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ALTERNATIVE REVENUE SHARING FORMULAS AND THEIR POTENTIAL IMPACT ON THE DISTRIBUTION OF FUNDS IN NEW YORK STATE

By

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ALTERNATIVE REVENUE SHARING FORMULAS AND THEIR POTENTIAL IMPACT ON THE DISTRIBUTION OF FUNDS IN NEW YORK STATE*

Harry P. Mapp, Jr.**

Introduction

We hear so much criticism these days of our public officials, public institutions and public programs, that the response by citizens and state and local leaders to federal general revenue sharing has been like a refreshing Spring breeze. This is not to argue that officials haven't been concerned about receiving an amount of funds equal to their expectations or that citizens haven't been concerned about, and sometimes critical of, the stated purposes for which the funds have been spent. However, few have been very vocal in their criticism of the merits of the basic idea, which is to share substantial amounts of federal funds with state and local governments over a five-year period with very few strings attached. To be sure, there are some broad guidelines regarding the purposes for which the funds may be spent, but given the imagination and ingenuity of state and local financial experts, the funds are virtually unrestricted.

The events leading up to the adoption of the State and Local Fiscal Assistance Act of 1972, which authorized federal general revenue sharing, included at least a decade during which there occurred a fundamental transformation in the attitudes of our citizens regarding the range, quantity and quality of services desired of all levels of government. Evidence of these transformations is contained in the dramatic growth in public expenditures. For example, between 1960 and 1972, expenditures of federal, state and local governments increased from $151.3 billion to $410.3 billion, about 171 percent. Local government expenditures, which were pushed upward by expanding school enrollments and welfare caseloads, maintained their relative importance by growing from $29.0 billion to $75.4 billion, about 169 percent [1, p. 17].

The rising cost of providing public services placed severe strains on the budgets of units of government across the country. Heavy reliance on the property tax as a primary source of revenue merely exacerbated this problem at the local level. The relatively faster rate of growth in total expenditures than either property tax revenues or revenues from own sources contributed to the

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development of an ever-widening "revenue gap." Local leaders, faced with pressure to simultaneously hold down property taxes and expand services, sought assistance from higher levels of government. This pressure from local and state leaders led to final passage by the U. S. Congress of the federal general revenue sharing legislation.

Perhaps because the reaction of state and local leaders to general revenue sharing has been almost universally favorable, and perhaps because the program has been in existence less than two years, little empirical analysis of its impact has been performed. Several aspects of the legislation deserve closer attention by researchers. For example, the legislation provides for the allocation of revenue sharing funds to county areas on the basis of population, relative income and general tax effort. The allocation of revenue sharing funds to county areas varies directly with population and general tax effort, but inversely with per capita income. Tax effort encompasses all general purpose taxes of each unit of local government, however, excludes property taxes collected to support schools and revenues derived from user charges and special assessments. To the extent that user charges and property tax revenues to support public education may be a greater proportion of tax effort in rural than urban areas, elimination of these factors from tax effort may work against rural areas.

In addition, the federal legislation contains a provision whereby any state may legislate an optional formula for distributing funds to local governments within the state. Rather than allocating funds on the basis of the three-factor formula, which includes population, general tax effort and relative income, the law permits states to adopt a formula based on population and general tax effort, population and relative income, or a combination of those two factors.

The purposes of this paper are (1) to evaluate the potential impact on the distribution of federal general revenue sharing funds among county areas in New York State[1/] of allocating funds based on (a) population, relative income and general tax effort, (b) population and general tax effort, and (c) population and relative income, and (2) to evaluate the impact on the distribution of revenue sharing funds of altering the definition of tax effort to (a) include revenues from user charges and special assessments and (b) include revenues from property taxes to support public education, in addition to user charges and special assessments.

The State and Local Fiscal Assistance Act of 1972

The federal general revenue sharing legislation specifies procedures under which each state's revenue sharing allocation is to be distributed. One-third of the state's entitlement goes to the state government with the remaining two-thirds going to local governments within the state. The local government entitlement is, in general, allocated to each county area on the basis of population, general tax effort and relative income, as indicated in Equation (1).[2/]

1/ County areas were selected for analysis because of the availability of data. Similar procedures could be adapted for other states or for units of local government within county areas.

2/ Procedures are also specified for allocating revenue sharing funds to the county government, the towns as a group, and the cities and villages as a group based on the adjusted taxes of each group, and among individual towns, cities and villages on the basis of population, general tax effort and relative income. This analysis concentrates on the initial allocation of revenue sharing funds among county areas.

$$CPl_i = \frac{POP_i \cdot GTE_i \cdot RI_i}{\sum_{i=1}^{n} POP_i \cdot GTE_i \cdot RI_i} \qquad (1)$$

where

CPl_i = proportion of the local government revenue sharing entitlement, county area i.
POP_i = population, county area i.
GTE_i = general tax effort factor, county area i.
RI_i = relative income factor, county area i.
n = the number of county areas.

Population means the total resident population for a county area as determined by the Bureau of the Census in the 1970 Census of Population. The relative income factor is defined as the ratio of state per capita personal income to county area per capita personal income. Per capita income for each county area is the mean income of all persons residing in that county area, based on the 1970 Census of Population and Housing.

The general tax effort factor for a county area is defined as the ratio of adjusted taxes to aggregate personal income for that county area. Adjusted taxes encompass all general purpose taxes of the county government, as well as those of the towns, villages and cities within the county area. Included are property taxes (except those collected to support schools and other education programs); the local portions of jointly imposed State and local sales and compensating use taxes[3/]; other non-property taxes, such as those, for example, on admissions and harness racing; and, licenses, permits and other county or municipal taxes. Adjusted taxes do not include receipts from user charges, special assessments, interest earnings or fines.

Evaluation of Alternative Formulas

Population, Relative Income and General Tax Effort

In New York State, the three-factor formula, which includes population, relative income and general tax effort, is currently being used to allocate the local government revenue sharing entitlement among county areas. To approximate the distribution of the 1972 local government entitlement of $394.3 million, estimates of population, relative income and general tax effort for the county areas of New York State were substituted into Equation (1). The census of county area population for 1970 was obtained from the U.S. Bureau of the Census [5]. Aggregate personal icoome and per capita personal income for the counties of New York State were derived from data published by the New York State Division of the Budget and estimated by the New York State Department of

3/ A local government's share of a wholly state imposed tax is classified as an intergovernmental transfer and not as local tax effort.

Commerce from the federal estimates of aggregates for each state [4, pp. 93-94].[4/] Adjusted taxes for each county area were calculated on the basis of data published by the New York State Department of Audit and Control [2].

Estimates of the county area allocations, expressed both in thousands of dollars and as a percentage of the estimated $394.3 million local government entitlement for 1972, are presented in Table 1. These figures indicate that, under the three-factor formula currently in use, New York City received nearly $192.5 million, or 48.8 percent of the 1972 local government entitlement for New York State. The highly urbanized counties in Group 2, those containing between zero and 25 percent rural population, received over 27 percent of the total. Thus, the highly urbanized portions of the State received over 76 percent of the local government entitlement under the three-factor formula.

Counties in Group 3, with between 26 and 50 percent rural population received approximately 9.2 percent of the local government entitlement, while those in Group 4, with between 51 and 75 percent rural population, received approximately 12.0 percent of the entitlement. The most rural counties, those with between 76 and 100 percent rural population which make up Group 5, received slightly less than three percent of the local government entitlement.

Population and General Tax Effort

To evaluate the potential impact of legislation by the State to adopt an alternative revenue sharing allocation formula based on population and general tax effort, each county area's proportion of the local government entitlement was re-calculated using Equation (2).

$$CP2_i = \frac{POP_i \cdot GTE_i}{\sum_{i=1}^{n} POP_i \cdot GTE_i} \qquad (2)$$

Allocating the local government entitlement on the basis of population and general tax effort, which eliminates relative income from the formula, results in substantial shifts in the distribution of revenue sharing funds. These changes, expressed in Table 1 in thousands of dollars and as a percentage of the amount received under the three-factor formula indicate that eliminating

4/ Estimates of personal income include money income received by residents before deductions of income taxes and government retirement payments, and include benefits for retirement, unemployment and welfare. Certain nonmonetary income, such as the rental value of owner-occupied homes, payment-in-kind for work performed, and food produced and consumed on farms, is included. This definition of personal income may differ slightly from that used by the Office of Revenue Sharing to compute allocations to local governments [6, pp. 3-4]. However, differences are thought not to be of sufficient magnitude to influence the results of this analysis.

relative income from consideration results in an increase of over 10 percent in the proportion of the local government entitlement accruing to the counties of New York City. They would enjoy about a $19 million boost in federal general revenue sharing funds.

The highly urbanized Group 2 counties would also benefit from greater emphasis on population and general tax effort. Their share of the local government entitlement would increase by $3.9 million, a 3.6 percent increase. However, this increase is by no means evenly distributed across Group 2 counties. For example, high income Westchester and Nassau Counties would be the major beneficiaries, receiving increases of 59.9 percent and 39.3 percent, respectively. Monroe and Albany Counties would also receive additional revenue, but more modest increases of 5.5 percent and 5.9 percent, respectively. Four counties, Erie, Onondaga, Rockland and Suffolk, would receive less revenue under the two-factor formula containing population and general tax effort than under the three-factor formula which also includes relative income.

Reduced reliance on relative income would also lower the revenue sharing allocation in every county in Groups 3, 4 and 5. Because per capita income in these rural counties is lower than in the urban counties, relative income is considerably more important. As a result, Group 3 counties incur about a 20.0 percent reduction in their revenue sharing allocation. The reductions in both Groups 4 and 5 amounts to approximately 27 percent. Clearly, New York City and several of the highly urbanized counties would be the primary beneficiaries of adopting an allocation formula based on population and general tax effort and, thus, eliminating relative income from consideration.

Population and Relative Income

A third allocation formula was used to evaluate the potential impact of distributing funds to county areas on the basis of population and relative income. The proportion of the local government entitlement which would accrue to county areas based on population and relative income was calculated using Equation (3).

$$CP3_i = \frac{POP_i \cdot RI_i}{\sum_{i=1}^{n} POP_i \cdot RI_i} \qquad (3)$$

Eliminating general tax effort from the general revenue sharing formula would also result in substantial shifts in the distribution of funds compared to the distribution under the three-factor formula. These changes for county areas, expressed in thousands of dollars and as a percentage of the allocation received under the three-factor formula, are presented in Table 1.

Elimination of general tax effort from the distribution formula would reduce the revenue sharing allocation of New York City while increasing the share of the other county groups. The share distributed to New York City would decline by $38.8 million, or by more than 20 percent. The allocation to counties in Groups 2, 3 and 4 would rise by about 21.4 percent, 16.5 percent

Table 1
Estimates of 1972 Revenue Sharing Allocations Based on Alternative Distribution Formulas, County Areas of New York State

County Groups[a]	Percent of 1970 State Population	1972 Allocation Based on POP, GTE and RI[b]		Change From 1972 Allocation Based on POP and GTE		Change From 1972 Allocation Based on POP and RI	
		County Area Allocation (thousands)	Percent of Total	Change in Allocation (thousands)	Percentage Change	Change in Allocation (thousands)	Percentage Change
Group 1							
New York City	43.28	$192,458	48.31	+$19,281	+10.02	-$38,760	-20.14
Group 2							
Albany	1.57	3,982	1.01	+ 237	+ 5.94	+ 1,814	+45.55
Erie	6.10	23,895	6.06	- 2,721	-11.39	+ 2,996	+12.54
Monroe	3.90	10,764	2.73	+ 592	+ 5.50	+ 3,628	+33.70
Nassau	7.83	16,955	4.30	+ 6,664	+39.30	+ 5,008	+29.54
Onondaga	2.59	11,238	2.85	- 1,341	-11.93	+ 236	+ 2.10
Rockland	1.26	4,771	1.21	- 749	-15.70	+ 1,104	+23.14
Schenectady	0.86	2,366	0.60	- 79	- 3.33	+ 1,222	+51.65
Suffolk	6.18	25,117	6.37	- 3,628	-14.44	+ 3,076	+12.25
Westchester	4.90	8,162	2.07	+ 4,889	+59.90	+ 3,825	+46.86
Total	35.21	107,250	27.20	+ 3,864	+ 3.60	+ 22,909	+21.36
Group 3							
Broome	1.22	4,929	1.25	- 710	-14.40	+ 631	+12.80
Chautauqua	0.81	4,180	1.06	- 1,065	-25.47	+ 39	+ 0.94
Chemung	0.56	2,366	0.60	- 513	-21.67	+ 394	+16.65
Cortland	0.25	1,262	0.32	- 355	-28.12	+ 118	+ 9.35
Fulton	0.29	1,419	0.36	- 394	-27.78	+ 119	+ 8.39
Herkimer	0.37	1,183	0.30	- 237	-20.03	+ 670	+56.64
Montgomery	0.31	1,419	0.36	- 354	-24.95	+ 198	+13.95
Niagara	1.29	6,427	1.63	- 1,341	-20.86	- 39	- 0.61
Oneida	1.50	5,678	1.44	- 1,104	-19.44	+ 1,577	+27.77
Orange	1.22	4,416	1.12	- 749	-16.96	+ 1,301	+29.46
Rensselaer	0.84	2,839	0.72	- 394	-13.89	+ 946	+33.33
Total	9.01	36,118	9.16	- 7,216	-19.98	+ 5,954	+16.48

Table 1 (continued)

County Groups[a]	Percent of 1970 State Population	1972 Allocation Based on POP, GTE and RI[b]		Change From 1972 Allocation Based on POP and GTE		Change From 1972 Allocation Based on POP and RI	
		County Area Allocation (thousands)	Percent of Total	Change in Allocation (thousands)	Percentage Change	Change in Allocation (thousands)	Percentage Change
Group 4							
Cattaraugus	0.45	$ 2,445	0.62	-$ 710	-29.03	$ 0	0.00
Cayuga	0.42	2,208	0.56	- 552	-25.00	+ 40	+ 1.81
Clinton	0.40	1,893	0.48	- 552	-29.17	+ 355	+18.75
Delaware	0.25	1,222	0.31	- 394	-32.24	+ 198	+16.20
Dutchess	1.22	2,997	0.76	- 119	- 3.97	+ 1,932	+64.47
Franklin	0.24	1,814	0.46	- 749	-41.30	- 237	-13.07
Genesee	0.32	1,104	0.28	- 158	-14.31	+ 394	+35.69
Jefferson	0.49	2,484	0.63	- 670	-26.97	+ 158	+ 6.36
Madison	0.34	1,696	0.43	- 552	-32.55	+ 315	+18.57
Ontario	0.43	1,617	0.41	- 316	-19.54	+ 512	+31.66
Orleans	0.20	670	0.17	- 118	-17.61	+ 316	+47.16
Oswego	0.55	3,509	0.89	- 1,301	-37.08	- 79	- 2.25
Otsego	0.31	1,222	0.31	- 355	-29.05	+ 473	+38.71
Putnam	0.31	1,420	0.36	- 277	-19.51	+ 78	+ 5.49
St. Lawrence	0.61	3,588	0.91	- 1,380	-38.46	+ 355	+ 9.89
Saratoga	0.67	2,957	0.75	- 1,143	-38.65	+ 1,223	+41.36
Seneca	0.19	670	0.17	- 157	-23.43	+ 276	+41.18
Steuben	0.55	2,011	0.51	- 552	-27.45	+ 867	+43.11
Tioga	0.25	828	0.21	- 237	-28.62	+ 552	+66.67
Tompkins	0.42	1,893	0.48	- 395	-20.87	+ 236	+12.47
Ulster	0.77	3,076	0.78	- 631	-20.51	+ 709	+23.05
Warren	0.27	1,774	0.45	- 473	-26.66	- 355	-20.01
Washington	0.29	1,301	0.33	- 394	-30.23	+ 316	+24.29
Wayne	0.44	1,419	0.36	- 275	-19.38	+ 710	+50.04
Wyoming	0.21	867	0.22	- 276	-31.83	+ 237	+27.34
Yates	0.11	513	0.13	- 158	-30.80	+ 118	+23.00
Total	10.71	47,198	11.97	- 12,894	-27.32	+ 9,700	+20.55

Table 1 (continued)

County Groups[a]	Percent of 1970 State Population	1972 Allocation Based on POP, GTE and RI[b]		Change From 1972 Allocation Based on POP and GTE		Change From 1972 Allocation Based on POP and RI	
		County Area Allocation (thousands)	Percent of Total	Change in Allocation (thousands)	Percentage Change	Change in Allocation (thousands)	Percentage Change
Group 5							
Allegany	0.25	$ 1,183	0.30	-$ 394	-33.31	+$ 315	+26.63
Chenango	0.25	1,065	0.27	- 276	-25.92	+ 276	+25.93
Columbia	0.28	1,025	0.26	- 276	-26.93	+ 434	+42.34
Essex	0.19	1,419	0.36	- 433	-30.51	- 354	-24.95
Greene	0.18	1,104	0.28	- 276	-25.00	- 118	-10.69
Hamilton	0.03	434	0.11	- 40	-19.22	- 316	-72.81
Lewis	0.13	749	0.19	- 276	-36.85	+ 40	+ 5.34
Livingston	0.30	828	0.21	- 158	-19.08	+ 591	+71.38
Schoharie	0.14	670	0.17	- 236	-35.22	+ 158	+23.58
Schuyler	0.09	552	0.14	- 197	-35.69	0	0.00
Sullivan	0.29	2,248	0.57	- 474	-21.09	- 829	-36.88
Total	2.13	11,277	2.86	- 3,036	-26.92	+ 197	+ 1.75

a/ Counties are grouped on the basis of percent rural population. Group 1 consists of the five counties of New York City (Bronx, Kings, Queens, New York and Richmond) all of which have zero rural population. Group 2 counties have rural populations between zero and 25 percent. Rural populations of Groups 3, 4 and 5 fall in the range of 26-50 percent, 51-75 percent and 76-100 percent, respectively.

b/ POP, GTE and RI represent population, general tax effort and relative income, respectively. Population is the 1970 census of county area population. General tax effort is estimated by dividing the adjusted local tax revenue of each county area by aggregate personal income for that county area. Relative income is estimated by dividing state per capita personal income by per capita income of each county area.

and 20.6 percent, respectively. While, on average, Group 5 counties would receive a 1.8 percent increase in revenue, four of the 11 counties would receive less revenue and one would receive approximately the same amount as under the three-factor formula.

Adoption of a formula which excludes general tax effort from the computations would work to the disadvantage of New York City, whoee tax effort, as defined in the revenue sharing legislation, is quite high. Most of the remaining county areas in the State would receive greater amounts of revenue than under the three-factor formula based on population, relative income and general tax effort.

Perhaps a word of caution is appropriate. Because the percentages and changes occasioned by alternative formulas are sometimes small, there may be a tendency to judge the potential impact of these alternative formulas as being too small to be of importance to local officials. However, a reduction of less than one percent in the county's share of a several hundred million dollar local government entitlement would involve the gain or loss of substantial amounts of revenue. For example, the revenue sharing allocation to rural Schoharie County based on the three-factor formula is only 0.17 percent of the local government entitlement in New York State, however, the allocation amounts to about $670,000. Elimination of general tax effort from the formula would increase the revenue sharing allocation to $828,000. On the other hand, eliminating relative income from the three-factor formula would reduce the allocation to Schoharie County to $434,000. Thus, the three formulas investigated in this study would yield a range of revenue sharing funds from $434,000 to $828,000 for Schoharie County.

Similar variation exists for larger and more populous counties. For example, in suburban Westchester County, the allocation of revenue sharing funds would range from a minimum of $8,162,000 under the existing three-factor formula to a maximum of $13,051,000 under the two-factor formula which contains population and general tax effort.

In New York City, the dollar figures are even more startling. They range from a minimum allocation of $153,698,000 under the two-factor formula containing population and relative income to a maximum of $211,739,000 under the two-factor formula based on population and general tax effort. These variations in revenue sharing allocations are obviously of sufficient magnitude to be of interest to local officials concerned with increasing pressure on local budgets.

Alternative Measures of Tax Effort

The current revenue sharing legislation has been critized by some for eliminating revenue from user charges and special assessments and property taxes for education from general tax effort. To evaluate the impact of alternative measures of tax effort on the distribution of revenue sharing funds among county areas in New York State, two additional measures of general tax effort were utilized. First, general tax effort was defined to include revenues derived from user charges and special assessments. Then, general tax effort was defined to include revenues derived from user charges, special assessments and property taxes to support education. The allocation of funds to county areas was re-calculated for each definition based on Equation (1) which contains population, relative income and general tax effort.

User Charges and Special Assessments

The potential impact of including user charges and special assessments[5/] in the definition of general tax effort is shown in Table 2. Changes in the county area allocation are expressed in thousands of dollars and as a percentage of the 1972 allocation based on the three-factor formula. In general, including the revenue derived from user charges and special assessments in measuring the general tax effort of each county area would result in only minor shifts in the distribution of the local government entitlement. Group 1, which is composed of the five New York City county areas, would lose about 2.5 percent of their allocation, or about $4.9 million. The major beneficiaries would be the urbanized Group 2 counties. Their revenue sharing allocation would increase by 4.4 percent, or by $4.7 million. A few counties in this group would receive substantially greater amounts of revenue. For example, Nassau County, which derives a large amount of revenue from user charges and special assessments, would receive nearly $2.2 million more, an increase of 12.8 percent, under this new definition of general tax effort.

The rural counties in Groups 3, 4 and 5 would experience modest changes in their revenue sharing allocations. For example, the Group 3 allocation would increase by only 0.11 percent, the Group 4 allocation would be unchanged, and the allocation for Group 5 counties would increase by slightly over 1.0 percent. Only 13 of 48 counties with more than 25 percent rural population would receive more revenue sharing funds under a definition of general tax effort which includes user charges and special assessments.

User Charges, Special Assessments and Property Taxes for Education

The potential impact of including revenue derived from property taxes to support public education as well as user charges and special assessments in the computation of general tax effort is also shown in Table 2.[6/] The share of the local government entitlement allocated to New York City would decline by $26.5 million, approximately 13.8 percent. Once again, the primary beneficiaries of including property taxes for education with user charges and special assessments in defining general tax effort would be the high income, urbanized Group 2 counties. Their share of the entitlement would increase by nearly 20 percent, or by $21.4 million. Within Group 2, the counties with the highest per capita income and high per pupil expenditures for public education

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5/ For the purposes of this analysis, user charges and assessments were defined to include revenues derived from ad valorem taxes and special assessments levied on property on the basis of benefit. In New York State, much of this revenue is derived through special town districts established for such purposes as fire protection, fire alarm, lighting, sewers, drainage, water, water supply, refuse and garbage, parks, parking, snow removal, dock, police, and mosquito control.

6/ Public education in New York State is provided by 753 school districts consisting of 62 city districts, 227 independent superintendencies, 332 central districts, four central high school districts, 86 union free districts and 42 common districts. For the purposes of this analysis, each school district was assumed to be within the county area in which the town or city contained in the school districts' official name is located.

Table 2
Estimates of 1972 Revenue Sharing Allocations Based on
Alternative Measures of Tax Effort, County Areas of New York State

County Groups[a/]	1972 Allocation Based on POP, GTE, RI		Change From 1972 Allocation When General Tax Effort Includes: User Charges and Special Assessments		User Charges, Special Assessments and Property Taxes for Education	
	County Area	Percent of Total	County Area	Percent Change	County Area	Percent Change
Group 1						
New York City	$192,458	48.81	- 4,889	- 2.54	-26,537	-13.79
Group 2						
Albany	3,982	1.01	+ 158	+ 3.97	+ 277	+ 6.96
Erie	23,895	6.06	+ 788	+ 3.30	+ 118	+ 0.49
Monroe	10,764	2.73	+ 237	+ 2.20	+ 1,696	+15.76
Nassau	16,955	4.30	+ 2,169	+12.79	+ 5,796	+34.18
Onondaga	11,238	2.85	+ 512	+ 4.56	+ 118	+ 1.05
Rockland	4,771	1.21	+ 315	+ 6.60	+ 2,602	+54.54
Schenectady	2,366	0.60	+ 79	+ 3.34	+ 355	+15.00
Suffolk	25,117	6.37	+ 473	+ 1.88	+ 8,911	+35.48
Westchester	8,162	2.07	0	0	+ 1,498	+18.35
Total	107,250	27.20	+ 4,731	+ 4.41	+21,371	+19.93
Group 3						
Broome	4,929	1.25	+ 118	+ 2.39	+ 355	+ 7.20
Chautauqua	4,180	1.06	- 79	- 1.89	0	0
Chemung	2,366	0.60	0	0	+ 39	+ 1.65
Cortland	1,262	0.32	- 40	- 3.17	- 40	- 3.17
Fulton	1,419	0.36	- 39	- 2.75	- 157	-11.06
Herkimer	1,183	0.30	0	0	+ 118	+ 9.97
Montgomery	1,419	0.36	- 39	- 2.75	- 118	- 8.32
Niagara	6,427	1.63	+ 40	+ 0.62	+ 118	+ 1.84
Oneida	5,678	1.44	- 40	- 0.70	- 158	- 2.78
Orange	4,416	1.12	+ 79	+ 1.79	+ 592	+13.41
Rensselaer	2,839	0.72	+ 39	+ 1.37	- 158	- 5.57
Total	36,118	9.16	+ 39	+ 0.11	+ 591	+ 1.64

Table 2 (continued)

County Groups[a/]	1972 Allocation Based on POP, GTE, RI		Change From 1972 Allocation When General Tax Effort Includes: User Charges and Special Assessments		User Charges, Special Assessments and Property Taxes for Education	
	County Area	Percent of Total	County Area	Percent Change	County Area	Percent Change
Group 4						
Cattaraugus	$ 2,445	0.62	- 40	- 1.64	- 40	- 1.64
Cayuga	2,208	0.56	0	0	- 118	- 5.34
Clinton	1,893	0.48	0	0	- 40	- 2.11
Delaware	1,222	0.31	- 39	- 3.19	+ 79	+ 6.46
Dutchess	2,997	0.76	+ 79	+ 2.64	+ 946	+31.56
Franklin	1,814	0.46	- 40	- 2.21	- 158	- 8.71
Genesee	1,104	0.28	0	0	+ 40	+ 3.62
Jefferson	2,484	0.63	- 39	- 1.57	- 118	- 4.75
Madison	1,696	0.43	- 40	- 2.36	+ 78	+ 4.60
Ontario	1,617	0.41	+ 39	+ 2.41	+ 157	+ 9.71
Orleans	670	0.17	0	0	+ 40	+ 5.97
Oswego	3,509	0.89	- 39	- 1.11	0	0
Otsego	1,222	0.31	0	0	+ 40	+ 3.27
Putnam	1,420	0.36	+ 78	+ 5.49	+ 670	+47.18
St. Lawrence	3,588	0.91	0	0	+ 118	+ 3.29
Saratoga	2,957	0.75	0	0	+ 671	+22.69
Seneca	670	0.17	- 39	- 5.82	- 39	- 5.82
Steuben	2,011	0.51	- 40	- 1.99	+ 158	+ 7.86
Tioga	828	0.21	0	0	+ 39	+ 4.71
Tompkins	1,893	0.48	+ 79	+ 4.17	+ 197	+10.41
Ulster	3,076	0.78	0	0	+ 867	+28.19
Warren	1,774	0.45	+ 40	+ 2.25	+ 158	+ 8.89
Washington	1,301	0.33	0	0	- 39	- 3.00
Wayne	1,419	0.36	+ 40	+ 2.82	+ 316	+22.27
Wyoming	867	0.22	- 39	- 4.50	- 78	- 9.00
Yates	513	0.13	0	0	+ 78	+15.20
Total	47,198	11.97	0	0	+ 4,022	+ 8.52

Table 2 (continued)

County Groups[a/]	1972 Allocation Based on POP, GTE, RI		Change From 1972 Allocation When General Tax Effort Includes:			
			User Charges and Special Assessments		User Charges, Special Assessments and Property Taxes for Education	
	County Area	Percent of Total	County Area	Percent Change	County Area	Percent Change
Group 5						
Allegany	$ 1,183	0.30	0	0	+ 39	+ 3.30
Chenango	1,065	0.27	0	0	+ 39	+ 3.66
Columbia	1,025	0.26	0	0	+ 119	+11.61
Essex	1,419	0.36	+ 79	+ 5.57	- 39	- 2.75
Greene	1,104	0.28	+ 39	+ 3.53	+ 79	+ 7.16
Hamilton	434	0.11	0	0	- 40	- 9.22
Lewis	749	0.19	0	0	0	0
Livingston	828	0.21	0	0	+ 197	+23.79
Schoharie	670	0.17	- 39	- 5.82	+ 79	+11.79
Schuyler	552	0.14	0	0	- 39	- 7.07
Sullivan	2,248	0.57	+ 39	+ 1.73	+ 118	+ 5.25
Total	11,277	2.86	+ 118	+ 1.05	+ 552	+ 4.89

a/ Counties are grouped on the basis of percent rural population. Group 1 consists of the five counties of New York City (Bronx, Kings, Queens, New York and Richmond), all of which have zero rural population. Group 2 counties have rural populations between zero and 25 percent. Rural populations of Groups 3, 4 and 5 fall in the range of 26-50 percent, 51-75 percent and 76-100 percent, respectively.

would experience the largest pereentage increase in revenue sharing funds. For example, Westchester, Nassau, Suffolk and Rockland Connties, four high income counties surrounding the New York City area, would experience increases of 18.4, 34.2, 35.5, and 54.5 percent, respectively. In Erie and Onondaga Counties, each of which contains a large central city, adding property taxes for education to revenues derived from user charges and assessments in defining general tax effort actually reduces their share of the local government entitlement. Thus, the reaction of these two counties is more like New York City and less like the other Group 2 counties.

Rural county areas in Groups 3, 4 and 5 would experience increases in their share of the local government entitlement of 1.6, 8.5 and 4.9 percent, respectively. The results vary considerably among counties, however. For example, only 29 of the 48 rural counties in Groups 3, 4 and 5 would receive a greater share of the local government entitlement under this definition of general tax effort. While the addition of revenue derived from property taxes for education to general tax effort would benefit rural county areas at the expense of New York City, the primary beneficiaries would be the high income suburban counties surrounding New York City.

Summary and Conclusions

The purposes of this paper were to evaluate the potential impact of alternative revenue sharing formulas and measures of tax effort on the allocation of funds among county areas in New York State. The revenue sharing formula currently in use, which distributes funds on the basis of population, relative income and general tax effort, allocates approximately 48.8 percent of the local government entitlement to New York City and an additional 27.2 percent to nine highly urbanized counties containing from zero to 25 percent rural population. The more rural counties, including those in Groups 3, 4 and 5, receive only 9.2, 12.0, and 2.9 percent of the local government entitlement, respectively.

Eliminating relative income from the three-factor formula currently in use would alter substantially the distribution of revenue sharing funds among county areas in New York State. The primary beneficiary would be New York City, whose revenue sharing allocation would increase by about 10.0 percent, or $19.3 million. The highly urbanized counties in Group 2 would also benefit on average, however, five of the 11 counties in this group would lose revenue under the new formula. The effect on rural counties would be entirely adverse with all 48 counties losing revenue. For Groups 3, 4 and 5, the revenue sharing losses would amount to 20.0, 27.3 and 26.9 percent, respectively.

Eliminating general tax effort from the three-factor formula would also alter substantially the distribution of revenue sharing funds among county areas. The share of the local government entitlement going to New York City would be reduced by more than 20 percent. Based on the 1972 local government entitlement, this reduction would amount to slightly less than $39 million. However, the allocation to all other county groups would be greater than currently received under the three-factor formula. The allocation to Groups 2, 3, 4 and 5 would increase by 21.4, 16.5, 20.6 and 1.8 percent, respectively. Most of the rural county areas, because both average tax effort and per capita

income are low, would benefit from formula changes designed to reduce the importance of general tax effort, as it is currently defined, while increasing the importance of relative income.

The addition of user charges and special assessments to revenues used to compute general tax effort would result in minor shifts in the distribution of the local government entitlement among county areas in New York State. New York City would lose about $4.9 million, only 2.5 percent of their allocation. The primary beneficiaries would be the high income, suburban Group 2 counties. Only 13 of 48 rural county areas would receive a greater proportion of the local government entitlement.

The addition of revenue from property taxes for education to user charges and special assessments in measuring general tax effort would result in substantial shifts among county areas. The share of the local government entitlement allocated to New York City would decline by $26.5 million, about 13.8 percent. Once again, the primary beneficiaries would be the high income, suburban Group 2 counties, whose allocation would increase by nearly 20 percent. While Groups 3, 4 and 5 would each receive greater proportions of the local government entitlement, only 29 of the 48 rural counties would receive more revenue under this definition of general tax effort than under the definition in current usage which does not include user charges, special assessments and property taxes for schools as part of local tax effort.

More detailed analyses are needed to provide the basis for an informed public policy decision regarding changes in the revenue sharing allocation formula. This study is, hopefully, a small step in the right direction.

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