik} \left(\frac{Y_s}{Y_{ik}}\right) \left(\frac{T_{ik}}{Y_{ik}}\right)}{\sum_{k=1}^{K} \sum_{i=o}^{N_k} P_{ik} \left(\frac{Y_s}{Y_{ik}}\right) \left(\frac{T_{ik}}{Y_{ik}}\right)} \right]$$

where the superscript is used to denote the detiered formula. Comparison of equations 3 and 9 demonstrate that both methods are based on the same three factors of population, relative income, and tax effort of local governments within the county area. The use of these three factors obviously makes sense in that allocations to county areas should depend on the size, income, and taxes of the local governments within the county. The only difference in the two formulas is that the tiered formula contains an additional term which measures the income disparity between the county area and its local governments. Thus, to justify the current formula as one which produces geographic equity it is necessary to provide a rationale for allocating more funds to county areas simply because the income of residents living inside cities exceeds the income of those living outside of cities. Such a rationale is not obvious. In the absence of a generally accepted criterion to determine equity among geographic areas, it is impossible to incorporate this criterion into the formula.

DETIERING DOES NOT DOUBLE COUNT POPULATION IN A COUNTY

Because a fully detiered formula makes allocations directly to units of local government, a concern may be raised that population may be double counted. Since the county government geographically overlays its local governments, some may argue that population is counted twice, once when an allocation is made to a county government and again when an allocation to an underlying city is made, while the current formula does not double count since county area allocations are made on the basis of county population.

Double counting does not occur because the population of each government is scaled by its tax effort. That is, each government's population is weighted by its tax effort. For example, if a citizen pays for half of his public services through the county government and half through his city government, then the tax effort of the two governments simply weights this citizen equally in making allocations to the two governments. On the other hand, if the county government provides more service, its tax effort automatically weights this person more in making the county government allocation than when making the city allocation.

Another way to see that a fully detiered formula does not double count population is simply to compare the two formulas that determine allocation to county areas. The comparison of equations 3 and 9 clearly shows that population enters into the determination of county area allocations identically. Therefore, if the current formula avoids double counting then the fully detiered formula also avoids it.

EXAMPLES OF THE IMPACT OF DETIERING THE REVENUE SHARING FORMULA FOR ALL FIFTY STATES

State	Per capita income 1975 (note a)	Tax effort 1977 (percent) (note a)	Revenue sharing per capita: Current formula with tiering (note a)	Revenue sharing per capita: Current formula detiered (note b)
Alabama				
Ariton Town	$3,465	1.68	$16.12	$17.74
Tuskegee City	3,487	1.41	22.03	14.79
Alaska				
Bristol Bay Borough	7,566	3.74	39.57	54.63
Juneau City Borough	9,483	3.27	47.72	47.23
Arizona				
Gila County	3,962	3.87	20.38	29.83
Holbrook Town	4,103	3.11	33.54	23.17
Arkansas				
Miller County	3,416	.46	8.66	10.28
West Helena City	3,469	.45	12.49	9.91
California				
Cerritos City	5,664	3.98	17.76	18.29
Bishop City	5,704	3.52	18.63	16.08
Colorado				
Meeker Town	4,378	1.92	7.17	13.10
Walsenburg City	4,427	1.72	14.10	11.64
Connecticut				
Bristol City	4,786	3.82	15.88	23.87
Plainville Town	4,834	3.41	24.65	21.06
Delaware				
Delaware City	4,172	1.38	28.11	35.24
Slaughter Beach	4,207	1.00	35.24	28.16

a/Entitlement Period 10 (FY 1979) data elements and allocation.

b/No changes in basic formula constraints but structure of formula "detiered." That is, all jurisdictions within a State compete with each other on a common basis according to their population, income, and tax effort.

State	Per capita Income 1975 (note a)	Tax Effort 1977 (percent) (note a)	Revenue sharing per capita: Current formula with tiering (note a)	Revenue sharing per capita: Current formula detiered (note b)
Florida				
Key West City	$4,223	1.65	$ 8.63	$10.79
Callahan Town	4,368	1.52	14.42	9.61
Georgia				
Brunswick City	3,588	3.64	19.75	27.11
Jefferson City	3,677	3.31	24.59	24.11
Hawaii - No jurisdiction is affected by detiering.				
Idaho				
Dubois City	3,244	.54	4.17	7.58
Ucon City	3,503	.50	7.72	6.56
Illinois				
Franklin Grove Vil.	3,848	1.49	10.36	11.31
Odell Township	3,861	1.44	11.37	10.84
Indiana				
Rockport City	3,772	1.20	10.32	11.19
Connelton City	3,828	1.17	13.98	10.70
Iowa				
Wayne County	3,618	2.50	22.24	22.46
Clayton Town	3,635	2.26	22.92	20.27
Kansas				
Cimarron City	3,902	1.16	3.78	8.04
Frontenac City	3,903	1.03	7.91	7.17
Kentucky				
Providence City	3,751	.77	9.75	12.03
Barbourville City	3,863	.71	29.76	10.82

a/Entitlement Period 10 (FY 1979) data elements and allocation.

b/No changes in basic formula constraints but structure of formula "detiered." That is, all jurisdictions within a State compete with each other on a common basis according to their population, income, and tax effort.

State	Per Capita Income 1975 (note a)	Tax effort 1977 (percent) (note a)	Revenue sharing per capita: Current formula with tiering (note a)	Revenue sharing per capita: Current formula detiered (note b)
Louisiana				
Rosepine Village	$3,940	.85	$ 5.88	$ 7.19
Jonesboro Town	4,053	.79	7.94	6.13
Maine				
Lisbon City	3,368	2.40	20.89	22.15
Acton Town	3,380	2.07	22.15	19.06
Maryland				
Grantsville Town	3,839	1.34	9.97	14.26
Rock Hall Town	4,030	1.20	13.70	12.18
Massachusetts				
Taunton City	3,987	4.40	22.34	21.02
Ayer Town	4,020	3.94	23.54	18.66
Michigan				
Freeman Township	3,093	1.05	10.80	12.55
Freeport Village	3,115	.82	11.80	9.70
Minnesota				
Beltrami County	3,426	1.41	14.02	15.56
Silver Lake Village	3,432	1.34	17.33	14.86
Mississippi				
Neshoba County	3,118	.89	11.96	13.39
Heidelberg Town	3,155	.73	19.96	10.92
Missouri				
Clarence City	3,159	1.45	12.94	15.09
Madison City	3,170	1.41	16.47	14.68
Montana				
Big Horn County	3,397	2.28	13.59	21.84
Ravalli County	3,511	2.09	19.83	19.30

a/Entitlement Period 10 (FY 1979) data elements and allocation.

b/No changes in basic formula constraints but structure of formula "detiered." That is, all jurisdictions within a State compete with each other on a common basis according to their population, income, and tax effort.

State	Per Capita Income 1975 (note a)	Tax effort 1977 (percent) (note a)	Revenue sharing per capita: Current formula with tiering (note a)	Revenue sharing per capita: Current formula detiered (note b)
Nebraska				
Douglas Township	$4,482	1.68	$ 8.88	$11.32
Wolbach Village	4,492	1.58	13.30	10.57
Nevada				
Lovelock City	4,544	2.08	8.30	9.48
White Pine County	4,661	1.90	8.72	8.44
New Hampshire				
Northumberland Town	3,709	1.95	11.47	$11.85
Deerfield Town	3,786	1.86	12.70	11.04
New Jersey				
Trenton City	4,164	5.38	18.35	28.10
Montague Township	4,216	5.13	29.53	26.46
New Mexico				
Los Lunas Village	3,264	1.27	24.57	24.31
Espanola City	3,383	1.20	29.65	22.13
New York				
Yonkers City	6,110	3.80	9.60	11.36
Southampton Village	6,340	3.12	14.73	9.42
North Carolina				
Edgecombe County	3,176	1.97	16.60	20.75
Chadbourn Town	3,220	1.93	29.47	20.09
North Dakota				
Valley Spring Township	4,893	1.04	8.77	8.86
Pillsbury City	4,897	.99	9.79	8.47
Ohio				
Riverside Village	4,638	1.82	10.03	12.05
Londonville Village	4,646	1.76	13.02	11.66

a/Entitlement Period 10 (FY 1979) data elements and allocation.

b/No changes in basic formula constraints but structure of formula "detiered." That is, all jurisdictions within a State compete with each other on a common basis according to their population, income, and tax effort.

State	Per Capita Income 1975 (note a)	Tax effort 1977 (percent) (note a)	Revenue sharing per capita: Current formula with tiering (note a)	Revenue sharing per capita: Current formula detiered (note b)
Oklahoma				
Wagoner City	$3,771	1.90	$15.15	$19.82
Wilburton City	3,826	1.17	19.27	12.04
Oregon				
Baker County	4,003	1.49	17.10	19.67
Riddle City	4,094	1.28	18.36	16.54
Pennsylvania				
Wilkensburg Borough	5,342	1.70	12.14	13.48
Whitehall Township	5,355	1.66	14.32	13.10
Rhode Island - No jurisdiction in the State is dramatically affected by detiering.				
South Carolina				
Irmo Town	3,759	.28	4.32	4.82
Tatum Town	3,764	.17	4.82	4.32
South Dakota				
Taopi Township	3,911	1.39	6.25	8.57
Bowdle City	3,960	1.36	10.40	8.32
Tennessee				
Portland Town	3,410	1.96	15.74	17.96
Waynesboro City	3,485	1.80	24.37	16.16
Texas				
Texas City	5,071	2.99	16.70	17.04
Kilgore City	5,078	2.81	18.17	15.95
Utah				
Morgan City	3,820	.89	8.13	9.16
Wellington City	3,881	.84	9.54	8.64

a/Entitlement Period 10 (FY 1979) data elements and allocation.

b/No changes in basic formula constraints but structure of formula "detiered." That is, all jurisdictions within a State compete with each other on a common basis according to their population, income, and tax effort.

State	Per Capita Income 1975 (note a)	Tax effort 1977 (percent) (note a)	Revenue sharing per capita: Current formula with tiering (note a)	Revenue sharing per capita: Current formula detiered (note b)
Vermont				
Rutland Town	$4,378	2.73	$26.09	$28.37
Vergennes City	4,508	2.61	35.28	26.31
Virginia				
Dumfries Town	3,937	1.29	7.47	11.38
Blackstone Town	3,949	1.17	14.89	10.32
Washington				
Oak Harbor City	4,181	1.07	7.89	10.22
Elma Town	4,277	.95	9.23	8.88
West Virginia				
Bethlehem Village	5,844	.80	13.75	16.78
West Logan Town	5,908	.62	21.89	13.21
Wisconsin				
Delavan Town	4,196	1.00	10.80	11.14
River Falls City	4,215	.83	10.91	9.19
Wyoming				
Thermopolis Town	5,009	1.10	8.13	10.61
Sheridan County	5,095	1.04	10.28	9.81

a/Entitlement Period 10 (FY 1979) data elements and allocation.

b/No changes in basic formula constraints but structure of formula "detiering." That is, all jurisdictions within a State compete with each other on a common basis according to their population, income, and tax effort.

IT'S A THIN LINE BETWEEN MUNICIPALITIES AND TOWNSHIPS

The distinction between municipalities and townships creates funding inequities between the two types of governments as discussed in chapter 2. New Jersey best exemplifies the municipality-township problem because New Jersey is acutely affected by the municipality-township funding inequities; has made several efforts to correct the funding inequities; and is unique in that State law allows local governments to change their governmental classification by a majority vote.

CENSUS DEFINITION AND CRITERIA OF GOVERNMENT UNITS

The General Revenue Sharing Program utilizes, as a method for distributing revenue sharing allocations, the Bureau of Census' definitions and criteria for distinguishing between municipalities and townships.

According to the Census Bureau, a government is defined as

> "An organized entity which, in addition to having governmental character, has sufficient discretion in the management of its own affairs to distinguish it as separate from the administrative structure of any other governmental unit."

The various units of government are thus classified using the following criteria consistent with the definition above.

(1) Existence of an organized entity.

- (a) Some form of organization and the possession of some corporate powers--such as perpetual succession, the right to sue and be sued, have a name, make contracts, acquire and dispose of property--must be present.

(2) Governmental character.

- (a) Officers are popularly elected or are appointed by public officials.
- (b) A high degree of responsibility to the public, demonstrated by requirements for public reporting or for accessibility of records to public inspection.

(c) Having power to levy property taxes, issue debt, and paying interest exempt from Federal taxation.

(3) Substantial autonomy.

(a) An entity has considerable fiscal and administrative independence.

On the basis of this criteria, there are roughly 38,000 substate local governments eligible to receive revenue sharing aid.

THE DISTINCTIONS BETWEEN MUNICIPALITIES AND TOWNSHIPS

To be classified as a municipality for revenue sharing purposes, a government has to be (1) organized, active, and meet the three criteria listed above; (2) incorporated; and (3) a "place" as defined by the Population Demographics Division of the Bureau of the Census. A "place" is either incorporated or unincorporated, is densely populated, and in a concentrated area. Thus a municipality is a political subdivision within which a municipal corporation has been established to provide general local government for a specific population concentration in a defined area. A municipality may be termed a city, village, borough, or town.

Township governments meet the three criteria of being a government but do not meet the criteria of being a "place" in that their geographic boundaries tend to cover wide geographic areas with low population densities. Therefore, for statistical purposes, the Bureau of the Census places townships into a separate classification. The placement of townships into a separate classification is based purely on demographic considerations which are unrelated to the various governmental functions performed by both municipalities or townships.

Census stated that the current definitions of municipalities and townships are derived from principles developed approximately 100 years ago and had no real significance other than for demographic purposes. However, because the General Revenue Sharing Program allocates funds based on these distinctions (through the tiering procedure), the distinctions between municipalities and townships have become significant. Census officials have indicated that, absent the general revenue sharing program, they would for purposes of the public sector statistics program consider combining the municipal and township classes into a single class in those States where there no longer exists a significant difference in government functions.

NEW JERSEY EFFORTS TO RESOLVE CLASSIFICATION DIFFERENCES

Since enactment of the General Revenue Sharing Program in 1972, Montclair, New Jersey, has expended considerable effort in trying to resolve so-called "township inequities" in revenue sharing allocations.

Congressman Joseph G. Minish's (11th District, New Jersey) concerns about revenue sharing allocations were first recorded in the Congressional Record on October 12, 1972. Montclair, concerned that actual allocations fell far short of the initial estimate that it would have received under the proposed program, passed its first resolution on December 12, 1972, urging more equitable revenue sharing allocations. In a letter dated December 29, 1972, Congressman Minish stated that "Townships are treated differently than towns, villages, cities, and other types of local governments" and urged the Department of the Treasury to reevaluate and invoke Section 108(d)(6) of the Revenue Sharing Act, which gives the Secretary of the Treasury the power to alter the effect of the act in circumstances where its original purposes are not being met. However, no action was taken by the Department.

On October 23, 1975, the Montclair Town Commissioner submitted a proposal to the House Subcommittee on Intergovernmental Relations and Human Resources. This proposal called for eliminating separate allocations to municipalities and townships in States where there is no substantive difference in their powers and duties as units of local government. The proposal was not enacted despite the overwhelming support of the New Jersey Congressional Delegation because members from other States wanted to know the impact on their States.

A Federal administrative remedy was subsequently sought under New Jersey Senate Concurrent Resolution 3004, which passed the New Jersey Senate on April 28, 1977, and the New Jersey General Assembly on June 30, 1977. The New Jersey Legislation (SCR-3004) urged the Bureau of the Census to classify all New Jersey municipalities in a single classification.

The Administration responded that the Census Bureau did not intend to reclassify the New Jersey townships because the classification was not based solely on governmental and corporate differences but took into account the demographic contrast as to density and character of settlement. The Census Bureau maintained that such demographic distinctions were too great to treat all New Jersey local governments alike for general statistical purposes.

In a letter dated October 20, 1977, the Carter Administration suggested that since Census had no intention of reclassifying all New Jersey townships, a more limited reclassification could be achieved through State action by altering the legal designation of densely populated townships to another type of municipality. The Census Bureau unofficially advised that this would be acceptable to the Bureau for general statistical purposes, for the Bureau would accept any government certified as a municipality by the appropriate State agency. Such a change would substantially relieve the township inequity in New Jersey.

Senate Bill No. 907 was introduced into the New Jersey State Legislature on February 27, 1978. This bill would reclassify densely populated townships as suggested by the Bureau of the Census. The bill was passed by the Senate on December 4, 1978. The bill would have provided substantial, but not complete, relief because, for demographic reasons, Census would not recognize reclassification of those townships that are rural in character. However, the bill died at the end of the legislative session. Montclair officials felt then that further actions by the New Jersey Legislature would be unlikely.

If the legislation had been enacted, the solution would have been partial since the remaining townships and county governments would continue to be in separate classifications based on demographic distinctions rather than on the basis of real differences in the functional responsibilities of the different types of governments.

The New Jersey State Law NJS 40:43-4, entitled "Article 2, Change of Name," allows municipalities to change their designations by referendum alone, without the necessity of concurrence of the Legislature. In 1978, South Orange Village was the first municipality to change its name to the "township" of South Orange Village effective beginning in entitlement period 10 (October 1978 to September 1979). The Borough of Fairfield in 1978 changed its designation by a majority vote of the electorate and became the "Township of Fairfield" effective beginning entitlement period 11 (October 1979 to September 1980).

Montclair officials initially refused to take such actions because they felt this approach simply imposed the inequity on other local governments in the State rather than eliminating the inequity. They felt the inequity should be corrected through legislative changes.

During the 1980 renewal of Revenue Sharing, the Montclair Town Commissioner testified on April 16, 1980, before the House Subcommittee on Intergovernmental Relations and Human Resources, Committee on Government Operations, to urge that the definition of "townships" in Section 108(d)(3) of the act be changed to eliminate the distinction between townships and other municipalities in New Jersey alone. On May 21, 1980, he testified again before the Senate Subcommittee on Revenue Sharing, Intergovernmental Revenue Impact and Economic Problems, to promote more equitable local government allocations of General Revenue Sharing in New Jersey by enacting the Detiering Provision of S. 2574 or by amending Section 108(d)(3) of the act. However, the House Subcommittee on Intergovernmental Relations and Human Resources, Committee on Government Operations, voted to eliminate the detiering provision of H.R. 7112 during the markup of the Administration Bill.

The Montclair Town Commissioner made one last attempt in a letter dated June 20, 1980, that urged the Subcommittee on Intergovernmental Relations and Human Resources to restore the detiering provision in H.R. 7112, amend the bill to provide detiering for New Jersey alone, or amend the bill to eliminate the distinction between townships and nontownships in New Jersey alone for purposes of General Revenue Sharing only. However, the Revenue Sharing Act was not changed and the actions taken by South Orange and Fairfield prompted the Town of Montclair and West Orange to change their designation by referendum in the November 4, 1980, election. The municipalities of Belleville, Verona, Bloomfield, Nutley, Essex Fells, Caldwell, and West Caldwell have since changed their classification from municipality to a township. These changes became effective in entitlement period 13 (October 1981 to September 1982).

SUGGESTED REVISIONS TO THE
STATE AND LOCAL FISCAL ASSISTANCE
ACT OF 1972, AS AMENDED
(PUBLIC LAW 94-488)

We suggest that section 108 of the State and Local Fiscal Assistance Act of 1972, as amended (31 U.S.C. §1227 et seq.) be further amended to read as follows 1/:

(1) Subsection 108(a) is amended to read:

(a) ALLOCATION TO UNITS OF LOCAL GOVERNMENT--

Except as otherwise provided in this section, the amount allocated to units of local government (other than Indian tribes and Alaskan native villages) within a State for any entitlement period shall be allocated so that each unit of local government will receive an amount which bears the same ratio to the total amount to be allocated to all such units within the State as--

(1) the population of that unit of local government, multiplied by the general tax effort factor of that unit of local government, multiplied by the relative income factor of that unit of local government, bears to

(2) the sum of the products determined under paragraph (1) for all such units.

(2) Subsection (b)(1), (2), (3), and (5) of section 108 are repealed. Subsection (b)(4) is redesigned subsection (b)(1), and amended to read:

(b)(1) Indian tribes and Alaskan Native Villages--If within a State there is an Indian tribe or Alaskan native village which has a recognized governing body that performs substantial governmental functions,

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1/This change will eliminate the act's intrastate geographic tiering procedures for fund allocations. Section 108 dollar constraints are not affected by this change.

then before applying subsection (a) there shall be allocated to such tribe or village a portion of the amount allocated to the State for the entitlement period which bears the same ratio to such amount as the population of that tribe or village bears to the population of the State involved.

(3) Subsection (b)(6) of section 108 is redesignated subsection (b)(2), and amended to read as follows:

(b)(2) ENTITLEMENT--

(A) IN GENERAL--Except as otherwise provided in this subsection, the entitlement of any unit of local government for any entitlement period shall be the amount allocated to such unit under this section (after taking into account any applicable modification under subsection (c)).

(B) MAXIMUM AND MINIMUM PER CAPITA ENTITLEMENT--

Subject to the provisions of subparagraphs (C) and (D), the per capita amount allocated to any unit of local government (other than a county government) within a State under this section for any entitlement period shall not be less than 20 percent, nor more than 145 percent, of the amount allocated to the State under section 106, divided by the population of that State.

(C) LIMITATION--The amount allocated to any unit of local government under this section for any entitlement period shall not exceed 50 percent of the sum of (i) such government's adjusted taxes, and (ii) the intergovernmental transfers of revenues to such government (other than transfers to such government under this subtitle).

(D) ENTITLEMENT LESS THAN $200, OR GOVERNING BODY WAIVES ENTITLEMENT--If (but for this subparagraph) the entitlement of any unit of local government below the level of the county government--

(i) would be less than $200 for any entitlement period ($100 for an entitlement period of

6 months, $150 for an entitlement period of 9 months), or

(ii) is waived for any entitlement period by the governing body of such unit, then the amount of such entitlement for such period shall (in lieu of being paid to such unit) be redistributed to other local governments within the State in accordance with subsection (a) and (b) of this section. If the entitlement of an Indian tribe or Alaskan native village is waived for any entitlement period by the governing body of that tribe or village, then the amount of such entitlement for such period shall (in lieu of being paid to such tribe or village) be redistributed to other local governments within the State in accordance with subsection (a) and (b) of this section.

(4) Subsection (b)(7) of section 108 is redesignated subsection (b)(3), and amended to read as follows:

(3) ADJUSTMENT OF ENTITLEMENT--

(A) IN GENERAL--In adjusting the allocation of any unit of local government, the Secretary shall make any adjustment required under paragraph (2)(B) first, any adjustment required under paragraph (2)(C) next, any adjustment required under paragraph (2)(D) next, and any adjustment required under subsection (e) last.

(B) ADJUSTMENT FOR APPLICATION OF MAXIMUM OR MINIMUM PER CAPITA ENTITLEMENT--The Secretary shall adjust the allocations made under this section to units of local government in any State in order to bring those allocations into compliance with the provisions of paragraphs (2)(B) and (2)(C).

(C) ADJUSTMENT FOR APPLICATION OF LIMITATION--In any case in which the amount allocated to a unit of local government is reduced under paragraph (2)(C) by the Secretary, the amount of that reduction shall be added to and increase the entitlements--

(i) first, of units of local government within the State, to the extent that such units may (after the application of paragraph (2) receive such a reallocation, and

(ii) then, if no unit of local government may receive such an allocation on account of the application of paragraph (2), among all units of local government within the State on a pro rate basis.

(5) Subsection (c) of section 108 is amended to read:

(c) SPECIAL ALLOCATION RULES--

(1) OPTIONAL FORMULA--A State may by law provide for the allocation of funds among units of local government (other than county governments), on the basis of the population multiplied by the general tax effort factors of such areas or units of local government, on the basis of the population multiplied by the relative income factors of such areas of units of local government, or on the basis of a combination of those two factors. Any State which provides by law for such a variation in the allocation formula provided by subsection (a) shall notify the Secretary of such law not later than 30 days before the beginning of the first entitlement period to which such law is to apply. Any such law shall--

(A) provide for allocating 100 percent of the aggregate amount to be allocated under subsection (a);

(B) apply uniformly throughout the State; and

(C) apply during the period beginning on the first day of the first entitlement period to which it applies and ending September 30, 1983.

(2) CERTIFICATION--Paragraph (1) shall apply within a State only if the Secretary certified that the State law complies with the requirements of such paragraph. The Secretary shall not certify any such law with respect to which he receives notification later than 30 days prior to the first entitlement period during which it is to apply.

(6) Subsections (d)(1) and (d)(2) of section 108 are amended to read:

(d) GOVERNMENTAL DEFINITIONS AND RELATED RULES--For purposes of this title--

(1) UNITS OF LOCAL GOVERNMENT--The term "unit of local government" means the government of a county, municipality, or township, which is a unit of general government below the State (determined on the basis of the same principles as are used by the Bureau of Census for general statistical purposes). Such term also means, except for purposes of subsection (c) and paragraphs (2)(C) and (2)(D) of subsection (b), the recognized governing body of an Indian tribe or Alaskan native village which performs substantial governmental functions. Such term also means (but only for purposes of subtitles B and C) the office of the separate law enforcement officer to which subsection (e)(1) applies.

(2) CERTAIN AREAS TREATED AS COUNTIES--In any State in which any unit of local government (other than a county government) constitutes the next level of government below the State government level, then, except as otherwise provided in this paragraph, the geographic area governed by such unit of government shall be treated as being governed by a county government. In any State in which any county area is not governed by a county government but contains two or more units of local government, such units shall not be treated as county governments.

APPENDIX V

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

DEPUTY ASSISTANT SECRETARY

January 19, 1982

Dear Mr. Anderson:

Secretary Regan has asked me to thank you for the opportunity to comment on the draft of your report, "Removing Tiering from the Revenue Sharing Formula Would Eliminate Payment Inequities to Local Governments." The report makes many useful technical contributions to an understanding of the Revenue Sharing formula. However, its recommendation of formula changes is premature; a number of important analytic and factual issues remain unresolved.

The Revenue Sharing formula is a complex mechanism for allocating general-purpose fiscal assistance within a State in inverse relation to the fiscal capacities, broadly defined, of local governments. Since the enactment of Revenue Sharing in 1972, extensive studies of the formula have been conducted by GAO, Treasury, and numerous private analysts. These studies have consistently found that the formula is, in general, conceptually sound and achieves a good match between payments and local fiscal capacities. The problems identified to date by this research, including that conducted by GAO, are relatively minor. For example, the formula modifications recommended by GAO in its current report would shift less than 3 percent of all funds allocated.

The GAO report, like much of the other research on the Revenue Sharing formula--in common with much of that dealing with taxation, economic regulation, welfare, and other types of policy analysis--appropriately places significant emphasis on the issue of horizontal equity. In concept, horizonal equity--the reasonably equal treatment of individuals, households, firms, governments, or geographic areas in like circumstances--is an elementary principle of justice in public policy with which those of all political persuasions can concur. In practice, however, the definition of the criterion or index to be used in evaluating a policy's horizontal equity is often a matter of no little controversiality.

Revenue Sharing researchers have raised issues pertaining to the horizontal equity of payments among geographic areas, individual governments, and types of governments. GAO's research focuses exclusively on the equity of payments among individual jurisdictions in a State. By so doing, it fails to acknowledge the possible relevance of other criteria to the evaluation of the Revenue Sharing formula.

The tiering of the formula, the focus of the GAO report, has been of considerable interest to Revenue Sharing researchers. Tiering is the procedure by which funds are first allocated among the States, then among the county areas in each State, then among the three major types of governments in each county, and finally to each local government.

Specifically, a State's payment is allocated among its county areas on the basis of population, tax effort, and per capita income. A county area's funds are then allocated among the three types of governments (the county government, cities, and townships) in proportion to their adjusted taxes (local taxes net of school taxes or expenditures). Finally, cities compete against each other and townships compete against each other on the basis of population, tax effort, and per capita income.

These procedures were developed in 1972 in an effort to accommodate the extraordinarily complex patterns of overlying and underlying local governments. Typically, local government in the United States is organized by county area--a county's residents are served by a county government and a constellation of underlying cities and townships, which may or may not overlap. The pattern of local government organization often varies widely among the counties of a State.

Tiering of the formula ensures that Revenue Sharing payments are not affected by these sub-county variations in local government structure. Thus the key consideration implicit in the current formula is horizontal equity among county areas. That is, county areas with the same population, tax effort, and per capita income should receive identical Revenue Sharing payments.

Early research on the Revenue Sharing formula established that, while the allocation of funds achieves equity among similar county areas, there are significant inequities among jurisdictions. Local governments with the same formula factors in the same or different county areas receive different payments. The studies determined that these interjurisdictional inequities result from the tiering of the formula, but they never fully assessed the issue.

The GAO report provides a detailed analysis of the sources of the payment inequities among jurisdictions. It verifies that the inequities are attributable to the tiering of the formula, and it establishes that the sub-county division of funds among government types is a particularly important factor. Focusing exclusively on the issue of horizontal equity among jurisdictions, the report concludes that the formula should be detiered--that all jurisdictions in a State should compete on a common basis according to population, income, and tax effort.

The formula modifications recommended by GAO would eliminate interjurisdictional inequities. However, Treasury's research suggests that the modifications would introduce inequities among county areas. As a result, the residents of some counties in a State would benefit from larger Revenue Sharing payments than would be justified by their collective tax effort and per capita income simply because of the way their local governments are organized. This is exactly the situation the formula appears to have been designed to avoid.

These considerations make acceptance or rejection of GAO's proposal to detier the formula contingent on four key issues: (1) the extent of the inequities that would be eliminated by the proposal, (2) the magnitude of the inequities that would be introduced by the modifications,

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(3) the standards applied to assess the seriousness of the different types of inequities, and (4) the possibilities for formula modifications that might reduce to negligible levels inequities among both areas and jurisdictions. Of these issues, the report addresses only the first.

The report provides no assessment of the magnitude of the inequities that would be introduced among county areas by the proposed formula modifications, nor does it offer a rationale for giving preference to equity among jurisdictions over equity among county areas. Also unexamined are formula-modification options that might reduce interjurisdictional inequities without introducing significant inequities among county areas.

Treasury's analysis suggests that this might be achieved by eliminating the division of funds within a county area according to the total adjusted tax collections of each type of government. If this step in the tiering process alone were eliminated, all localities within a county might then compete for funds on a common basis according to their populations, tax efforts, and per capita incomes. Unfortunately, the mathematics of the Revenue Sharing formula is so complex that a conclusive evaluation of this option relative to the GAO proposal, the current formula, and other options requires simulation analysis, which has yet to be performed.

These comments are in no way intended to denigrate GAO's research. Quite the contrary, the analysis is clearly among the most significant yet conducted of the Revenue Sharing formula. As useful as the research is, however, it is incomplete. It simply does not provide a sufficient basis for the conclusion that the formula should be fully detiered. Therefore, while we welcome the results of the research, we must urge that the report's policy recommendation be set aside until the full range of critical issues receives appropriate attention and is adequately resolved.

I and my staff are looking forward to continued consultation with GAO staff in the hope that our cooperative efforts in the next few months will be successful in resolving these issues.

Sincerely,

Robert W. Rafuse, Jr.

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