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UPON FISCAL FLOWS-A STUDY OF A HYPOTHETICAL CASE.

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**EFFECTS OF MODIFICATIONS OF POLITICAL BOUNDARIES
UPON FISCAL FLOWS - A STUDY OF A HYPOTHETICAL CASE**

by

RONALD NEEDLEMAN

A dissertation submitted to the Graduate
Faculty in Economics in partial fulfillment of the
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1973

This manuscript has been read and accepted for the Graduate Faculty in Economics in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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TABLE OF CONTENTS

	<u>Page</u>
Acknowledgements	iv
List of Tables	vi
Introduction	viii
 CHAPTER I	
A. Metropolitan Area: An Historical Perspective	1
B. Definition of the New York Metropolitan Area	3
C. Economic and Social Characteristics	10
Footnotes	14
 CHAPTER II	
A. Tax System	16
B. Tax Allocations	23
C. Expenditure System: An Overview	35
Local Assistance Fund	35
State Purposes Fund	36
D. State Purposes Fund Allocations	42
Footnotes	54
 CHAPTER III	
A. The Redefined Area	60
B. Effects of the Existing Tax and Expenditure Structure on the Results	70
C. Concluding Remarks	83
Footnotes	87
Appendix A	88
Appendix B	96
Bibliography	104

LIST OF TABLES

<u>Table</u>	<u>Page</u>	
1	Economic and Social Characteristics of the New York Metropolitan Area	5
2	Commuting Patterns in the Region	6
3	New Jersey Tax Revenues	9
4	Commuting Patterns in the New York Metropolitan Area . . .	13
5	New York State Tax Collections	17
6	Allocation of Personal Income Tax	24
7	Allocation of Business Taxes	27
8	Allocation of Sales and Use Tax	28
9	Allocation of State Taxes Fiscal 1967	32
10	Allocation of State Taxes Fiscal 1970	33
11	Tax Allocations	34
12	New York State Local Assistance Fund	37
13	Local Assistance Fund Distribution within the Area	38
14	Allocation of State Purposes Fund Fiscal 1967	50
15	Allocation of State Purposes Fund Fiscal 1970	51
16	New York State State Purposes Fund	52
17	Summary of Allocation of State Purposes Fund	53
18	Total State Expenditures Made to the Area and Taxes Collected from the Area	66
19	Percent Distribution of Total State Expenditures Made to The Area and Taxes Collected From the Area	67
20	Current Expenditures of the Area	68
21	State Taxes and Expenditures in the Remaining Portion of the State	69
22	Tax Payments Under Alternative Taxes	74
23	Tax Differentials Under Alternative Taxes	75
24	General Fund Revenues for Education	77
25	Hypothetical CUNY Expenditures, if Financed on Equivalent Basis to SUNY	82

<u>Table</u>	<u>Page</u>
Appendix B	
A Allocation of State Taxes Fiscal 1967	96
B Allocation of State Taxes Fiscal 1970	97
C Percentage Distributions Used for Allocating the State Taxes	98
D Allocation of the State Purposes Fund Fiscal 1967	99
E Allocation of the State Purposes Fund Fiscal 1970	100
F Percentage Distributions Used for Allocating the State Purposes Fund	101
G Local Current Expenditures by Category	102
H Percentage Distribution of Tax Payments	103

INTRODUCTION

This dissertation examines the fiscal impact of redefining the boundaries of a financial subunit of a political entity upon the welfare of its residents. A concrete case study is undertaken, namely, that of the New York Metropolitan Area. In order to satisfy the objective certain imputations with respect to taxes and expenditures are necessary. On the tax side, one must estimate the taxes collected within the area by the state. On the expenditure side one must estimate the amount of indirect expenditures, i. e., State Purposes Fund Expenditures, made by the state which benefit the residents of the area. The direct expenditures, i. e. Local Assistance Fund Expenditures, are directly obtainable without the necessity of allocation schemes. Completion of the forementioned allocations allows for the examination of the problem at hand. That is to say, the complete current expenditure and taxation picture is available for investigation.

The initial chapter deals with the past and present literature relating to Metropolitan Areas, as viable entities. A discussion of the definition of the New York Metropolitan Area by use of economic criteria is included. The methodology involved in the selection process is denoted. The chapter concludes with a detailed description of the social and economic characteristics of the area, as defined.

Chapter II commences with a discussion of the existing New York State Tax System. An appendix to this chapter (Appendix A) deals with the technical characteristics of the individual taxes, i. e. base, rate structure, imposition,

etc. The allocation schemes used to distribute the individual taxes across the counties of the area are discussed in detail in the next section of the chapter. The following section discusses the State expenditure system. The chapter concludes with a detailed discussion of the allocation of the State Purposes Fund across counties.

Chapter III commences with a discussion of the fiscal impact upon the area of its separation from the state. It then proceeds to investigate those factors inherent in the existing tax and expenditure structures which are instrumental in yielding the above results. The final section summarizes the results and conclusions of the dissertation and spotlights areas where further research is necessary.

CHAPTER I

A. Metropolitan Areas: An Historical Perspective

According to William B. Neenan, "A Metropolitan area, both central city and suburbs, is a natural economic and social unit." ^{1/} This view is, certainly, not held by Neenan alone. For decades economists, geographers and the like have been studying metropolitan areas. A vast amount of literature has developed upon the subject. Varied approaches to the concept of a Metropolitan area have been espoused by Hawley, ^{2/} Gras, ^{3/} Bogue and Beale, ^{4/} Bogue, ^{5/} Bollens and Schmandt ^{6/} and the U. S. Bureau of the Census, ^{7/} to name a few. A detailed discussion of these approaches will not be undertaken here and those interested should refer to the above cited articles and books. It is interesting to note that in two of the above cases the authors make use of the census definition of a Standard Metropolitan Area (SMA) as a starting point. Hawley would include all counties and civil divisions within 35 miles of the inner core of the central city of the S. M. A. in his Extended Metropolitan Area. Bogue and Beale would include all counties of the S. M. A. within one state in their Metropolitan State Economic Area.

The most widely used definition of a Metropolitan Area is the Census Bureau's Standard Metropolitan Statistical Area (SMSA) (an up date of the S. M. A. for 1950 and prior). The definition of an S. M. S. A. is undertaken with the forming of socially and economically integrated areas, in mind. There are two basic criteria used; one of population and the other of metropolitan character. The first specifies the appropriate population of the city or cities which

constitute the central city or cities, and identifies the county which is to be the central county. The second examines the economic and social relationships of the contiguous counties which make up the periphery. The predominant concern is with the county as a work place or residence of non agricultural workers. Many other criteria, too numerous to mention here, are used in order to reach a final determination. Even Economic base theorists have dealt with the concept of Metropolitan areas. Andrews says, "It is this writer's belief that at the present time those interested in actual field research on problems of the base should employ the Bureau of the Census Standard Metropolitan Area as the base area wherever this may be possible." ^{8/} It is clear that Metropolitan areas have been discussed in varying contexts. The concept may be even more important today. At this point in time with so many of the nation's large cities in financial crises and with the finger being pointed at the flight of the middle class to suburbia, as a major cause, it seems logical for the solution to cross the old political boundaries and deal with the problem on a broader Metropolitan area basis. The formation of new more realistic boundaries would help alleviate the problem by again bringing the middle class into the tax base. This would aid in the financing of the central city, which the suburbanites are still so heavily dependent upon for their livelihood, as well as the area. Bahl states "Specifically, fiscal disparities result because the tax base (resources) in the community is divorced from the needs of the community (requirements) a phenomenon made possible by government fragmentation." ^{9/} This certainly gets to the heart of the problem. He concludes that with a true Metropolitan government these disparities can't exist

because there is no divorce of the tax base from the fiscal needs. He cites as the predominant causes of the disparities the concentration of low income population with great need for public services in the central city, with inadequate and declining levels of resources and the imposition of public service requirements by the suburban residents due to commuting, shopping and seeking entertainment. For an interesting article along the same lines dealing with the balkanizing of the Metropolitan area as a cause of the fiscal problem see Margolis.^{10/} For a model dealing with the arrangement of governments solely on an economic efficiency basis see Tiebout.^{11/}

B. Definition of the New York Metropolitan Area

Defining the New York Metropolitan Area requires an extensive investigation of the economic make up of the potential counties to be included. In order to define an economically integrated area it is necessary to determine where the income of the workers is generated and what relative significance this has on the respective counties. One wishes to include those counties whose labor force is heavily employed in New York City or are employed in industries, which have developed in the outlying areas, heavily dependent upon income earned in New York City for their existence. As a starting point the twenty four counties defined by Tri-State Transportation Commission^{12/} to be part of the New York Region were investigated. The counties were located in three states, New York having Bronx, Queens, Kings, New York, Richmond, Nassau, Suffolk, Rockland and Westchester; New Jersey having Bergen, Essex, Hudson, Middlesex, Monmouth, Morris, Passaic, Somerset, Union and Mercer; and Connecticut having Fairfield and New Haven. Various data relating to these

counties was gathered, e. g. , population density, non-agricultural labor force, median family income, auto availability, retail sales, wholesale sales, etc. In addition data on commuting patterns was obtained, i. e. highway traffic flows, railroad passenger flows, and destination and origin of work trips.

It is obvious from the population and density data (see Table 1) that New York City would be the central city of the area. It is next necessary to determine which of the contiguous counties forementioned would be included within the Metropolitan area. The primary criteria for determining this will be the percentage of the labor force of the respective county that works in New York City. In order to examine marginal changes in the commuting patterns as the work-place is expanded we start with the Central Business District (CBD) of Manhattan as the initial work place. This will be expanded as we proceed in order to determine whether any significant shifts take place. The first array of the percentage of the labor force working in Manhattan's CBD (see Table 2), shows that over 90% of Manhattan's resident labor force work there while none of the other boroughs of the city show even 50% of their resident labor force working there. Next the work place is expanded to New York City (the five counties). This array shows all of the counties of New York City having over 90% of their resident labor force working there. The next highest county is Nassau with over 40% and then Westchester with over 28%. At this point it was decided arbitrarily that any county which didn't have at least 15% of its resident labor force working in New York City would be excluded from the area. This left us with eleven counties out of the initial twenty four.

TABLE 1

ECONOMIC AND SOCIAL CHARACTERISTICS
OF THE NEW YORK METROPOLITAN AREA

COUNTIES	POPULATION 1960	DENSITY 1960	MEDIAN FAMILY INCOME 1960	RETAIL SALES (THOUS. \$) 1963	RETAIL SALES PER RESIDENT 1963
NEW YORK	1,698,281	74,814	5,300	4,339,472	2,555
KINGS	2,627,319	37,373	5,800	2,651,356	1,009
BRONX	1,424,815	34,583	5,800	1,201,210	843
QUEENS	1,809,578	16,755	7,200	2,053,671	1,135
RICHMOND	221,991	3,861	6,800	247,307	1,114
NASSAU	1,310,171	4,507	8,500	2,353,590	1,696
ROCKLAND	136,803	776	7,500	198,332	1,217
SUFFOLK	566,784	718	6,800	1,148,843	1,395
WESTCHESTER	808,891	1,826	8,100	1,452,526	1,713

SOURCE : NEW YORK STATE DIVISION OF THE BUDGET
 NEW YORK STATE STATISTICAL YEARBOOK, 1970, TABLE A-4 P.48 AND
 U.S. BUREAU OF THE CENSUS CITY AND COUNTY DATA BOOK, 1967
 (A STATISTICAL ABSTRACT SUPPLEMENT) U.S. GOV'T PRINTING OFFICE,
 WASHINGTON, D.C. 1967 TABLE 2 PP. 252-261

TABLE 2

COMMUTING PATTERNS IN THE REGION 1960

COUNTY	LABOR FORCE	% COMMUTE TO :		
		C.R.D.	N.Y.C.	METRO AREA
NEW YORK	775,703	90.45	96.90	98.13
KINGS	1,021,039	34.97	97.12	98.70
BRONX	570,745	48.66	94.44	98.24
QUEENS	765,450	44.17	93.74	98.96
RICHMOND	80,023	22.26	93.70	93.95
NASSAU	466,438	24.19	40.72	99.60
WOCKLAND	45,208	13.11	15.96	92.45
SUFFOLK	212,811	8.90	16.72	99.86
WESTCHESTER	321,158	22.77	28.20	97.46
PUTNAM	10,030	9.43	11.88	52.27
ORANGE	66,192	1.42	1.90	3.90
DUTCHESS	57,591	0.86	0.96	1.85
HUDSON	245,567	14.27	15.94	16.05
ESSEX	368,984	5.04	5.57	5.61
UNION	198,456	6.49	7.34	7.34
BERGEN	301,004	20.11	22.44	23.88
PASSAIC	157,282	3.76	4.28	4.51
MIDDLESEX	150,056	4.15	5.01	5.41
MERCER	99,412	1.06	1.16	1.16
MCMOUTH	109,831	5.35	5.99	6.11
MORRIS	95,704	6.48	7.02	7.02
SOMMERSET	46,206	4.03	4.50	4.50
FAIRFIELD	255,009	5.97	7.30	8.64

SOURCE: CONSTRUCTED FROM DATA IN TRI-STATE TRANSPORTATION COMMITTEE
JOURNEY TO WORK IN THE TRI-STATE REGION JUNE 1964

They were the five counties comprising New York City, Nassau, Suffolk, Rockland, Westchester, Hudson and Bergen. An investigation of the expansion of the work-place to include the nine New York State Counties was then conducted.

As the work place area is expanded the counties now included in it increase their percentage of resident labor force working there tremendously, as is to be expected. Observing the effect upon those counties not included in the work place area as it is expanded to the nine county definition, it is found that Putnam county increases its percentage to 52.27% as compared to the 11.88% prior to this. This can be accounted for by the fact that Westchester is now included in the work place area and a great portion of the resident labor force of Putnam work there. Putnam however, was not included in the Metropolitan area because it failed to meet the criteria with respect to the New York City work place area. An interesting observation regarding commutation from Connecticut can be noted. Less than 6% of the resident labor force of Fairfield county works in the Central Business District (CBD) of Manhattan; only slightly more than 7% work in New York City and even with Westchester included in the nine county work place area, just over 8 1/2% work in the area. One would suspect a priori that a greater portion of its labor force would have worked in the respective areas.

At this point it is best to deal with the problem which arose with regard to the two New Jersey counties, Hudson and Bergen. Both met the criteria discussed previously that 15% of their resident labor force worked in New York City. However, other factors outweighed this consideration and led to their

exclusion from the Metropolitan area. One consideration in reaching this decision was based upon the political consideration of raising the question of the separation of these counties from New York State, since these counties are not part of New York State. Beyond this it does not seem feasible to perform the same sort of analysis for these counties, as for the others. This is largely due to the different governmental structure which exists in New Jersey. There is a very heavy reliance on local financing and a very complex local governmental operation involving numerous governmental units.^{13/} Once one crossed state lines a higher fiscal level would have to be dealt with. One could no longer assume the Federal level to remain constant. New Jersey relies heavily on Highway Use taxes for its revenue with the Motor Fuel and Motor Vehicle taxes accounting for almost 30% of the revenue in 1967.^{14/} The Sales tax accounted for over 25%.^{15/} There is no Personal Income tax, as of the date of this analysis. New York State on the other hand relies heavily on the Personal Income tax which accounted for almost 40% in 1967, the Sales tax about 16% and the Highway Use tax is less than 12%.^{16/}

For all these reasons, it was decided to exclude the two New Jersey counties from the definition of the New York Metropolitan Area used here. The final definition of the area arrived upon includes the following nine counties: Kings, Queens, Bronx, New York, Richmond, Nassau, Suffolk, Rockland and Westchester. This definition, while arrived upon independently, coincides with the Census definition of the New York SMSA. It should be noted that 98.49% of the labor force working in the nine counties, reside there as well. It is, also, interesting that with the exception of Manhattan (New York County) none of the

TABLE 3

NEW JERSEY TAX REVENUES
CALENDAR YEARS (THOUS. DOLLARS)

TAX	1966	1967
TOTAL	688,469	859,639
CIGARETTE	87,868	97,241
CORPORATION	119,462	134,406
INHERITANCE	55,246	54,097
MOTOR FUEL	147,765	150,166
MOTOR VEHICLE	95,179	97,288
PARI MUTUEL	29,209	31,215
SALES	83,349	222,107
ALL OTHERS	70,391	73,119

SOURCE: STATE OF NEW JERSEY - DEPARTMENT OF TREASURY
ECONOMIC POLICY COUNCIL AND OFFICE OF ECONOMIC POLICY
2ND ANNUAL REPORT - JUNE 1969 P. 130

counties had 50% of their resident labor force working within that county.

C. Economic and Social Characteristics

At this point it would be appropriate to discuss briefly the economic and social make up of the area. The nucleus of the New York Metropolitan Area is New York City with a population of 7,771,730 in 1970.^{17/} The city is composed of five counties or boroughs, namely, Bronx, Kings (Brooklyn), New York (Manhattan), Queens and Richmond (Staten Island). Manhattan is the employment center of the area with over two million people employed there in 1960. It is the financial and banking center as well. The two largest stock exchanges in the country are located there, the New York and American Exchanges. The most populated of the five counties is Kings with 2,562,245^{18/} people and the least populated is Richmond with 294,608.^{19/} The densest populated county is Manhattan with almost 75,000 people per square mile in 1960, which is double that of the next ranking county, Kings. Manhattan had the lowest median family income in 1960 of about \$5,300, while Queens had the highest with \$7,200. The retail center of the city (and the area for that matter) was Manhattan with over 4 billion in sales in 1963. This is clearly demonstrated by examining retail sales per capita (see Table 1). Manhattan comes out much higher than any other county and this cannot reasonably be accounted for by sales to its own residents, since its median family income is so much lower than the rest of the counties. It has the highest percentage of its labor force working within its own borders, more than 90%. The least number of cars available per 100 households also occurs there with only 22. Richmond on the other hand has the most cars available per 100 households with 88 which is reasonable since it is the farthest

removed from Manhattan and has the least extensive system of Public Transportation.

Next we will discuss the four suburban counties. Immediately to the east is Nassau with a population of 1,413,012.^{20/} In addition to being the most populated of the suburban counties, it was the densest with 4,507 people per square mile in 1960. It has the largest percentage among the suburban counties (almost 41%) of its resident labor force commuting to New York City. It also had the highest median family income of the entire area in 1960 with \$8,500. The county to the east of Nassau, is Suffolk with a population of 1,107,786.^{21/} This county showed the largest absolute population increase in the state from 1960 to 1970. It was the least dense of the counties in the area in 1960 with 718 people per square mile, and probably still is even though its population rose by 66.1%. The eastern tip of the county acts as a summer beach resort for many of the inhabitants of the area. The western most part of the county, in contrast, consists to a large extent of commuters to New York City and other parts of the area. Immediately north of New York City is Westchester with a population of 888,314.^{22/} About 28% of its resident labor force commutes to New York City. It had the second highest median family income in the area in 1960, with \$8,100. Across the Tappan Zee Bridge to the west of Westchester is Rockland with a population of 228,897.^{23/} It had the highest percentage increase in population in the state between 1960 and 1970 with 67.39%. It has the fewest in number and lowest in percentage commuters to New York City of the counties in the area.

Some interesting observations about the general commuting within the area can be noted by examining Table 4. The average travel time one way to the CBD varies from 31.7 minutes for Manhattan residents to 105.9 minutes for Suffolk residents. The ratio of passengers to seats declines as the distance traveled increases. Autos available per 100 households was lowest in Manhattan with 22 and highest in Nassau with 126. This statistic tended to decline as the distance from Manhattan increased. The percentage of workers using public transportation for intracounty travel declines drastically as one gets out into the suburban counties. The percentage using public transportation to go to Manhattan also declines, but not nearly as much (from 90% in the New York City counties to about 70-80% in the suburban counties).

TABLE 4

COMPUTING PATTERNS IN THE NEW YORK METROPOLITAN AREA

NEW YORK COUNTY	LABOR EMPLOYED	% COMPUTING TPO		A.V.G. MILES	A.V.G. MILES PER TRIP	A.V.G. TRAVEL TIME ONE WAY TO C.P.D. (MIN.)	% PER MILE PER 100 MILES PER TRIP	TRIP COUNT	PERCENT OF TOTAL
		C.P.D.	PERCENT						
NEW YORK	775,703	90.45	98.13	90.45	31.7	.63	22	90	93
KINGS	1,021,039	54.97	97.17	43.67	51.2	.47	48	58	92
BROOK	570,745	48.66	95.24	31.54	58.1	.65	44	68	91
QUEENS	769,420	44.17	93.74	23.93	57.2	.62	75	48	88
RICHMOND	80,023	32.66	93.70	25.38	79.1	---	89	24	96
MASSAU	466,433	24.19	95.60	15.72	61.6	.46	126	9	73
WEEKLAND	45,208	13.11	92.45	20.38	94.9	.09	120	3	34
SUFFOLK	212,811	8.90	95.86	14.01	105.9	.19	121	3	75
WESTCHESTER	321,158	22.77	97.40	27.79	72.1	.47	110	19	80

SOURCE: CONSTRUCTION BUREAU DATA FOR THE STATE OF NEW YORK METROPOLITAN COMMITTEE
 JOURNEY TO WORK IN THE METRO AREA, 1964

FOOTNOTES

CHAPTER I

- 1/ Neenan, William B., "Suburban-Central City Exploitation Thesis: One City's Tale," National Tax Journal, vol. XXIII, No. 2 (June 1970) p. 117.
- 2/ Hawley, Amos, The Changing Shape of Metropolitan America, (Free Press, Glencoe, Ill., 1956).
- 3/ Gras, N. S. B., An Introduction to Economic History (Harper Bros., Publishers, New York, 1922).
- 4/ Bogue, Donald J. and Beale, Calvin, Economic Areas of the United States, (Free Press of Glencoe, Inc., New York, 1961).
- 5/ Bogue, Donald J., State Economic Areas, (U. S. Government Printing Office, Washington, D. C., 1951).
- 6/ Bollens, John and Schmandt, Henry, The Metropolis, (Harper & Row, New York, 1965).
- 7/ U.S. Bureau of the Census, County and City Data Book, 1967 (A Statistical Abstract Supplement) U. S. Government Printing Office, Washington, D. C., 1967, pp. XIII-XVII.
- 8/ Andrews, Richard, "Mechanics of the Urban Economic Base: The Problem of Base Area Delimitation" in The Techniques of Urban Economic Analysis, Pfouts, Ralph, Ed. (Chandler-David Publishing Co., 1960) p. 135.
- 9/ Bahl, Roy W., "Public Policy and the Urban Fiscal Problem: Piecemeal vs. Aggregate solutions" Land Economics, vol. XLVI No. 1 (February 1970) p. 42.
- 10/ Margolis, Julius, "Metropolitan Finance Problems: Territories, Functions and Growth" in Universities-National Bureau Committee for Economic Research, Public Finances: Needs, Sources and Utilization, (Princeton University Press, Princeton, N. J., 1961) pp. 229-270 (Henceforth: in U-N-B)

11/ Tiebout, Charles, "An Economic Theory of Fiscal Decentralization" in U-N-B, pp. 79-96.

12/ Tri-State Transportation Committee, Journey to Work in the Tri State Region, June 1964.

13/ Wood, Robert, 1400 Governments (Harvard University Press, Cambridge, Mass., 1961).

14/ State of New Jersey, Division of Budget and Accounting, Fiscal Report 1967.

15/ Ibid.

16/ New York State, Department of Taxation and Finance, Statistical Supplement Fiscal Year 1966-7 (Henceforth: Stat. Sup. T & F) Table 1.

17/ New York Times, September 22, 1970, Preliminary Census Data.

18/ Ibid.

19/ Ibid.

20/ Ibid.

21/ Ibid.

22/ Ibid.

23/ Ibid.

CHAPTER II

A. Tax System

The New York State tax system is heavily dependent upon the Personal Income Tax for its revenue collections. (See Table 5). In 1970 this tax produced 43.04% of the total tax collections, while in 1967 the figure was 39.54%.^{1/} The next largest tax, the sale and use tax, accounted for 17.38% of 1970 tax revenues and 15.65% of 1967 tax revenues.^{2/} The next largest group of taxes are those on businesses. The Business Taxes accounted for 16.54% of the revenues in 1970 and 19.36% in 1967.^{3/} The sales tax has developed quite a prominent role in revenue production during its relatively short existence (effective August 1965). These three taxes account for over 75% of the total tax collections of the state.

Some changes and modifications of the structure have occurred between 1967 and 1970, which should now be noted. Effective July 1, 1968 the Fuel use tax was added to the Highway use taxes. In addition the Real Estate Transfer Tax was instituted effective August 1, 1968. Neither of these taxes accounted for a very significant proportion of tax collections in 1970 (less than 1% each). Another item which is not strictly a tax but is handled by the New York State Tax Commission and listed with its tax collections is the Lottery which began June 1, 1967. Another change which has to do with the Alcoholic Beverage Control Licenses took place in September 1968. The listing of the collections of this department no longer included the use fees for the privilege of selling under brand name. These collections were to be included along with Alcoholic Beverage Taxes.

TABLE 5
NEW YORK STATE TAX COLLECTION

TAXES	FISCAL 1967	%	FISCAL 1970	%
PERSONAL INCOME	1,527,086,577	39.54	2,506,435,402	43.03
BUSINESS	631,875,148	16.36	962,911,826	16.54
SALES AND USE	604,327,031	15.65	1,012,035,665	17.38
MOTOR VEHICLE FEES	183,504,958	4.75	209,949,797	3.61
MOTOR VEHICLE INSPECTION	-----		2,098,660	.04
MOTOR FUEL	275,808,331	7.14	374,820,560	6.44
ALCOHOLIC BEVERAGE	68,166,579	1.77	112,622,537	1.93
ALCOHOLIC BEVERAGE LICENSES	65,061,410	1.68	33,182,710	0.57
CIGARETTE	218,452,601	5.66	256,563,536	4.41
HIGHWAY USE	22,734,770	0.59	29,300,319	0.50
ESTATE	116,029,108	3.00	127,934,756	2.20
REAL ESTATE TRANSFER	-----		5,949,981	0.10
PARI MUTUEL	145,267,528	3.76	159,932,658	2.75
RACING ADMISSIONS	3,553,777	0.092	3,485,475	0.0066
BOXING	82,981	0.002	169,044	
LOTTERY			25,986,382	0.45
TOTAL	3,861,970,799	100.00	5,823,379,308	100.0

SOURCE NEW YORK STATE DEPARTMENT OF TAXATION
AND FINANCE STATISTICAL SUPPLEMENT
FISCAL YEARS 1966-7 AND 1969-70 TABLE 1

The following paragraphs contain a brief discussion of the various taxes which make up the system. At this point the technical details such as basis, rate structure, etc. will not be discussed. Those interested will find them in Appendix A.

The Personal Income Tax ^{4/} was instituted back in 1919. The basic rate structure varied from 2-7%, from 1935-58 with capital gains (beginning in 1938) being taxed at half that rate. General conformity to the Federal Income Tax provisions was achieved with Article 22 of the tax law in 1960. The rate structure was changed to vary from 2%-14%. The Business Taxes ^{5/} are mostly of the franchise tax form, a tax for the privilege of doing business in the state. More than half of the collections come from the taxing of business corporations falling under Article 9A. This was an outgrowth of the Emerson Act of 1917 which made New York one of the first states to tax corporations on the basis of their net income. With various exceptions which will not be dealt with here, net income is the basis for taxation of most of the corporations falling under Article 9A. The remaining business taxes use various bases for taxation of industry; par value of the authorized capital stock, a flat rate per no-par share of authorized capital stock, gross earnings within the state, gross income or operating income, premiums received from New York State sales or a combination of the above.

The Sales and Use tax ^{6/} is a broad based tax encompassing the sale or rental of most tangible personal property, and a wide range of services. It was made effective August 1, 1965 at a 2% rate. This was raised to 3% April 1, 1967 and to 4% in 1971. Simplified procedures for computation of the tax due were

put into effect September 1, 1970. They relieved the retailer of record keeping, by allowing him to multiply the taxable sales by the rate in order to determine his tax liability. The New York State Sales Tax differs from that of most of the states in that it allows for multiple taxation due to the possibility of taxation on more than one level in the process from production to purchase by the consumer. A single stage retail sales tax which is typical in the U. S. is designed to avoid this multiple taxation. The problem occurs in the New York Tax due to the taxation at levels lower than retail of some of the goods and services which eventually figure in the final price of the finished good. There is a detailed specification of what is and is not taxable on the lower levels.^{7/}

The Motor Vehicle Fees ^{8/} were instituted in the state in 1901, making New York the first state to do so. In 1923 a passenger car tax based solely on weight was adopted and remains in effect until today with only changes in the rate having occurred. Buses are taxed on the basis of seating capacity and commercial vehicles, trucks and trailers on the basis of gross weight (including maximum load as stated by the owner). Operators' licenses are issued at a flat fee for 3 years duration. Motor Vehicle inspection fees are also included, although they are now listed separately in the report of the Tax Commission.

The Motor Fuel Tax ^{9/} is a gallonage tax on gasoline and diesel fuel sold in this state. Certain qualified carriers are able to arrange for a reimbursement.

The Alcoholic Beverage Tax ^{10/} is also a gallonage tax remitted by distributors on varying types of alcoholic beverage. The rates vary according to

type with the lowest rate on beer and highest on certain liquors depending on alcoholic content. As previously mentioned the brand label use fees are now included with these collections. The State Liquor Authority in addition to regulating the industry collects the Alcoholic Beverage License Fees.

The Cigarette Tax ^{11/} which was instituted as an emergency revenue producer gained permanence in 1947. The rate as of June 1, 1968 was 12¢ a pack. This seemingly small tax amounts to quite a sizeable collection of almost \$257 million in 1970.

With the addition of the Fuel Use Tax ^{12/} in 1968 the Highway Use Taxes now have three subdivisions. The Fuel Use Tax is a gallonage tax upon trucks and tractors subject to the Highway Use Taxes. Determination of the taxable gallons is accomplished by dividing the miles traveled in New York State by the mileage per gallon for the respective truck or tractor. The Truck Mileage Tax is imposed on commercial vehicles for the privilege of using the state's public highways, in order to distribute the burden of their maintenance. This applies to out of state vehicles as well, and is based upon mileage. The final portion of the Highway Use Tax is the Vehicle Permits. Each vehicle subject to the tax must have a permit and plate which are renewable triannually.

The Estate Tax ^{13/} is imposed upon the net taxable estate of a resident and that portion of estate located in the state of a non-resident. Certain exemptions are made for a bequest to a spouse or close relative. The rates range from 2-21%.

The Real Estate Transfer Tax ^{14/} is based upon the net consideration of the value of the consideration paid for the transfer of real property exceeding \$100. Consideration means the price paid including the discharge of any indebtedness.

The Pari-Mutuel Tax ^{15/} is imposed on pari-mutuel wagering and dates back to 1940. The rates vary depending upon whether the race is a flat race or a harness race. In conjunction with this tax there is a 15% Racing Admission Tax imposed upon the price of admission ticket to either a flat or harness race.

The Boxing Tax ^{16/} is collected by the Athletic Commission which licenses and collects fees from participants and their managers. In addition, a 5% gross receipts tax is imposed upon boxing and wrestling matches including the broadcasting, television and motion picture rights.

The final item included in the collections of the State Tax Commission, though not a tax, is the Lottery. ^{17/} This became effective on April 18, 1967 with banks, telegraph corporations, hotels and motels as authorized sales outlets. Subsequent Federal legislation prohibited banks from selling tickets; however it allowed them to provide accounting services, distribute tickets to vendors and collect proceeds. The original law was amended to broaden the type of establishment that could sell tickets, in order to make up for the loss of the banks as outlets. Included in this broadened base were food stores, drug stores, restaurants, book and stationery stores, etc. The law specifies that not more than 30% of the collections can be given in prizes and not less than 55% can be allocated to education. The funds are to be distributed between the

Local Assistance Fund and the State Purposes Fund by the Director of the Budget and to be used for primary, secondary and higher education and to provide scholarships.

B. Tax Allocations

This section will deal with the allocation of the various taxes to the appropriate counties under the existing structure in fiscal 1967 and fiscal 1970. The tax structure was basically the same for the two years in question, other than the rate changes and the addition of a few minor taxes as noted in the previous section. The overall allocation of the taxes for the two years for New York City, the four counties and the area as a whole may be found in Table 11). A more detailed allocation may be found in Tables 9 and 10.

Even though the Personal Income Tax is listed by fiscal year, data for the calendar year was used as a basis for the allocation scheme. Observation of several years surrounding the years in question showed a relatively stable percentage distribution of tax payments by county. It was therefore felt that using the percentage distribution for the calendar year and applying it to total tax collections in the state in the fiscal year would yield a very good approximation for county payments on a fiscal year basis. This procedure was carried out using 1967 calendar year data and 1969 calendar year data (the latest available) ^{18/} to construct the percentage distributions by county and 1967 and 1970 fiscal year data on total state collections. ^{19/} (See Appendix B, Tables A and B for the total collections and Table C for the percentage distributions.)

The allocation of the Business Taxes involved the most complex scheme and caused the most uncertainty as to the accuracy. Due to the procedure used in collecting the taxes, no direct data is available. Consolidated statements of tax liability are filed by multi-plant firms which may span many counties. However, the total tax liability is paid in the county of the main office or corporate

TABLE 6
ALLOCATION OF PERSONAL INCOME TAX

	1967	1970
NEW YORK CITY	639,696,567	1,022,876,000
NASSAU	192,260,200	322,327,000
ROCKLAND	15,118,157	27,570,000
SUFFOLK	64,137,636	114,042,000
WESTCHESTER	149,501,776	247,134,000
FOUR COUNTIES	421,017,769	711,075,000
AREA	1,060,714,336	1,733,952,000
STATE	1,527,086,577	2,506,435,000

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES

headquarters. Several alternative schemes were set up in order to attempt an allocation on a county basis. The schemes which were not used in the final analysis will be presented here, briefly, only to indicate alternatives that had been examined. Data was available on tax payments for those corporations in New York State taxed under Article 9A.^{20/} This was broken down by industry and sub-classification within each industry. The first allocation scheme involved weighting the industry tax payments by the number of establishments within each industry in each county. This would yield tax payments by industry by county. Of course, this would implicitly assume each establishment within an industry paid the same amount of taxes. This is not very likely and therefore this scheme was rejected. The next method using the same industry tax payment data, weighted it by employment within each industry by county. This would again yield tax payments by industry by county. However, the implicit assumption behind the use of this scheme was that output per man within an industry was constant and further that output bore some relation to tax payments by industry. However, while output per man might be constant within a sub-classification of an industry it was not likely it would be for the overall industry.^{21/} Therefore this allocation scheme was also rejected. It was decided that the use of employment data for the sub-classifications of the industry as a weighting factor could alleviate the problem by making the hypothesis of constant output per man more tenable. The next method used employment data for the sub-classifications of the industry^{22/} to weight the respective tax payments and yield tax payments by industry sub-classification by county. After summing up the tax payments by each industry sub-classification within each county an overall percentage distribution of tax payments by

county was constructed. This percentage distribution was applied to the remaining Business Taxes (approximately 1/2 of the total) not falling under Article 9A in order to obtain a county distribution for the total Business Taxes. This scheme was rejected in favor of the next scheme because of the questionability of applying the percentage distribution of Article 9A tax payments to the entire Business Taxes. The method which was finally adopted involved the same procedure, as above, for allocating the taxes under Article 9A. The remaining Business Taxes were where possible allocated using appropriate employment data.^{23/} A percentage distribution by county of the allocated taxes was constructed and this was used to weight the still remaining unallocated Business Taxes (less than 10% of the total) in order to distribute them by county. It was felt that this minimized the distortion due to the relatively small amounts involved.

The Sales and Use tax was allocated on the basis of the percentage distribution of retail sales across counties in the respective years. This was done despite the inclusion as previously mentioned of some collections on the wholesale level; because of the relatively small size of this collection and the infeasibility of obtaining an accurate measure of it. A cross check was available for the New York City allocation. New York State collects all state and local sales and uses taxes and then redistributes the appropriate local portion to the respective localities. Knowing in 1967 that the state levy was 2% and the New York City levy 1%, one third of the total collected for New York City^{24/} was the local levy. This figure amount corresponded very closely with the amount that resulted from using the retail sales distribution as a basis. There-

TABLE 7
 ALLOCATION OF BUSINESS TAXES

	1967	1970
NEW YORK CITY	365,478,260	560,510,
FOUR COUNTIES	81,950,641	123,830,
AREA	447,428,901	684,341,
STATE	631,875,148	962,911,

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES

TABLE 8

ALLOCATION OF THE SALES & USE TAX

	1967	1970
NEW YORK CITY	250,795,718	419,994,80
MASSAU	61,943,521	103,733,65
ROCKLAND	5,982,838	10,019,15
SUFFOLK	31,568,900	53,536,68
WESTCHESTER	36,380,487	60,924,54
FOUR COUNTIES	136,275,740	228,214,04
AREA	387,071,464	648,208,84
STATE	604,327,031	1,012,035,66

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES

fore retail sales distribution by county for 1967 ^{25/} was used as a weight on total state sales tax collections for the respective years. ^{26/} This method was applied in the case of New York City, as well, in order to yield a consistent set of data.

The Motor Vehicle Fees, Motor Vehicle Inspection Fees and the Motor Fuel Tax were allocated on the basis of the percentage distribution of Motor Vehicle registrations in New York State in 1968. ^{27/} This weight was used for both years except in the case of the Motor Vehicle Inspection Fees which were only effective in 1970.

The Alcoholic Beverage Tax varies according to the type of beverage from beer to liquor. There was no information available on the distribution of sales within a county by type of beverage and therefore no direct way of taking this into account. However, since the fee for the beverage license also varies according to beverage it was felt that it might give an indication of the relative tax distribution by county. Therefore the value of the alcoholic beverage licenses by county for 1968 ^{28/} was used as a weight for the tax collections in each year. ^{29/} As previously mentioned part of the collections under this heading in 1970 were collected by the license authority in 1967. The portion involved was the Brand Label Use Fee.

The same allocation scheme was used for the Alcoholic Beverage License Fee, as for the Alcoholic Beverage Tax. The 1967 amount included the Brand Label Use Fee and the 1970 amount excluded it.

The Cigarette Tax was allocated on the basis of the percentage distribution of population by county in the respective years. ^{30/} This was applied

to the tax collections in the respective years. ^{31/} While I am fully aware that the use of the above crude allocation scheme could be refined by use of socioeconomic and ethnic surveys related to smoking patterns, e. g., starting and ending time, incidence, etc., gains in accuracy cannot be secured easily as is indicated by a simple test comparing the distribution yielded by the age 15 and above population. For New York City this percentage of 15 and above population was 45.08 for 1970 ^{32/} compared with the general population percentage of 44.63 in 1967 and 44.41 in 1969. The respective figures for the four counties were 19.63 in 1970 for the 15+ population and 19.46% in 1967 and 19.76% in 1970 for the general population.

The Highway Use Tax consisted of three individual portions: the Truck Mileage, the Vehicle Permits and the Fuel Use (not in existence in 1967). This entire group was allocated on the basis of the percentage distribution of highways (excluding the New York State Thruway) per county in 1969. ^{33/} This was applied to the total collections in the respective years. ^{34/}

The Estate Tax collections were available directly by county for each year ^{35/} and therefore did not necessitate an allocation scheme.

The Real Estate Transfer Tax was in effect only in 1970 and was allocated on the basis of the proportionate share of full property valuation in each county. ^{36/} Since it was levied upon the price of real property transferred the above should be a good indicator of the relative distribution of the tax by county. This implicitly assumes the same proportionate transfer of property in dollar terms in each county. This distribution was applied to the total tax collections. ^{37/}

The Pari-Mutuel and Racing Admission Taxes were available by track and therefore by county for the respective years. ^{38/} Thus the allocation was directly available.

The Boxing Tax was allocated on the basis of the percentage distribution of population by county for the respective years. ^{39/} This was used since there was no information available which would indicate a better or different distribution. The resulting distribution was then applied to the total collections for the respective years. ^{40/}

The final item in the state tax collections was the Lottery which was only in effect in 1970. For lack of better information it too was distributed by the percentage distribution of the population by county ^{41/} which was applied to the total collections. ^{42/}

TABLE 9
 ALLOCATIONS BY STATE AND FISCAL YEAR

STATE	1966	1967	1968	1969	1970	1971	1972	1973
ALABAMA	639,656,567	192,260,200	15,118,157	64,137,636	149,561,776	421,017,769	1,060,714,336	1,527,056,577
ALASKA								
ARIZONA								
ARKANSAS								
CALIFORNIA	365,489,260	2,731	259	736	2,233	81,050,641	667,028,021	631,875,148
CONNECTICUT	179,469,517	4,002,180	208,014	1,414,472	6,454,556	54,161,117		
DELAWARE	50,476							
FLORIDA	569,659,777	1,536,401	171,568	754,223	553,606			
GEORGIA	29,261,451	4,227,704	550,344	1,994,401	3,167,004			
ILLINOIS	715,600,000							
INDIANA	28,194,013							
IOVA								
KANSAS								
KENTUCKY								
LOUISIANA								
MAINE								
MARYLAND								
MASSACHUSETTS								
MICHIGAN								
MINNESOTA								
MISSISSIPPI								
MISSOURI								
MONTANA								
NEBRASKA								
NEVADA								
NEW HAMPSHIRE								
NEW JERSEY								
NEW MEXICO								
NEW YORK								
NORTH CAROLINA								
NORTH DAKOTA								
OHIO								
OKLAHOMA								
OREGON								
PENNSYLVANIA								
RHODE ISLAND								
SOUTH CAROLINA								
SOUTH DAKOTA								
TENNESSEE								
TEXAS								
UTAH								
VIRGINIA								
WASHINGTON								
WEST VIRGINIA								
WISCONSIN								
WYOMING								
TOTAL	1,685,957,410	43,666	1,685,957,410	43,666	1,685,957,410	43,666	1,685,957,410	43,666

SOURCE: FEDERAL BUREAU OF INVESTIGATION AND REFERENCES

TABLE IO
 ALLOCATION OF STATE TAXES
 FISCAL 1970

TAXES	STATE	FEDERAL	STATE	FEDERAL	STATE	FEDERAL
PERSONAL INCOME	1,622,876,288	322,827,593	27,570,789	114,042,811	247,134,531	711,075,724
SALES TAX	500,510,974		53	152	401	123,830,461
PROPERTY TAX	265,943,636	564				83,749,013
INCOME TAX	75,423,221	5,300,792	675,609	1,873,461	3,251,005	18,700,767
ESTATE TAX	93,246,101	9,320,571	370,369	1,630,069	1,931,969	7,253,508
TOTAL STATE TAXES	1,991,896,493	6,824,054	907,422	3,035,172	4,816,726	15,285,374
TOTAL FEDERAL TAXES	40,796,001					0,344,566
UNASSIGNED TAXES						
SALARY TAXES	419,944,801	103,733,656	10,019,153	53,536,687	60,924,947	220,144,043
WAGE TAXES	53,664,123	22,563,909	3,178,242	16,429,119	13,428,837	55,410,726
WAGE TAXES - FICA	53,664,123	279,593	31,690	162,226	131,377	59,885
WAGE TAXES - FUTA	75,841,717	43,005,269	5,659,750	28,773,620	21,463,707	94,102,855
ALCOHOL TAXES	61,145,067	4,166,344	696,200	3,266,054	4,079,400	12,322,168
ALCOHOL TAXES - FICA	18,311,485	1,757,825	205,733	962,299	1,207,951	3,033,501
CIGARETTE TAXES	112,929,886	20,174,332	3,150,875	14,860,685	12,350,552	50,696,654
WINE TAXES	1,525,147	1,110,442	240,463	1,623,238	305,174	3,785,627
AMTRITE TAXES						
STATE TAXES	64,978,656	15,576,463	570,075	4,271,945	15,716,774	30,500,762
FEDERAL TAXES	24,770,072	3,340,498	76,160	371,279	405,744	1,483,526
PROPERTY TAXES	49,836,504	54,333,622			39,509,690	84,573,481
INCOME TAXES	1,934,453	1,128,426			632,040	1,700,275
ESTATE TAXES	76,072	13,184	2,092	9,405	8,148	31,403
TOTAL TAXES	11,940,557	2,051,121	317,034	1,507,210	1,252,544	5,134,504
TOTAL	2,477,922,901					1,422,472,442
	4,455					24,43
						3,900,245,373
						66,64
						5,821,374,373
						1,00,00

SOURCE: STATE AND FEDERAL TAX ADMINISTRATION, 1970

TABLE 11

TAX ALLOCATIONS

	1967	%	1970	%
NEW YORK CITY	1,685,957,410	43.66	2,477,822,491	42.55
FOUR COUNTIES	903,069,974	23.38	1,422,472,882	24.43
AREA	2,589,027,384	67.04	3,900,295,373	66.98
STATE	3,861,970,799	100.00	5,823,379,308	100.00

SOURCE CONSTRUCTED FROM DATA IN NEW YORK STATE
DEPARTMENT OF TAXATION AND FINANCE
STATISTICAL SUPPLEMENT FISCAL YEARS 1966-7
AND 1969-70 TABLE 1

C. The Expenditure System: An Overview

The expenditures for the operation of state departments and agencies are primarily, supplied by the General Fund. The funding comes from tax collections and debt issues. The fund itself consists of three parts: the State Purposes Fund, the Local Assistance Fund and the Capital Construction Fund. The first two will be dealt with in this paper. The financing of these two funds which make up the current expenditures portion is from tax collections. The Capital Construction Fund is for the purpose of capital outlays and is financed by debt issue. The relevant determinations for it exceeded the framework of the dissertation. It has been determined to deal, only, with the current expenditures and their financing through taxation.

The Local Assistance Fund is directly allocated to local governments for particular types of assistance. The categories of assistance are: Per Capita, Education, Social Services, Health, Mental Health, Highways, Housing Subsidies, Urban Renewal and Other Aids. The State Purpose Fund on the other hand finances the operations of various state departments and agencies, which perform services that are of benefit to all residents of the state. The major departments on the basis of expenditure size are: SUNY, Mental Hygiene, The Education Department, Transportation and the Executive Department.

Local Assistance Fund

The Local Assistance Fund increased from \$2,343,417,875 in 1967 to \$3,662,251,275 in 1970 (see Table 18). That is an increase of over 50%. New York City's share rose from \$928,050,727 or 39.60% to \$1,649,269,027 or 45.03% over this period. The four counties showed a decrease in their per-

centage share over the period from 20.19% to 17.85%, even though the absolute amount rose from \$473,171,450 to \$653,638,539. The area as a whole gained percentagewise as well as absolutely from \$1,401,222,177 or 59.79% to \$2,302,907,566 or 62.88%. An examination of particular categories within this fund showed a consistent rise in New York City's percentage share. For Education the rise was from 27.19% to 31.22%, for Social Services from 71.74% to 72.87% and for Per Capita aid from 50.05% to 56.82%. The trend was similar for the area as a whole. For education the percentage share rose from 52.10% to 53.86%, for Social Services from 81.34% to 82.57% and for Per Capita aid from 64.41% to 68.20%. The pattern was not consistent for the four counties. They experienced a percentage wise loss for Per Capita aid from 14.36% to 11.48% and from 24.91% to 22.64% for Education, while showing a slight gain for Social Services from 9.54% to 9.70%.

It is interesting to observe the allocation of the total Local Assistance Fund by each of these categories in 1967 and 1970. Education accounted for 62.94% in 1967 and only 59.45% in 1970, Social Services on the other hand accounted for 16.95% in 1967 23.80% in 1970, while Per Capita aid accounted for 8.51% in 1967 and 7.84% in 1970.

State Purposes Fund

Recently, much literature relates to the benefits of governmental expenditures. Of particular note, is Musgrave's ^{43/} discussion of incidence and output effects of budget policy. While on the surface it might seem that a similar analysis is required here in order to allocate the State Purposes Fund, it is not. One attempt at trying to measure the benefits accruing to the population

TABLE 12

NEW YORK STATE LOCAL ASSISTANCE FUND
(DOLLARS)

	1967	1970
TOTAL	2,343,417,875	3,662,251,275
PER CAPITA	199,319,686	286,982,776
EDUCATION	1,472,519,416	2,177,160,421
SOCIAL SERVICES	397,219,949	872,789,424
HEALTH	51,701,619	62,544,618
MENTAL HEALTH	34,184,440	59,008,907
HIGHWAYS	116,890,474	130,007,109
HOUSING SUBSIDIES	30,225,539	36,903,857
URBAN RENEWAL	14,062,589	2,665,319
OTHER AIDES	27,294,179	34,188,841

SOURCE: NEW YORK STATE DEPARTMENT OF AUDIT AND CONTROL
OFFICE OF THE STATE COMPTROLLER, ANNUAL REPORT 1967 AND 1970
EXHIBIT C PP. 66-7, 1967 AND EXHIBIT C PP. 76-7, 1970

SOURCE: NEW YORK STATE DEPARTMENT OF AUDIT AND CONTROL
OFFICE OF THE STATE COMPTROLLER
ANNUAL REPORT 1967 AND 1970. EXHIBIT C PP. 66-7, 1967 AND
EXHIBIT C PP. 76-7, 1970

	1967	1970	%
NEW YORK CITY	928,050,727	1,649,269,027	45.0
FIVE COUNTIES	473,171,450	653,638,539	17.8
METRO AREA	1,401,222,177	2,302,907,566	62.8
STATE	2,343,417,875	3,662,251,275	100.0

LOCAL ASSISTANCE FUND DISTRIBUTION WITHIN THE AREA

TABLE 13

from various government expenditures on such items as education, highways, etc. on the basis of income groupings occurs in a paper by Gillespie.^{44/}

If one examines his problem, namely determining the net benefits from the entire government operation of expenditures and taxation, one sees that the problem at hand here is quite different. Here I am not interested in how the benefits of the government expenditures fall on different groups in society, but how much of the expenditures are made for each area. It is evident that benefits and expenditures are not necessarily equal. Unless one assumes that the benefits of an expenditure on the same item will differ depending upon which unit of government makes that expenditure it therefore is irrelevant how the benefits are distributed by income group within the area. All that is necessary is to know how many people make use of the service provided and assume that each direct user has the same portion of the expenditure spent upon him.

One can readily see that what must be determined in this case is how much expenditure would have to be made in the various categories by an alternatively bounded area, say the metropolitan area to replace the expenditure that would no longer be made by the state. It is possible that the area could spend the money on the exact same items and therefore not alter the benefit flows. One can see that while measuring the benefits of government expenditures is important in its own right, it is irrelevant to the problem at hand. The same logic holds for the tax side of the picture. It is only necessary to determine where the tax is raised. It should not be assumed that with these problems cleared up the allocation of the respective taxes and expenditures becomes a

matter of simple arithmetic. Numerous problems still exist and many allocation schemes must be devised in order to make the necessary allocations.

One of the most crucial problems that must be met prior to the allocation of departmental expenditures under the State Purposes Fund is what service is being performed and for whom it's being performed. In essence what must be determined is whether this department is performing services for only selected parts of the state or for the state as a whole. It is best to look at an example of a department (actually a sub unit of one) whose service is excluded from a particular area of the state. The State Police Department, a sub unit of the Executive Department, does not operate in New York City for all practical purposes (The Citizens Budget Commission ^{45/} estimates less than 1% of the force operates in New York City). Therefore it is necessary to separate the expenditures of this part of the Executive Department before allocating it in order to reflect this phenomenon. The question of whether this occurs in other departments, e. g., Judiciary, Correction, Health, Mental Hygiene, etc., also arose. It therefore was necessary to examine these departments thoroughly. It was determined that this was not the case. In the case of the Judiciary it seemed at first glance that the New York City courts were performing functions performed elsewhere in the state by state courts. This, however, is not so and it appears that the suspicion is caused by the title given to particular courts, i. e., New York City Criminal Court, New York City Civil Court, etc. Despite the titles and division of the functions of these courts, they perform the equivalent function as county courts do elsewhere,

the financing of the city and county courts as well as other local courts is the responsibility of the respective county, city or town.^{46/} The state finances the Court of Appeals and Court of Claims. Expenditures for the State Appellate Division and Supreme Court are reimbursed by New York City and each of the counties proportionately, although the money is initially appropriated by the legislature.^{47/} In the case of the Correction Department the story is much the same with the counties and cities responsible for financing their houses of detention, jails or penitentiaries as the case may be.^{48/} In the case of the Health and Mental Hygiene Departments the facilities in question are of a specialized nature and are located throughout the state. They are open equally to all residents of the State. It is therefore proper to allocate the expenditures of these departments according to the appropriate criteria without fear that services are being withheld from any particular area.

While the situation for the above departments has been clarified, there still remains a "gray area" covering such departments as Public Works (Transportation in 1970), Conservation and SUNY. It is unclear whether a state service is being performed elsewhere in the state without the same service being performed for New York City by the state. The question arises due to the lack of state parklands in New York City and, therefore, most of the related expenditures of the Conservation Department going to aid areas outside New York City, while New York City maintains its own parks. The same may be true with relation to highway expenditures in the Public Works Department (Transportation in 1970) due to the lack of state highways in New York City. The case of SUNY and CUNY is discussed in greater detail later in the paper. The final resolution

of these matters will take a detailed analysis of each of these cases, far beyond the scope of this paper.

D. State Purposes Fund Allocations

Next, we will discuss the allocations of the expenditures out of the State Purposes Fund of the various departments to the appropriate counties for the fiscal years 1967 and 1970. (See Table 14 and 15). Since the expenditures of this fund are of an indirect nature as opposed to those of the Local Assistance Fund, it is necessary to form allocation schemes for each department in order to determine the approximate amount expended upon each county.

The allocation of the following departments are all handled with the same allocation scheme: Audit and Control, Law, Judiciary, Commerce, Health, Public Service, State and Miscellaneous Boards and Commissions. They all perform services which are general in nature and therefore the recipients of their services would be the residents of the state. The use of the formula based on the percentage of the state population residing in each county in the respective years $\frac{49}{100}$ produces a fairly reasonable allocation of the expenditures of these departments by county. Application of this percentage distribution of population by county to the departmental expenditures in each of the respective years $\frac{50}{100}$ yields the appropriate expenditures by county.

The Executive Department also performs general services in much the same way as the above mentioned departments. However, a special adjustment was necessitated in allocating its expenditures due to the unique situation with respect to one of its subdivisions, namely the State Police Department.

For all practical purposes the State Police do not function inside New York City (as discussed above) and therefore it has been determined not to allocate any of its expenditures to New York City. The expenditures of this department are allocated on an adjusted population basis. The population of New York City is subtracted from the total state population to yield a new population base for the respective years.^{51/} The population of each of the remaining four counties ^{52/} is placed over the adjusted base to determine their percentage share. This percentage distribution is then applied to the departments expenditure ^{53/} to distribute the appropriate share among the four counties. The remaining expenditures of the Executive Department are distributed on a population basis the same as the previously mentioned departments.

The expenditures of the Legislature Department can best be approximated by the number of representatives from each county in the two houses of the State Legislature.^{54/} A percentage distribution of representatives to both houses for each county was constructed. This was then used to distribute the departmental ^{55/} expenditures to the respective counties.

A rough estimate of the distribution of expenditures among counties by the Agriculture and Markets Department can be ascertained by use of the numbers of farms in each county.^{56/} This data was then used to create a percentage distribution of farms by county to be applied to the total expenditures of the department ^{57/} made to yield a distribution by county.

Employment in the Banking industry seems to be an appropriate indication of banking activity within the county. It therefore would give a reasonable

estimate of the expenditure level for the banking department within each county. The employment data ^{58/} used also includes employment in other credit agencies which this department also supervises. A percentage distribution of banking employment by county for the respective years was created and used to weight the total expenditures by ^{59/} this department in order to distribute them by county.

The expenditures of the Civil Service Department by county can best be estimated by the number of full time state employees within each county. ^{60/} A percentage distribution again was created and used as a weight to distribute the total expenditures of the department ^{61/} by county.

A variety of functions are performed by the Conservation Department and therefore it was necessary to divide up its expenditures according to the functions and allocate them individually. By examining the detailed budget of this department ^{62/} it was determined that 60% of its expenditures were for parklands and the remaining 40% were of a general nature. For the portion of the expenditures dealing with parklands, it was felt that the number of acres of state parklands in each county ^{63/} would give a good approximation of these expenditures by county. Therefore a percentage distribution of acres of parkland per county was created and used to weight 60% of the total departmental expenditures ^{64/} in order to allocate it by county. The remaining 40% of the departmental expenditures were distributed on a population basis as discussed for the previous departments.

A fairly good indication of the distribution of the expenditures of the Correction Department can be obtained by using data on the number of New

Commitments to State Correctional Institutes by county of commitment. ^{65/}
Since the county of commitment reflects the place of the crime, a good indication of the expenditures being made for each county is yielded. A percentage distribution again was formed and used to distribute the total expenditures of the department ^{66/} by county.

Expenditures of the Insurance Department exclusive of first instance appropriations (those which are paid back to the department) were solely for the administration of the Employees Welfare Fund. Therefore, it was felt that the number of employees in the industry by county ^{67/} would be a good indication of the expenditures of the department by county. A percentage distribution was constructed and applied to the total expenditures of the department ^{68/} in order to yield the expenditures by county.

Allocation of the Labor Department expenditures by county can best be reflected by the number of employees per county in the respective years. ^{69/}
The total expenditures of the department ^{70/} was then allocated by county according to the percentage distribution of employees in each county.

The number of motor vehicles registered in a county ^{71/} gives a good indication of the expenditures of the Motor Vehicle Department by county. Computation of the percentage distribution of the motor vehicles registered in each county was then used to allocate the expenditures of the department by county. ^{72/}

The Public Works Department which existed in 1967 was later disbanded and various of its functions were incorporated in other departments. Examination of its detailed budget ^{73/} showed that 60% of its expenditures related to highways and the remaining 40% were of a general nature. Therefore the 60%

of the total expenditures of the department ^{74/} were allocated on the basis of the number of miles of highway within a county in 1969 ^{75/} through the creation of a percentage distribution. The remaining 40% was allocated on a population basis as discussed previously.

The Transportation department which was not in existence in 1967, took over some of the functions of the Public Works Department, namely those relating to highways. An examination of its budget ^{76/} showed 55% of its expenditures related to highways and 45% of a general nature. The portion relating to highways was allocated on the same basis as was the Public Works department, namely miles of highways using the same data and distribution. The general portion was allocated on a population basis.

Expenditures in state-aided programs ^{77/} for assistance, care and administration was used as an indication for allocating the expenditures of the Social Service Department. A percentage distribution by county of these expenditures was constructed and applied to the total expenditures ^{78/} of the department in order to obtain a distribution by county.

The allocation of the expenditures of the Taxation and Finance Department was on the basis of the percentage distribution of tax payments by county. This distribution was determined from the allocations of the State Taxes described in the previous section. Applying this distribution to the total expenditures of the department ^{79/} one obtains a distribution of the expenditures by county.

It was determined in fiscal 1967 that 33% of the Education Department's expenditures were for general public school programs, 30% for State Regents

Scholarships and 37% for State Scholar Incentive Awards. The public school enrollment by county ^{80/} was used to allocate 33% of the departments expenditures ^{81/} which related to public schools. Once again a percentage distribution was used to distribute it by county. The number of recipients of Regents Scholarships by county was obtained from a department press release ^{82/} for the respective years. Unfortunately no information was available with regard to the dollar amounts of the awards by county. The scholarship varies in amount according to the income of the family of the recipient. With no information available to show that the distribution of incomes of those who actually use the scholarship (it is only good if the student enrolls in a college within New York State) differs significantly across counties, the percentage distribution of number of recipients per county was used to allocate the appropriate proportion of the expenditures. In order to allocate the expenditures for the Scholar Incentive Awards, the number of high school graduates by county ^{83/} for the previous academic year was used. This could be affected by the variations in college going rates across counties and by difference in the proportion of students remaining within the state (the award is only available if the student attends college in the State). All students attending college within the state and paying minimum amount of tuition are eligible. The award also varies according to income. However, with no better information available, it was decided to use the percentage distribution of high school graduates by county as an indication in order to distribute these expenditures by county.

The expenditures of SUNY were allocated on the basis of the permanent residence of the students attending the university. ^{84/} Since aid to Community

Colleges comes from the Local Assistance Fund and not the State Purpose Fund, Community college students were subtracted from the enrollment figures. The percentage distribution of the number of students at all facilities (except Community Colleges) by county of permanent residence was used to distribute the expenditures ^{85/} by county.

The allocation of the expenditures of the Mental Hygiene Department differed in the two years due to the addition of the Narcotic Addiction Control to the department in 1970. The allocation of the expenditures of the main department in both years will be discussed first. The number of resident patients of Mental Hospitals and Schools by county of residence ^{86/} was used to allocate this part of the departments expenditure. ^{87/} A percentage distribution was constructed once again, for this purpose. Two alternative schemes were considered in order to allocate the expenditures for Narcotic Addiction Control for fiscal 1970. The first was to allocate it in the same way as the rest of the department, as described above. The second method, which is the one actually used, was to follow the allocation scheme of the Citizen's Budget Committee. ^{88/} They allocated 86% of the direct treatment expenditures to New York City on the basis of the residence of the patient. The grant expenditures were allocated with 95% going to New York City. It was stated that the only other counties to receive grants were Nassau and Westchester. Therefore the remaining 5% of grant expenditures was allocated to the four counties. The remaining 14% of direct treatment expenditures was also allocated to the four counties. This may seem to be a very bold assumption, however it is felt that it is not very far from the actual situation. With no other information

available, this at least has the additional feature of indicating the direction of bias. The direct treatment expenditures accounted for 75% of the total expenditures 89/ and the grant expenditures accounted for 25%.

TABLE 14

ALLOCATION OF THE STATE BUDGET BY COUNTY FISCAL 1967

	F.Y.C.C.	UNEMPLOYED	HOUSING	WESTERN CARE	CHURCHES	STATE
DEPT. OF CORRECTIONS	25,049,736	8,000,000	1,228,141	5,220,951	21,106,704	65,771,004
DEPT. OF HEALTH	4,188,000	740,000	1,050,115	453,400	1,870,800	9,400,315
DEPT. OF EDUCATION	3,175,945	541,000	86,412	359,000	1,451,057	7,000,414
DEPT. OF TRANSPORTATION	7,947,847	1,437,110	1,200,000	803,000	3,040,685	17,000,620
DEPT. OF AGRICULTURE	6,853,877	1,270,000	1,740,000	740,000	3,100,501	15,000,322
DEPT. OF SOCIAL SERVICES	13,987	70,000	12,142	24,707	200,872	6,000,000
DEPT. OF PUBLIC SAFETY	186,913	11,000	1,157	60,000	20,814	25,000,000
CIVIL SERVICE	2,603,000	1,000,000	459,134	250,000	1,587,113	10,000,000
LEGISLATION	2,780,745	400,000	70,000	301,200	1,210,411	6,000,000
GENERAL INVESTMENT	5,055,000	1,100,000	420,000	551,100	3,170,520	13,000,000
STATE DEPARTMENT OF REVENUE	46,659,700	5,000,000	3,200,000	1,000,000	5,170,000	50,000,000
STATE DEPARTMENT OF HIGHWAYS	20,000,000	10,000,000	1,000,000	5,000,000	22,000,000	40,000,000
HEALTH	10,711,574	2,100,000	1,400,000	5,000,000	4,200,000	10,000,000
LEGISLATION	16,257,000	2,500,000	1,800,000	1,500,000	6,000,000	10,000,000
LABOR	300,000	20,000	1,000	10,000	50,000	1,000,000
LEGISLATION	7,100,000	800,000	900,000	500,000	1,900,000	10,000,000
STATE DEPARTMENT OF REVENUE	154,551,170	8,300,000	1,513,216	9,500,000	20,000,000	180,000,000
STATE DEPARTMENT OF TRANSPORTATION	4,650,243	1,000,000	274,000	1,100,000	4,000,000	10,000,000
PUBLIC SAFETY	2,068,577	300,000	51,000	271,200	800,000	4,000,000
PUBLIC SAFETY	13,422,774	2,700,000	652,000	2,600,000	1,800,000	7,000,000
STATE DEPARTMENT OF REVENUE	13,877,654	620,000	117,632	570,400	1,800,000	15,000,000
STATE DEPARTMENT OF SOCIAL SERVICES	2,835,000	500,000	71,800	300,000	1,200,000	6,000,000
STATE DEPARTMENT OF TRANSPORTATION	18,000,000	11,000,000	1,000,000	7,170,000	28,000,000	40,000,000
MISC. LEGISLATION & COMMISSIONS	66,473,501	11,000,000	1,000,000	7,170,000	28,000,000	100,000,000
TOTAL	442,672,000	100,000,000	17,000,000	64,000,000	54,000,000	100,000,000

SOURCE: SEE TEXT FOR DISCUSSION AND NOTES.

TABLE 16

ALLOCATION OF THE STATE PURCHASES FUNDS
FISCAL 1970

	FY66*	FY67**	FY68***	FY69****	FY70	CAPITAL	POSTPONED	FUND COUNTRIES	STATE
EXECUTIVE	42,454,867	13,206,406	2,012,774	9,671,117	8,034,172	32,547,686	75,407,256	135,162,759	
ADJUTANT GENERAL	6,135,811	1,004,250	169,559	931,364	8,574,965	2,730,008	6,805,206	13,811,782	
LAW	5,765,419	1,017,496	146,735	745,175	619,233	2,532,997	4,244,115	12,447,150	
LEGISLATIVE	5,246,117	1,671,672	146,602	745,950	914,510	3,214,813	12,774,630	20,331,611	
JUDICIAL	11,248,805	2,007,320	304,602	1,469,055	1,270,356	5,008,515	16,253,324	25,321,540	
AGRICULTURE & MARKETS	16,255	20,814	14,378	18,305	34,544	2,38,668	2,64,044	9,564,071	
MARKETING	230,347	14,654	14,378	18,305	34,544	2,38,668	2,64,044	9,564,071	
CIVIL SERVICE	2,035,381	100,241	3,000,000	913,257	214,175	1,182,153	3,718,034	10,651,446	
GENERAL	3,388,388	600,712	92,453	414,915	305,595	1,459,746	4,867,132	7,404,745	
OPERATION	5,813,374	1,636,140	644,351	1,370,057	409,004	4,624,506	13,447,570	49,641,826	
OPERATION	43,859,260	3,601,614	360,040	2,120,951	1,202,342	7,175,440	51,213,770	70,311,078	
POSTAL SERVICE	53,962,404	17,276,409	2,215,719	11,811,427	8,401,941	39,154,971	53,647,375	104,171,434	
POSTAL SERVICE	31,769,471	41,755,507	3,600,867	26,860,824	9,702,312	11,619,430	113,640,121	363,472,730	
HEALTH	23,343,481	4,163,035	641,276	3,940,687	2,453,564	10,186,502	33,735,034	52,553,619	
INSURANCE	416,366	25,267	1,521	10,342	17,947	59,072	47,564	50,000	
LAW	9,682,132	1,121,341	113,763	483,107	728,085	2,452,036	1,019,164	17,002,448	
MISCAL	150,496,797	10,721,117	1,942,446	8,465,866	12,437,141	33,447,110	211,439,557	346,061,714	
RESEARCH	33,817,140					4,509,278	38,376,408	46,376,408	
STATE HIGHWAY	6,072,410	2,548,051	358,577	1,035,734	1,406,036	6,279,018	12,351,426	23,749,181	
STATE HIGHWAY	2,431,146	433,566	66,787	317,511	263,802	1,081,726	3,512,672	5,474,432	
STATE HIGHWAY	36,754,256	5,068,564	1,602,539	9,065,263	5,899,747	25,37,412	22,441,714	100,253,100	
STATE HIGHWAY	26,613,083	1,423,745	205,054	1,142,460	1,256,486	4,030,545	33,643,624	40,796,999	
STATE HIGHWAY	3,459,822	617,018	95,046	451,857	375,509	1,539,430	4,600,210	7,770,617	
STATE HIGHWAY	21,623,562					1,415,356	34,039,514	50,201,413	
MISC	100,461,518	17,916,124	2,759,808	13,120,396	10,903,502	44,859,834	145,161,352	226,213,732	
TOTAL	685,201,501	100,461,518	17,916,124	13,120,396	10,903,502	330,027,426	1,015,226,527	1,853,220,637	
	36.97					17.81	54.78	100.00	

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES

TABLE 16

NEW YORK STATE PURPOSES FUND
(DOLLARS)

	1967	1970
TOTAL	1,169,847,189	1,853,229,
AUDIT AND CONTROL	9,408,370	13,816,
EXECUTIVE	85,701,603	135,162,
LAW	7,461,235	12,847,
LEGISLATURE	17,506,820	20,361,
JUDICIARY	15,446,732	25,328,
AGRICULTURE AND MARKETS	8,227,788	9,585,
BANKING	262,850	322,
CIVIL SERVICE	12,584,636	10,656,
COMMERCIAL	6,250,828	7,584,
CONSERVATION	33,357,907	49,641,
CORRECTION	59,288,705	70,918,
EDUCATION DEPARTMENT	94,405,499	162,173,
S.U.N.Y.	191,212,519	363,723,
HEALTH	31,946,359	52,563,
INSURANCE	561,060	608,
LABOR	13,263,603	17,502,
MENTAL HYGIENE DEPARTMENT	270,217,059	346,961,
NARC. CONTROL		38,376,
MOTOR VEHICLES	18,186,324	23,748,
PUBLIC SERVICE	4,591,030	5,474,
PUBLIC WORKS	73,292,421	----
TRANSPORTATION	----	160,253,
SOCIAL SERVICES	19,947,756	40,794,
STATE	6,354,250	7,790,
TAXATION AND FINANCE	41,428,296	50,820,
MISC. BOARDS AND COMMS.	148,943,539	226,213,

SOURCE NEW YORK STATE DEPARTMENT OF AUDIT AND CONTROL
OFFICE OF THE STATE COMPTROLLER ANNUAL REPORT 1967 AND
EXHIBIT A P. 58, 1967 AND EXHIBIT A P. 56, 1970

TABLE 17

SUMMARY OF
ALLOCATION OF STATE PURPOSES FUND

	1967	%	1970	%
NEW YORK CITY	442,672,089	37.84	685,201,501	36.97
FOUR COUNTIES	198,837,698	17.00	330,027,426	17.81
NEW YORK METROPOLITAN AREA	641,509,787	54.84	1,015,228,927	54.78
NEW YORK STATE	1,169,847,189	100.00	1,853,229,937	100.00

SOURCE CONSTRUCTED FROM DATA IN NEW YORK
STATE DEPARTMENT OF AUDIT AND CONTROL
OFFICE OF THE STATE COMPTROLLER ANNUAL
REPORT 1967 AND 1970 EXHIBIT A P58, 1967
AND EXHIBIT A P56, 1970.

FOOTNOTES

CHAPTER II

1/ Stat. Sup., T & F, Fiscal Years 1966-7 and 1969-70.

2/ Ibid.

3/ Ibid.

4/ New York State, Department of Taxation and Finance, The New York State and Local Tax System, January 1970.

5/ Ibid.

6/ Ibid.

7/ New York State, Department of Taxation and Finance, New York State and Local Sales Tax Information, Booklet No. 4.

8/ New York State, Department of Taxation and Finance, The New York State and Local Tax System, January 1970.

9/ Ibid.

10/ Ibid.

11/ Ibid.

12/ Ibid.

13/ Ibid.

14/ Ibid.

15/ Ibid.

- 16/ New York State Tax Commission, The Division of the Treasury and the Division of the Lottery Annual Report 1969-70.
- 17/ New York State, Department of Taxation and Finance, The New York State and Local Tax System, January 1970.
- 18/ New York State, Department of Taxation and Finance, New York Personnel Income and Tax Liability by County of Residence, Income years 1967 and 1969.
- 19/ Stat. Sup. T & F, Fiscal Years 1966-7 and 1969-70, Table 1.
- 20/ Ibid. Fiscal year 1968-9, Table 4.
- 21/ I thank Dr. Bernard Okun for pointing this out to me.
- 22/ U.S. Bureau of the Census, County Business Patterns, 1968 New York CBP p. 68-34. U.S. Government Printing Office, Washington, D.C. 1969, Table 1A, p. 3 and Table 2 pp. 21-183 (Henceforth: C. B. P.)
- 23/ Ibid.
- 24/ Stat. Sup. T & F, Fiscal Year 1966-7, Table 7.
- 25/ New York State, Division of the Budget, New York State Statistical Yearbook, 1970 Table D-11, p. 106-7 (Henceforth: Stat. Yrbk.)
- 26/ Stat. Sup. T & F, Fiscal Years 1966-7 and 1969-70, Table 1.
- 27/ Stat. Yrbk., 1970 Table F-2, p. 133.
- 28/ Ibid. Table H-20, p. 176.
- 29/ Stat. Sup. T & F, Loc. Cit.
- 30/ Stat. Yrbk. 1970, Table A-11, p. 55.
- 31/ Stat. Sup. T & F, Loc. Cit.

32/ U. S. Bureau of the Census, Census of Population 1970, General Population Characteristics, Final Report PC(1) B-34, New York, U.S. Government Printing Office, Washington, D. C., 1971, Table 20 p. 76 and Table 35 pp. 221-241.

33/ Stat. Yrbk. 1970, Table F-5, p. 136.

34/ Stat. Sup. T & F, Loc. Cit.

35/ Ibid. Table 14.

36/ Stat. Yrbk. 1970, Table H-25, p. 182.

37/ Stat. Sup. T & F, Fiscal Year 1969-70, Table 1.

38/ Ibid. Fiscal Years 1966-7 and 1969 and 70, Table 13.

39/ Stat. Yrbk. 1970, Table A-11, p. 55.

40/ Stat. Sup. T & F, Fiscal years 1966-7 and 1969-70, Table 1.

41/ Stat. Yrbk. 1970, Loc. Cit.

42/ Stat. Sup. T & F, Fiscal Year 1969-70, Table 1.

43/ Musgrave, Richard The Theory of Public Finance, McGraw Hill Book Company, New York 1959, Chapter 10, pp. 205-231.

44/ Gillespie, W. Irwin, 'Effect of Public Expenditures on the Distribution of Income', in Essays in Fiscal Federalism, Musgrave, Richard A., ed., Brookings Institute, Washington, D. C., 1965, pp. 122-186.

45/ Citizens Budget Commission, Does New York State Shortchange New York City? (New York, December 1969, p. 15).

46/ See: Tauber, Gilbert and Kaplan, Samuel, The New York City Handbook, (Doubleday, Inc., Garden City, N. Y. 1969), and New York State A Citizen's Handbook, (League of Women Voters of New York State, 1963).

47/ Ibid.

48/ New York State, State Commission of Correction, Annual Report for the Year 1965 (Albany, February 1966).

49/ Stat. Yrbk. 1970, Table A-11, p. 55.

50/ New York State Department of Audit and Control Office of the State Comptroller, Annual Report 1967 & 1970, Exhibit A, p. 58 1967 and Exhibit A, p. 56, 1970 (Henceforth: Ann. Rep. Compt.).

51/ Stat. Yrbk. 1970, Table A-11, p. 55.

52/ Ibid.

53/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

54/ New York State, State Department Manual for the Use of the Legislature 1966/7 and 1969/70.

55/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

56/ Stat. Yrbk. 1970, Table G-2, p. 145.

57/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

58/ C. B. P. 1968 and 1969, Tables 1A and 2.

59/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

60/ U. S. Bureau of the Census, Census of Governments 1967, vol. 3, no. 2 "Compendium of Public Employment", U. S. Government Printing Office, Washington, D. C. 1967, Tables 15 and 20.

61/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

62/ New York State, Executive Budget 1966-7 and 1969-70.

63/ Stat. Yrbk. 1970, Table L-1, pp. 250-1.

64/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

65/ Stat. Yrbk. 1970, Table K-6, p. 242.

66/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

67/ C. B. P. 1968 and 1969, Loc. Cit.

68/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

69/ Stat. Yrbk. 1970, Table B-10, p. 77 and C. B. P. 1969, Table 1-F.

70/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

71/ Stat. Yrbk. 1970, Table F-2, p. 133.

72/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

73/ New York State, Executive Budget, 1966-7.

74/ Ann. Rep. Compt. 1967, Exhibit A, p. 58.

75/ Stat. Yrbk. 1970, Table F-5, p. 136.

76/ New York State, Executive Budget 1969-70.

77/ New York State Department of Social Services, Statistical Supplement to the Annual Report 1967 and 1969, Table 3.

78/ Ann. Rep. Compt. 1967 and 1970, Exhibit A, p. 58, 1967 and Exhibit A, p. 56, 1970.

79/ Ibid.

80/ Stat. Yrbk. 1970, Table I-4, p. 202.

81/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

82/ University of the State of New York, State Education Department Winners and Alternates in the Regents College Scholarship Competition, 1967 and 1970.

83/ Stat. Yrbk. 1970, Tables I-13, p. 210 and I-14, p. 211.

84/ State University of New York, Geographic Origins of Students Fall 1968, Report No. 5, September 1969, Table 1.

85/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

86/ Stat. Yrbk. 1970, Table J-6, p. 224.

87/ Ann. Rep. Compt. 1967 and 1970, Loc. Cit.

88/ Citizens Budget Commission, Does New York State Shortchange New York City? (New York, December 1969, p. 15).

89/ Ann. Rep. Compt. 1970, Exhibit A, p. 56.

CHAPTER III

A. The Redefined Area

Now, having determined the structure of the taxes and expenditures of the area as it existed, it will be applied to the redefined area in order to determine the impacts. It will be necessary only to deal with the additional revenues available and the additional expenditures necessary in order to determine whether a benefit exists in fiscal terms due to separation. Since all the local expenditures and taxes are assumed to remain constant, as well as the Federal ones, the relationship between the alternatively allocated revenues available and alternatively allocated expenditures necessary is the critical one. One, of course, must be aware of the problems involved in allocating the taxes and expenditures which were discussed previously. One must weigh the results of the following sections in this light.

Turning to the tax side first, one finds the area accounting for \$2,589,027,384 in 1967 and \$3,900,295,373 in 1970. (See Table 18.) This amounts to 66.54% and 66.98% of New York State Tax collections, respectively. Breaking these figures down further New York City accounted for \$1,685,957,410 in 1967 and \$2,477,822,491 in 1970, while the four counties accounted for \$903,069,974 and \$1,422,472,882, respectively. The largest taxes in dollar terms are the Personal Income Tax, the Business Taxes and the Sales and Use Tax. The additional revenue available is equivalent to the previously mentioned tax dollar which no longer would be sent to the state capitol, but, instead, would remain in the area.

Now one must determine the amount of additional expenditures which would be necessitated, since New York State would no longer provide the services or aid. In the case of many departments in Albany which are performing services, it is possible that duplication of these services is taking place within the area. This would tend to indicate that the area would not have to replace the total amount of expenditures made for the area by these state departments and agencies. However, on the other hand, some services now being performed by the state may have been subject to economies of scale and, therefore, would require a greater expenditure on the part of the area to replace them, than is indicated in the allocations. It is assumed that these two effects will more or less cancel each other out and therefore, the use of the allocated expenditure data will be a close approximation of the additional expenditures needed. It was not necessary to allocate the expenditures of the Local Assistance Fund, since they are direct expenditures and specified by county. The amounts received from this fund by the area were \$1,401,222,177 in 1967 and \$2,302,907,566 in 1970. The largest categories of aid were Education, Social Services and Per Capita. New York City received the largest percentage share of the Social Services Expenditures. While the largest dollar amount it received was in Education, the gap between the two shrank drastically from 1967 to 1970. In 1967 New York City received \$400,358,533 for Education and \$284,945,890 for Social Services. The figures for 1970 were \$679,784,698 and \$635,952,623, respectively. In fact New York State more than doubled its expenditures for the Social Service category from \$397,219,949 in 1967 to \$872,789,424 in 1970.

To the Local Assistance Fund expenditures one must add those allocated from the State Purposes Fund. Only the appropriate totals will be dealt with here, since these expenditures have been dealt with at length previously. The State Purposes Fund figures for the area for 1967 and 1970 were \$641,509,787 and \$1,015,228,927. Adding the two funds together yields the necessary additional expenditures; namely \$2,042,731,964 for 1967 and \$3,318,136,493 for 1970.

Comparing the area's expenditure figures to its tax figures, one finds an excess of tax revenues of \$546,295,420 in 1967 and \$582,158,880 in 1970. While this figure is sizeable in dollar terms, when compared with the current expenditure budget of the area for the two years in question its significance is militated (see Table 20). It is interesting to see how these gains are distributed throughout the area. For fiscal 1967, New York City's gain would have been \$315,234,594 and the four counties' \$231,060,826. The pattern for fiscal 1970 showed a significant shift with the city's gain falling to \$143,351,963 and the four counties' rising to \$438,806,917. While the city's tax payments increased in absolute terms by about 47%, revenues derived from the Local Assistance Fund increased by 77% and those from the State Purposes Fund by 57%. (See Table 18.) The percentages for New York City for 1967 and 1970 with regard to tax payments show a decline from 43.66% to 42.55% and with regard to the expenditure receipts show a rise from 39.06% to 42.33%. For the four counties the movement was in the opposite direction from 1967 to 1970, showing a rise from 23.38% to 24.43% in tax payments and a fall from 19.13% to 17.83% in expenditure receipts. A further explanation for the increase in tax payments by the four counties could

be the increased reliance upon the Personal Income Tax by the state. From 1967 to 1970 it rose from 39.54% to 43.04% of total collections. Since the tax is progressive in structure and the four counties are relatively high income areas, one would expect it to fall heavier upon them. In fact, in 1967 New York City accounted for 41.89% of the collections of this tax and in 1970 for 40.81%, while the four counties went from 27.57% to 28.37%. Another possible source of increased tax payments for the four counties may have been the Pari Mutuel Tax. The share accounted for by the four counties rose from 39.35% in 1967 to 55.59% in 1970. In fact the absolute amount of the increase was greater than the increase in the state collections of this tax over these years.

It must be recognized that in a fiscal system such as the one which exists there is no a priori reason for any area to get back (even in percentage terms) exactly what it gives. In fact the reverse is often the case, especially if the system is fulfilling one of its goals, the redistribution of income from the richer to the poorer areas. Need must be a predominant factor in determining what an area will receive from the state. On this ground a strong case can certainly be made for New York City receiving more than it is now.

Now looking at the expenditure side for an explanation of the pattern of gains throughout the area, we find some quite apparent. In 1967 the city's share of the Local Assistance Fund was 39.60% and in 1970 it was 45.03%. However, its share of the State Purposes Fund fell from 37.84% to 36.97%. This decline, however, was much smaller both absolutely and relatively, since the Local Assistance Fund is roughly twice as large as the State Purposes

Fund. The picture for the four counties was, again exactly the opposite with an increase in their share of the State Purposes Fund from 17.00% to 17.81% and a decline in the share of the Local Assistance Fund from 20.19% to 17.85%. The city is, clearly, receiving a greater portion of its aid from the Local Assistance Fund. An explanation for this could be the large portion of the State Purposes Fund that is accounted for by SUNY expenditures, of which the city shares little. New York City's share is under 9% of the expenditures of this department. On the other hand, New York City's share of the Education Department expenditures for CUNY account for all the municipal college expenditures in this department. A more detailed discussion of the financing of CUNY and SUNY will follow in a later section.

A review of the fiscal situation in the newly defined New York Metropolitan Area shows fiscal gains in dollar terms from separation but these gains turn out not to be significant in relation to the current expenditures of the area. This may not portray the entire picture due to the fact that certain other considerations have not been examined here such as, the capital items and the political feasibility, etc. However, in this paper many questions have been exposed which need further investigation, some will be dealt with later on and others will have to be dealt with in further research. One thing is clear: in order for separation to be profitable significant benefits will have to exist in areas other than those explored here.

Before moving on to an investigation of some of the reasons behind the above results, the fiscal impact upon the state deserves a brief discussion. An interesting phenomenon occurs when we observe the fiscal situation in the state

after separation. The state would have to expend \$1,470,533,100 on the remaining part of the state and would collect \$1,272,943,415 in tax revenues from it in 1967 (see Table 21). The appropriate figures for 1970 are \$2,197,344,719 and \$1,923,083,935. This means the state would have to raise taxes by \$197,589,685 or 15.52% in 1967 and \$274,260,784 or 14.26% in 1970 in order to finance the same expenditure level for the remainder of the state. A further thought occurs in relation to the state expenditure picture. If the state was experiencing economies of scale in providing some of its services before separation, the cost of providing these services afterwards might well necessitate a larger proportionate expenditure. This therefore might even necessitate greater tax increases in order to provide these same services.

TABLE 18

TOTAL STATE EXPENDITURES MADE TO APFA
AND TAXES COLLECTED FROM THE APFA

1967	N.Y.C.	4 COUNTIES	APFA
LOCAL ASSISTANCE FUND	928,050,727	473,171,450	1,401,222,177
STATE PURPOSES FUND	442,672,089	198,837,698	641,509,787
TOTAL	1,370,722,816	672,009,148	2,042,731,964
TAXES	1,685,557,410	903,069,974	2,589,027,384
1970	N.Y.C.	4 COUNTIES	APFA
LOCAL ASSISTANCE FUND	1,649,269,027	653,638,539	2,302,907,566
STATE PURPOSES FUND	685,201,501	330,027,426	1,015,228,927
TOTAL	2,334,470,528	983,665,965	3,318,136,493
TAXES	2,447,822,491	1,422,472,882	3,900,295,373

SOURCE: COMPILED FROM DATA IN TABLES 11, 13, AND 17

TABLE 19

PERCENT DISTRIBUTION OF TOTAL STATE EXPENDITURES MADE TO THE AREA AND TAXES COLLECTED FROM THE AREA

1967	N.Y.C.	FOUR COUNTIES	AREA
LOCAL ASSISTANCE FUND	39.60	20.19	59.79
STATE PURPOSES FUND	37.84	17.00	54.88
TOTAL	39.02	19.13	58.14
TAXES	43.66	23.38	66.54
1970	N.Y.C.	FOUR COUNTIES	AREA
LOCAL ASSISTANCE FUND	45.03	17.85	62.88
STATE PURPOSES FUND	36.97	17.81	54.78
TOTAL	42.33	17.83	60.16
TAXES	42.55	24.43	66.98

SOURCE: CONSTRUCTED FROM DATA IN TABLE 18

TABLE 20

CURRENT EXPENDITURES OF THE AREA
(FISCAL YEARS ENDING DURING)

	1967	1968*
NEW YORK CITY	3,916,076,689	4,634,055,840
FOUR COUNTIES	1,511,980,751	1,740,555,727
NEW YORK METROPOLITAN AREA	5,428,057,440	6,374,611,567

* LATEST AVAILABLE

SOURCE: NEW YORK STATE DEPARTMENT OF AUDIT AND CONTROL
DIVISION OF MUNICIPAL AFFAIRS
SPECIAL REPORT ON MUNICIPAL AFFAIRS BY THE STATE COMPTROLLER
FOR FISCAL YEARS ENDING DECEMBER 31, 1967 AND DECEMBER 31, 1968 TABLE 8

TABLE 21

STATE TAXES AND EXPENDITURES IN THE REMAINING PORTION OF THE STATE
(DOLLARS)

	1967	1970
STATE TAXES COLLECTED	1,272,943,415	1,923,083,935
STATE EXPENDITURES MADE	1,470,533,100	2,197,344,719
EXCESS OF EXPENDS. OVER TAXES	197,589,685	274,260,784

SOURCE: CONSTRUCTED FROM DATA IN TABLES 11, 13 AND 17

B. Effects of the Existing Tax and Expenditure Structure on the Results

At this point, those factors inherent in the tax and expenditure structures which effect the results stated in the previous section, will be investigated.

In the following paragraphs various substitutions of possible alternative taxes for existing taxes will be hypothesized. In each case the yield of the substitute tax will be equal to that of the tax for which it is substituted. In other words, the same revenue is raised through a different tax. In order to determine the distribution by county of these alternative revenue collections, use is made of the allocation schemes developed earlier in the dissertation. They will be assumed to be identical for the corresponding type tax, e.g., Sales, Personal Income, etc. The only exception is in the case of the Proportional Personal Income Tax, where it was necessary to develop an allocation scheme. This will be discussed at the appropriate time below.

The first set of hypothesized substitutions involve the Personal Income Tax, which is the largest source of tax revenue for New York State. What would be the impact on the collection of revenue from New York City and the four counties, if the structure of the Personal Income Tax was altered from a progressive one to a proportional one? A Proportional Income Tax by definition is a fixed percentage of personal income. In order to estimate the resulting tax collections due to this change, the proportionate share of total state income in each county had to be determined. The use of total income for all tax returns by county ^{1/} rather than the Commerce Department's figures was necessary in order to take into account tax collections from non-residents. As one can

see in Table 22 for the 1970 fiscal year New York City would have paid \$1,017,612,773 as opposed to what it did pay, \$1,022,876,288 under the existing system. While this difference is relatively small, the difference for the four counties is substantial. There would be a reduction in tax payments from the \$711,075,724 they did pay to \$603,299,001. It is evident from an examination of Table 23 that the net reduction in tax payments for the area would have been about \$113 million under a proportional personal income tax. If instead, the Sales Tax was substituted for the Progressive Personal Income Tax a net reduction in tax payments for the area of about \$129 million would have resulted. This would be composed of an additional \$17 million payment by New York City and a reduction of \$146 million in payment by the four counties. The substitution of the Business Taxes for the Progressive Income Tax would yield a net increase in payment for the area of \$71 million composed of a \$436 million increase for New York City and a \$389 million reduction for the four counties. It is apparent that New York City would not have experienced a substantial reduction in payments from any of the forementioned substitutions, while the four counties would have.

Next the substitution of various alternative taxes for the Business Taxes will be investigated. If a Sales Tax was substituted for them, New York City would have paid \$399,608,408 as opposed to the \$568,510,974 it did pay in 1970. On the other hand, the four counties would have paid \$217,136,617 instead of the \$123,830,461 they did pay. The results of substituting the Progressive and Proportional Personal Income Tax, as can be seen in Table 23, are quite similar for New York City. A net reduction for the area would have resulted with New York City experiencing the reduction and the four counties the increase

in payments. The substitution of all the taxes above yield similar overall results, in fact, with New York City experiencing the reduction and the four counties the increase.

The final set of substitutions relate to the Sales Tax. The greatest impact is noted when the Business Taxes are substituted for it. New York City would have had to pay about \$169 million in additional taxes, while the four counties would have had a reduction of \$98 million. Thus a net increase of \$71 million for the area would have resulted. The substitution of a Progressive and Proportional Personal Income Tax would have had only a minor impact on New York City's payments. A substantial increase in tax payments of about \$59 million would result for the four counties, if a Progressive Income Tax was substituted and thus a net increase in payments for the area of about \$52 million. In fact, all of the above substitutions would result in a net increase in payments for the area.

It is clear that substitutions for the Progressive Income Tax lead to a reduction in tax payments for the area, primarily, due to the reduction experienced by the four counties. The only case where this does not hold, is that of the Business Taxes. In that case, New York City's increased payment outweighs the reduction for the four counties. Since the Personal Income Tax accounts for over 43% of the total New York State Tax collections in 1970, the four counties' contribution would have been significantly altered to their advantage by the substitution of the alternative taxes mentioned. It is, also, obvious that the substitution for the Business Taxes would yield a significant benefit to New York City in terms of reduced tax payments due to

its high proportional payment of this tax. On the other hand, the rest of the area would have experienced an increased tax burden, due to the small proportion of the Business Taxes it pays. A heavy reliance on the Business Taxes by New York State (about 16 1/2% of 1970 collections) finds New York City contributing more to total collections than it would under the alternative taxes.

It is apparent that very little in the way of generalizations can be made about the benefits and losses due to substituting one tax for another. This is largely due to the opposing effects upon the components of the area. The only case where both New York City and the four counties benefited was that of the substitution of the Proportional Income Tax for the Progressive Income Tax. And in that case New York City's benefit was only minor. Substituting the Sales Tax for the Progressive Income Tax yields the largest net benefit to the area. Looking at the components of the area, one finds that any movement away from the Progressive Income Tax benefits the four counties and any movement away from the Business Taxes benefits New York City. The results do, however, show that a substantial impact upon tax payments can be made by substituting one type of tax for another. The most extreme impact occurs when the Business Taxes are substituted for the Progressive Income Tax. New York City would have increased its payment by about \$436 million, while the four counties would have reduced theirs by about \$389 million. The importance of these differentials becomes apparent when they are related to current total tax payments. New York City would have experienced an increase of over 17% and the four counties a decrease of over 27%.

TAX PAYMENTS UNDER ALTERNATIVE TAXES
FISCAL 1970
(DOLLARS)

TABLE 22

NEW YORK CITY		FOUR COUNTIES	
TAX	PROGRESSIVE INCOME	1,022,876,288	711,075,724
IF	SUBSTITUTED	1,017,612,773	603,299,001
	SALES	1,040,170,069	565,201,123
	BUSINESS	1,458,996,047	322,327,593
TAX	BUSINESS	560,510,974	123,830,461
IF	SUBSTITUTED	392,964,316	273,178,085
	PROGRESSIVE INCOME	390,942,201	231,772,877
	SALES	399,608,408	217,136,617
TAX	SALES	419,994,801	228,214,043
IF	SUBSTITUTED	413,011,755	287,114,518
	PROGRESSIVE INCOME	410,886,460	243,596,985
	BUSINESS	589,105,461	130,147,797

SOURCE: CONSTRUCTED FROM TAX ALLOCATIONS SEE TEXT FOR DISCUSSION

TABLE 23

TAX DIFFERENTIALS* UNDER ALTERNATIVE TAX S
 (FISCAL 1970)
 (MILLION DOLLARS)

	N.Y.C.	OTHER COUNTIES	AREA
PROGRESSIVE INCOME TAX VS.			
PROPORTIONAL INCOME TAX	-5	-108	-113
BUSINESS TAXES	436	-389	47
SALES TAX	17	-140	-129
BUSINESS TAX VS.			
PROGRESSIVE INCOME TAX	-168	149	-19
PROPORTIONAL INCOME TAX	-170	108	-62
SALES TAX	-161	93	-68
SALES TAX VS.			
PROGRESSIVE INCOME TAX	-7	59	52
PROPORTIONAL INCOME TAX	-9	16	7
BUSINESS TAXES	169	-98	71

* MINUS SIGN INDICATES TAX REDUCTION

SOURCE: COMPUTED FROM DATA IN TABLE 22

An analysis of the effect of particular State expenditure policies upon the area both directly by means of State Aid and indirectly through influences on local expenditure patterns will follow. Having found that redefining the fiscal boundaries of the area did not yield meaningful fiscal gains, an examination of the possible gains due to alternative expenditure policies may yield more meaningful results.

First, one might examine the State-Aid Policy as it applies to localities throughout the state. The largest category of State Aid is for Education and, therefore, it seems appropriate to deal with it. A clear pattern emerges throughout the state when cities are compared to non city areas. In school year 1965-66 State Aid accounted for 36.32% of the money in the General Funds for Education in cities throughout the state. ^{2/} (See Table 24). The figure for non-city areas was 52.73%. These figures, at first glance, may not seem unreasonable. However, with much literature, ^{3/} recently, emphasizing the higher cost of education in central cities, they become suspect. Looking further into the data, one finds the overall figure for the State to be 44.72% while for the New York Metropolitan area it is 36.41% and for New York City even lower, 31.72%. Excluding New York City, it is found that the remainder of the state receives 51.51% of its General Fund for Education from State sources. Excluding the New York Metropolitan Area, the figure is 58.05%. It is quite apparent that a greater portion of educational expenditures are being financed by the state elsewhere as opposed to the area. It therefore becomes questionable whether the higher cost of education in cities and in New York in particular is being taken into account in the State's distribution of its aid.

TABLE 24

GENERAL FUND REVENUES FOR EDUCATION
(1965-66)

REGION	TOTAL GENERAL FUND REVENUES	FROM STATE SOURCES	%
N.Y.C.	971,597,305	308,198,289	31
NASSAU-SUFFOLK	567,009,341	258,390,633	45
ROCKLAND-WESTCH. STES.	209,232,733	70,425,870	33
NY METRO	1,747,839,383	637,014,792	36
MID HUDSON	129,617,804	66,839,394	51
CAPITAL DISTRICT	130,838,207	75,282,926	57
NORTHERN	72,071,873	49,071,666	68
MOHAWK VALLEY	73,955,477	47,658,751	64
BINGHAMPTON	70,436,539	46,940,320	66
SYRACUSE	125,975,682	78,064,927	61
ROCHESTER	177,496,403	94,016,973	52
ELMIRA	72,603,354	49,369,098	68
BUFFALO	232,213,025	122,724,272	52
TOTAL CITIES	1,382,162,264	501,954,962	36
TOTAL STATE	2,833,087,747	1,266,983,119	44
STATE LESS CITIES	1,450,925,483	765,028,157	52
STATE LESS N.Y.C.	1,861,490,438	958,784,830	51
STATE LESS NY METRO	1,085,248,364	629,968,327	58

SOURCE: UNIVERSITY OF THE STATE OF NEW YORK STATE EDUCATION DEPARTMENT
BUREAU OF STATISTICAL SERVICES ANNUAL EDUCATION SUMMARY 1965-66
TABLE 48 PP. 94-7

Looking into the basis for State-Aid distribution to localities for public school education, one finds, at least theoretically, an adjustment to account for low income areas. The formula for the state payment portion of the local districts expenditures is as follows:

$$1 - \left[\frac{V}{S} \times .51 \right]^{4/}$$

where V = actual valuation per RWADA of the district

and S = State average valuation per State WADA.

In the formula RWADA stands for Resident Weighted Average Daily Attendance which includes an adjustment for residents of the district attending school in another district and for non-residents attending school in this district. WADA stands for Weighted Average Daily Attendance, which is constructed by weighting attendance figures for various grade levels in the following manner: half day kindergarten receives a weight of .5, full day kindergarten through sixth grades receives 1.00, and seventh grade through twelfth grade receives 1.25. The actual valuation in the formula is assessed property valuation of a district divided by an equalization ratio designed to convert it to full valuation. The formula is designed so that the average district in the state in terms of property value per resident pupil will receive 49% of its school expenditures from the state. The proportion that the state finances can vary two ways in the formula: due to property value and due to attendance. With property value per potential pupil constant and the attendance rate lower (higher) the state's share of the financing will be smaller (larger). With the attendance rate constant and the property value per potential pupil higher (lower) the state's share of the financing will be smaller (larger). One

of the problems the central cities face is poor attendance rates which tend to lower the state share of financing. Attendance rates are, particularly, low in disadvantaged areas which need the aid the most. Beyond this one finds in central cities, New York in particular, a high property valuation and a high proportion of low income families. This situation exists largely due to the phenomenon of absentee ownership in the cities. That is to say, the owners of the property often reside elsewhere and usually do not use the service, education. Few people own their own home in New York City as opposed to the more rural areas. The situation exists that a great proportion of the student population in the city comes from low income families. Due to the higher property valuation, adequate reflection of the low income population may not be taken into account in the State Aid formula. The necessity of higher costs to educate the low income population may show up through higher budgets in the low income districts. However, the state placed a limit upon the amount of expenditure per WADA that it will share in financing. As of 1967-8 this limit was \$760 per WADA.^{5/} Other adjustments allow for the sharing in an additional 10% of this limit or \$76 per WADA. But it is quite probable that the expenditures per WADA in low income areas far exceed these limits and therefore the excess must be financed by the district without state assistance.

Another problem of financing education which is of particular importance to the area relates to the City University of New York (CUNY). In fiscal 1970 state expenditures for current operations at CUNY were far outstripped by those for the State University of New York (SUNY).^{6/} On a full time

equivalent (FTE) student basis, ^{7/} \$3,107 per FTE SUNY student was being spent as opposed to \$1,126 per FTE CUNY student. Even though New York City residents are eligible to attend SUNY, they make up less than 9% of its enrollment. The lack of a SUNY campus near enough to the heavy concentration of population in the metropolitan area may account for this.

At its inception the City University provided a service beyond that which was then provided by the state for its residents. The additional expenditure necessary for the financing of CUNY therefore had to be taken on by New York City. The advent of the State University altered the situation. Now, a similar service to that being provided by CUNY was being provided to state residents through SUNY. This service was being financed through tax revenues raised throughout the state, New York City included. New York City residents were therefore, subject to an additional financial outlay which was not being made by state residents outside the City. In order to attempt the measurement of the impact upon financial flows of a varied financial arrangement for this 'gray area', the form of the question may be altered from the general assumption of unchanged levels of financing. Let us hypothesize that the expenditure per FTE student at CUNY was raised to the level at SUNY. With the desired level equal to the SUNY FTE outlays, the total dollar amount of this additional financial burden can be computed by multiplying the number of students at CUNY by the differential in expenditure per FTE, i. e. , \$1,981. (This assumes that the equivalent FTE expenditure level at each yields the equivalent educational level.) In other words, New York City residents would be called upon to raise an additional \$148.2 million in taxes to provide the equivalent educational level at CUNY to that provided at SUNY.

Since an imputation scheme now has been determined for tax collections in the state, it is possible to hypothetically increase the state expenditure on CUNY to an equivalent FTE level as at SUNY. This can be financed by increased tax collections and the relevant amounts from each area determined through this imputation scheme. The number of FTE students at CUNY times the per FTE expenditure at SUNY yields the expenditure necessary at CUNY to put it on an equivalent level with SUNY. This figure less the existing state expenditures for CUNY in 1970 yields the necessary additional expenditure. New York City's share of this additional tax collection will be assumed to be the same proportionate share as its tax payments determined earlier in the paper. Subtracting this amount from the approximately \$148.2 million additional financial outlay would yield the potential financial gain from this alternate financing arrangement. As can be seen in Table 25, this yields a \$85.1 million potential financial gain for New York City. This figure was not reflected in the gain or loss figures earlier in the paper because it involved an internal financing procedure by New York City and therefore, was beyond the scope of the analysis. It's possible that this figure coupled with those yielded from other services requiring similar additional financial outlays may change the picture. Further analysis along these lines for those services falling in the "gray" areas, as discussed previously in the paper is necessary before a final accounting with reference to gains or losses in financial terms is possible.

TABLE 25

HYPOTHETICAL C.U.N.Y. EXPENDITURES IF FINANCED
ON EQUIVALENT BASIS AS S.U.N.Y.

1970

CUNY FTE STUDENTS	74,821
SUNY EXPENDITURE PER FTE	\$3,107
NECESSARY CUNY EXPENDITURE TO PROVIDE EQUIVALENT SERVICE AS SUNY	\$232.5 MILLION
PRESENT STATE EXPENDITURE AT CUNY	\$84.3 MILLION
ADDITIONAL NECESSARY EXPENDITURE AT CUNY	\$148.2 MILLION
N.Y.C. SHARE OF THIS EXPENDITURE	\$63.1 MILLION
POTENTIAL FINANCIAL GAIN TO N.Y.C.	\$85.1 MILLION

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES

C. Concluding Remarks

The issue raised in this dissertation was: would the redrawing of political boundaries modify the financial flows of public funds. The primary conclusion is: the effect would not be very great or of a systematic form. One must, however, bear in mind that the analysis considered only current expenditures and their financing. An analysis of capital expenditures and their financing is required in order to complete the picture. Beyond this further analysis of those areas explored in the dissertation but not in the depth necessary to come to a definite conclusion would be necessary. From the analysis of State Aid for Education the question arises as to whether the cities are getting their fair share. A complete analysis of state aid to localities would be necessary to determine this. The question is raised as to the possible provision of a service by New York City for its residents (CUNY) which is provided elsewhere by the state (SUNY). The financing of the latter is accomplished through tax revenues which are collected from New York City residents, as well. This analysis may be extended to other services e. g. , parklands, highways, etc. The effect of state administration of a service upon the local government's expenditure when the state does not assume the complete financial obligation is questioned. In the case of Social Services, New York State sets the eligibility criteria and the minimum payment, thus, to a large extent, defining the local government's necessary outlay. In addition, it has been shown here that the type of tax levied to raise revenue has in many cases a substantial impact upon the fiscal flows from one area as opposed to another. Thus the state tax policy has great implications with

regard to the issue raised in the dissertation. All of the above considerations, therefore, are necessary before a total accounting of fiscal flows resulting from redrawing political boundaries is possible.

The investigation seems to lend support to much of the recent literature ^{8/} with regard to the performance of certain major services on an area-wide basis. An interesting article presenting a model for the arrangement of governments on an economic efficiency basis was written by Tiebout. ^{9/} Another article by Hirsch ^{10/} deals with the division of the provision of major services on the basis of economies of scale and the necessity of political proximity. According to the author such services as, air pollution control, sewerage disposal, transportation, power, water, public health, hospitals and planning can best be performed on an area-wide basis due to the expectation of economies of scale and the non-essentiality of political proximity. Other services such as; education, public housing, welfare and police and fire protection do not fall into this group because they require people-proximity. Granting this, however, one still wonders whether the latter could be structured, at least, partially on an area-wide basis leaving enough room for individual community control. It has become quite evident that localities, especially central cities, no longer have adequate resources to finance welfare and education without a substantial increase in aid from higher levels of government. The structuring of the provision of this service on an area-wide basis coupled with varying community options could provide the solution to the equalization of the quality of education throughout. The situation as it stands, finds the city with limited resources impinging upon the quality of education provided as compared to the more affluent suburbs.

A rational, efficient and economical transportation system throughout the area certainly would be of great benefit to all concerned. It has become a critical necessity for the city, if it is to remain the employment center of the area. The provision and financing of this service on an area-wide basis, certainly, seems desirable.

The fact is that the provision of most of the above mentioned services on an area-wide basis would lead to substantial benefit for the area, as a whole. The flight of the middle class to the suburbs has left the city in dire straits with respect to its tax base. Yet, the suburbanite still depends to a great extent upon the city for his income and calls upon the city to provide him with many services. Bringing him once again into the tax base of the city will help alleviate the financial crisis. This will, also, provide an opportunity for a possible restructuring of the varied local tax systems which exist throughout the area. This would, also, allow for equity considerations both horizontal and vertical, which can not now be taken into consideration.

The investigation has brought to light many questions which have yet gone unanswered, in any systematic form. As is the case with many of the State and Local fiscal problems much more detailed and systematic research is needed. One very important question which needs answering is: Who pays for and who benefits from capital expenditures? Another question related to the above argument is: What is the effect of state aid in the varying categories upon local expenditures in the same categories? Related to this: Is state aid distributed in an equitable fashion, and if not, what are the appropriate criteria to be applied to insure this end? Other questions arise

with regard to the local taxation and expenditure patterns and the possibility of altering them. These are just some of the many questions which remain to be answered.

One finds a severe data problem which will militate against much of this research. Adequate data on tax collections and expenditures is not available. This has necessitated the use of gross estimating techniques in this paper and will necessitate the same in answering many of the above questions. Beyond this, there exists no adequate method for estimating benefits received from public expenditures which is necessary in order to answer some of the questions. Fortunately, as mentioned previously, this was not necessary for the question at hand.

Again, there has been found no strong or systematic effect upon the fiscal flows from current expenditures and their financing due to the redrawing of fiscal boundaries.

FOOTNOTES

CHAPTER III

1/ New York State Department of Taxation and Finance, New York Personal Income and Tax Liability by County of Residence, Income years 1967 and 1969.

2/ University of the State of New York, State Education Department Bureau of Statistical Services Annual Education Summary 1965-6, Table 48, pp. 94-7.

3/ See: Bahl, Roy, Metropolitan City Expenditures (University of Kentucky, Lexington, Ky., 1967) and "Public Policy and the Urban Fiscal Problem: Piecemeal vs. Aggregate Solutions" Land Economics, vol. XLVI, No. 1, February 1970 pp. 41-50; Graduate School of Public Administration, New York University Financing Government in New York City, June 1966; Netzer, Dick, "Federal, State and Local Finance in a Metropolitan Context", Issues in Urban Economics Perloff, Harvey and Wingo, London, eds. (Johns Hopkins Press, Baltimore, Md., 1968) (Henceforth: P & W) pp. 435-476.

4/ University of the State of New York, State Education Department, Division of Educational Finance A Guide to Programs of State Aid for Education in New York State 1966-7.

5/ Ibid. 1969-70.

6/ Ann. Rep. Compt. 1970.

7/ New York City Mayor, Executive Budget 1971-2 and New York State Governor Executive Budget, 1971-2.

8/ Hirsch, Werner, "Local Versus Areawide Urban Government Services" National Tax Journal, vol. XVII, No. 4, December 1964, pp. 331-9 and "The Supply of Urban Public Services" in P & W, pp. 477-525; Tiebout, Charles Loc. Cit.

9/ Ibid.

10/ Ibid.

APPENDIX A

Technical Details of the New York State Taxes
Fiscal Years 1967 and 1970

Personal Income Tax: The base of the tax is the taxable income of individuals, estates and trusts. Non residents are taxed upon their taxable income from New York State sources. The rate structure is as follows:

<u>Over</u>	<u>Not over</u>	<u>Pay +</u>	<u>Tax Rate</u>	<u>On Excess</u>
\$ 0	\$ 1,000	-	2%	\$ 0
\$ 1,000	\$ 3,000	\$ 20	3%	\$ 1,000
\$ 3,000	\$ 5,000	\$ 80	4%	\$ 3,000
\$ 5,000	\$ 7,000	\$ 160	5%	\$ 5,000
\$ 7,000	\$ 9,000	\$ 260	6%	\$ 7,000
\$ 9,000	\$11,000	\$ 380	7%	\$ 9,000
\$11,000	\$13,000	\$ 520	8%	\$11,000
\$13,000	\$15,000	\$ 680	9%	\$13,000
\$15,000	\$17,000	\$ 860	10%	\$15,000
\$17,000	\$19,000	\$ 1,060	11%	\$17,000
\$19,000	\$21,000	\$ 1,280	12%	\$19,000
\$21,000	\$23,000	\$ 1,520	13%	\$21,000
\$23,000	-	\$ 1,780	14%	\$23,000

The exemptions are the same as the Federal ones and there were statutory credits for the years involved.

Corporate Franchise Tax: The primary base of this tax is entire net income or the portion allocated to New York State plus a tax on the value of subsidiary capital allocated to the state. However, if a greater tax is yielded, alternative bases such as, allocated capital, income plus salaries or a \$100 flat fee must be used. The tax is imposed upon a domestic corporation for the privilege of exercising a corporate franchise and on a foreign corporation for doing business, employing capital, owning or leasing property or maintaining an office in New York. There are credits for eligible businesses in depressed urban areas and for investment in production facilities. The rate structure is as follows:

The largest of A

- 1) 7% of all or allocated entire net income
- 2) \$100
- 3) 1 1/4 mills on each dollar of business and investment capital allocated to New York (1/3 mill on that for cooperative housing).
- 4) 7% on allocated income and salaries base as follows:
30% of total of a) entire net income plus b) salaries or compensation to officers and shareholders of more than 5% of the issued stock minus
c) \$15,000 (or a proportionate share for less than a year) minus d) any net loss for the year.

Plus B

5/8 mill on each dollar of allocated subsidiary capital.

Franchise Taxes on Banks and Other Financial Institutions: The primary base is net income. There are alternative bases, i. e., on interest and dividends credited to depositors or shareholders (in the case of Savings Banks and Savings and Loan Associations), or on issued capital stock (in the case of other financial institutions). The rates are as follows: National Banks and Production Credit Associations - 6% of net income allocated to New York with no minimum.

Savings Banks and Savings and Loan Associations - 6% of net income allocated to New York; the alternative is 2% of interest and dividends credited to depositors or shareholders. This is used if it yields a higher tax payment. The minimum tax is \$50.

Other Banks and Financial Institutions - 6% of net income allocated to New York. The alternative is 1 1/4 mills on each dollar of apportioned capital stock. This is used if the tax payment would be greater. The minimum tax is \$50.

There are credits for businesses in depressed urban areas or low income rural counties and for servicing mortgages acquired by the New York Mortgage Agency.

Unincorporated Business: The base is unincorporated business taxable income of every business wholly or partly carried on in New York State. The rate is 5 1/2% of such income. There are depressed area and statutory credits.

Insurance Taxes: They are, primarily, based upon the excess of gross amount of premiums on property or risks located in New York over the deductions allowed.

The rates vary from 1% to 6 1/2% and are specified in detail according to the class of the company.

Public Utilities Tax: There are four separate franchise taxes: two on transportation and transmission corporations; one on water, gas, electric and steam heating, light and power corporations and one on gross income of utilities. Transportation and transmission corporations - 1-3/10 mill per dollar of net value of the capital stock allocated to New York, or, if a dividend of 6% or more is paid, an alternative computation is used or \$50, whichever is greater. A second tax of 65/100% on intra-state gross earnings is imposed.

Water, Gas, Electric and Steam Heating, Lighting and Power Companies - 65/100% of gross earnings from New York plus 3-9/10% on the amount of dividends paid in excess of 4% of the paid in capital employed in New York. There is a minimum tax of \$100.

Additional Tax on furnishing of utility services at the rate of 2-6/10% of gross income of every utility in the state under the Department of Public Service with gross income in excess of \$500. For all others, the rate is 2-6/10% of gross operating income, if it is over \$500.

Tax on Cooperative Agricultural Corporations: The base is the amount of capital stock in New York. The rate structure is the largest of:

- 1) 1 mill per dollar of net value of the issued stock allocated to New York.
- 2) If a dividend of 6% or more is paid, 1/4 of a mill for each point of dividend paid applies or
- 3) \$10

Sales and Use Tax: The tax is imposed on the sales price or charge for any service whether received in money form or other consideration. It is imposed on tangible property of a general nature. The tax on services is selective and enumerated, all others being exempt. The rate was 2% in 1967, 3% in 1970 and was raised to 4% in 1971. It applies to:

- 1) sale of tangible personal property
- 2) enumerated services
- 3) sales of public utilities
- 4) hotel occupancies
- 5) restaurant meals
- 6) admission charges
- 7) club dues and cabaret charges

Alcoholic Beverage Taxes: This is an excise tax imposed upon the sale or use within the state of beer, wine and liquor by distributors. The rates vary from 1-1/2¢ per gallon for cider with more than 3% alcohol content to \$2.25 for liquors with more than 24% alcohol content. A license fee is collected from all connected with the sale. It varies from \$5 to \$9,375, according to classification of the business and population.

Cigarette Tax: It is a stamp tax levied upon the sale of each pack. The rate was 12¢ per pack of 20 cigarettes as of June 1968.

Gasoline Tax: This is based upon the motor fuel sold within the state by the distributor. There is a separate tax on the retail sale of diesel fuel within the

state for use in a motor vehicle. The rates are 7¢ a gallon for motor fuel and 9¢ a gallon for diesel fuel.

Highway Use Taxes: Fuel Use Tax: It is designed to capture the amount of tax that would accrue to the state, if the carrier purchased all his fuel used in the state from New York State sources. The base is the amount of fuel consumed in New York. This is multiplied by 7¢ a gallon for motor fuel and 9¢ a gallon for diesel fuel in order to determine the tax.

Truck Mileage Tax: This is based upon the gross weight of the vehicle or, alternatively, the unloaded weight of the truck or trailer; and the number of miles operated in New York. The rates vary according to weight group and are multiplied times the number of miles operated in New York. For the gross weight method, the rates vary for 6.0 mills to 35 mills with an additional 2 mills per ton for weights beyond the chart. For the unloaded weight method, the rates vary from 4 mills to 27 mills for trucks and 6 mills to 27 mills for tractors.

Motor Vehicle Fees: They are imposed upon the operation and ownership of commercial and non-commercial motor vehicles. The base is the weight of the vehicle; with the exception of passenger omnibuses, where it is based upon seating capacity. There is a wide range of rates specified according to the classification of the vehicle.

Estate Tax: This is imposed upon the transfer of a New York taxable estate of every deceased individual, who at death was a resident. It is, also, imposed upon non-residents on transfer of real and tangible property having actual situs

in New York, which is includable in the Federal gross estate or would have been in the New York gross estate if he was a resident. The rates vary from 2% to 21%. There is a tax credit allowable for aggregate personal exemptions up to 2% of the first \$50,000 and 3% of the next \$100,000. There is no tax collected where it would amount to \$40 or less. The minimum tax on the estate of a resident is equal to the Federal credit for the state death tax.

Real Estate Transfer Tax: It is imposed on deeds conveying interest in realty whose consideration is in excess of \$100. The grantor is primarily liable; however, the grantee is liable if the grantor fails to pay. The rate is 55¢ for each \$500 or fraction paid in consideration for the transfer.

Unrelated Business Income of Exempt Organizations: Any corporation subject to taxation under Article 9A is exempt. The base is unrelated business income. The rate is 7% of that income, with a minimum tax of \$100.

Pari-Mutuel Taxes: Running races - the rates are: 1st zone, 80% of the breaks plus 11% of the pool from 1970-5 and 11-1/2% of pool, thereafter. 2nd zone, 75% of the breaks and for 1970-5, 5% of the pool exceeding \$175,000 to 11% of pool exceeding \$600,000; for 1976 rates increase 1/2% in each bracket and after 1976 75% of the breaks and 10-1/2% of the pool. Harness racing - 5% up to \$250,000 in daily pool to 12-1/2% for \$900,000 - \$1,000,000 in daily pool and 12-1/2% plus 1/2 of the breaks for over \$1,000,000. Quarter Horse Races - 5-1/2% up to \$175,000 in daily pool to 10-1/2% for \$500,000-\$600,000 and 11-1/2% plus 75% of the breaks for pool over \$600,000.

Racing Admissions Tax: The base is the admission price. The rate is 15%.

APPENDIX B
TABLE A

ALLOCATION OF STATE TAXES
FISCAL 1967

TAXES	N.Y.C.	NASSAU	ROCKLAND	SUFFOLK	WESTCHESTER	COUNTIES	AREA	STATE
PERSONAL INCOME	639,696,567	192,260,200	15,110,157	64,137,636	149,501,776	421,017,769	1,060,714,336	1,527,086,577
TAXES ON BUSINESSES								
TOTAL BUSINESS	365,478,260					81,950,641	447,428,901	631,875,140
BUSINESS CORPS 9A	179,458,517					54,141,117		
REAL ESTATE	50,436	2,731	255	734	2,233			
TURF AND RACE	56,945,777	4,002,180	208,014	1,414,492	2,454,556			
PARKS	29,263,451	1,536,401	171,598	754,233	853,906			
TRAINS & UTILITIES	71,566,000	4,287,794	590,384	1,994,801	3,167,004			
TREES	78,194,013					6,322,205		
TAXES ON CONSUMPTION & USE								
SALES & USE	250,795,718	61,943,521	5,982,838	31,968,900	36,380,467	136,275,746	387,071,464	604,327,031
WATER & SEWER FEES	46,922,218	20,075,442	2,770,925	14,184,933	11,487,410	48,518,740	95,440,928	183,504,958
WATER FUEL	70,524,190	30,173,431	4,164,706	21,319,484	17,265,602	72,923,723	143,447,893	275,808,331
ELECTRICITY	37,043,719	2,583,913	422,633	1,976,831	2,481,263	7,464,240	44,505,959	68,166,579
ALCOHOLIC BEV LISC	35,354,370	2,465,827	405,381	1,486,781	2,368,235	7,174,274	42,478,594	65,061,410
CIGARETTES	97,445,506	17,323,291	2,468,514	12,189,455	10,529,415	42,510,875	140,006,271	218,452,601
HIGHWAY USE	1,220,551	866,155	186,625	1,259,506	625,206	2,937,332	4,167,283	22,734,770
TAXES ON TRAFFIC								
ESTATE	65,686,704	8,314,940	631,518	3,406,598	11,414,612	23,824,768	93,513,672	116,029,108
PERSONAL VEHICLE	70,036,140	27,761,806			29,617,687	57,174,493	127,215,613	145,287,528
OTHER TAXES								
RECIPIENT COMMISSIONS	1,659,143	618,470	938	4,630	705,835	1,324,305	2,983,448	3,553,777
ROLLING	37,034	6,580			4,000	16,148	53,182	82,981
TOTAL	1,605,957,410	43,666				903,069,974	2,589,027,384	3,861,970,799
						23,338	61,664	109,000

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES PP. 22 - 31

TABLE A
 ALLOCATED TO STATE TREASURY
 FISCAL 1970

ITEMS	STATE	FEDERAL	STATE	FEDERAL	STATE	FEDERAL	STATE	
PERSONAL INCOME TAXES TO MISCELLANEOUS	1,022,876,248	322,377,593	27,570,789	116,082,811	287,136,531	711,075,724	1,733,952,012	2,506,635,472
TOTAL	550,510,574			152	401	123,830,401	684,341,415	902,811,820
ADJUSTMENTS	285,982,636					10,245,011		
ADJUSTMENTS	10,422	53				1,230		
ADJUSTMENTS	75,427,321	5,300,742	275,509	1,873,461	3,251,005	10,700,267		
ADJUSTMENTS	63,246,101	3,220,571	370,869	1,630,094	1,931,960	7,253,508		
ADJUSTMENTS	198,850,653	6,524,054	907,422	3,035,172	4,618,720	15,285,374		
ADJUSTMENTS	46,946,401					0,344,566		
STATE TAXES	419,454,401	103,743,650	10,019,453	53,536,687	60,927,547	224,814,043	548,208,444	1,012,035,005
ADJUSTMENTS	53,689,103	22,409,504	3,170,242	16,229,119	13,421,157	58,510,726	109,194,439	209,560,737
ADJUSTMENTS	53,627	279,543	31,690	102,226	131,376	154,845	1,251,112	2,034,000
ADJUSTMENTS	95,841,617	41,000,164	5,659,740	28,773,620	23,463,767	94,107,515	154,944,172	374,927,660
ADJUSTMENTS	61,185,067	4,266,194	698,260	3,266,054	4,094,400	14,332,168	73,531,255	112,422,137
ADJUSTMENTS	18,031,485	1,757,025	205,733	862,299	1,207,851	3,633,502	21,664,593	31,157,710
ADJUSTMENTS	113,936,466	20,319,832	3,130,075	14,840,025	12,366,362	50,696,934	164,909,820	250,541,536
ADJUSTMENTS	1,585,147	1,110,162	240,263	1,623,236	405,144	3,785,102	5,370,364	20,303,111
STATE TAXES	64,478,456	15,576,463	570,075	4,271,845	15,381,876	30,400,262	100,872,916	127,934,750
ADJUSTMENTS	2,637,032	630,648	76,160	371,279	405,744	1,423,426	4,420,558	5,945,921
ADJUSTMENTS	49,836,594	54,333,622			34,554,650	88,503,481	138,740,075	190,432,658
ADJUSTMENTS	1,054,530	1,128,226			652,049	1,780,275	2,874,805	3,945,475
ADJUSTMENTS	75,672	13,386	2,062	9,405	6,148	33,403	107,475	109,044
ADJUSTMENTS	11,540,552	2,056,121	317,034	1,507,210	1,252,544	5,134,504	16,675,446	25,540,342
TOTAL	2,477,822,461					1,422,472,882	3,900,295,373	5,821,374,308
	42,55					24,43	66,98	100,00

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES PP. 23 - 31

TABLE C

PERCENTAGE DISTRIBUTIONS USED FOR ALLOCATING THE STATE TAXES

		N.Y.C.	NASSAU	ROCK- LAND	SUFFOLK	WEST- CHESTER	FOUR COUNTIES
POPULATION (EST.)	1967	44.63	7.93	1.13	5.58	4.82	
	1969	44.41	7.92	1.22	5.80	4.82	
MOTOR VEHICLE REGISTR.	1968	25.57	10.94	1.51	7.73	6.26	
MILES OF HIGHWAY	1969	5.41	3.81	0.82	5.54	2.75	
RETAIL SALES	1967	41.50	10.25	0.99	5.29	6.02	
PERSONAL INCOME TAX	1967	41.89	12.59	0.99	4.20	9.79	
(INCOME YEAR)	1969	40.81	12.86	1.10	4.55	9.86	
VALUE OF ALCOH. BEV. LIC. 1968		54.34	3.79	0.62	2.90	3.64	
FULL PROPERTY VALUE	1968	44.32	10.60	1.28	6.24	6.82	
BUSINESS TAXES							
9A	1967	50.25	7.13	0.91	2.87	4.20	15.16
	1970	50.25	7.13	0.91	2.87	4.20	15.16
R.E., INSUR., BANKS,	1967	69.83	4.35	0.43	1.84	2.88	9.50
UT. & TR.	1970	70.15	4.29	0.44	1.85	2.83	9.42
OVERALL	1967	57.84					12.97
	1970	58.21					12.86

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES PP. 23 - 31

TABLE E

ALLOCATION OF THE STATE PURPOSES FUND

FISCAL 1970

	PAYEE	MISSOURI	KY. LAND	CORP. IN	WEST. CH. ST. TP	EDUC. PURPOSES	AREA	STATE
EXECUTIVE	42,454,607	13,206,400	2,032,774	4,671,337	8,034,172	32,947,689	75,402,240	135,162,754
AUDIT AND CONTROL	6,135,811	1,094,250	168,559	801,344	655,945	2,730,098	8,465,609	13,816,282
LAW	5,705,419	1,017,494	156,735	765,135	214,233	2,534,597	8,244,016	12,947,150
LEGISLATIVE	5,246,117	1,671,672	146,602	785,450	934,530	3,534,813	12,744,630	20,361,411
JUDICIAL	11,248,405	2,006,020	309,608	1,469,055	1,270,530	5,004,519	16,253,329	25,321,540
AGRICULTURE & MARKETS	15,295	26,838	14,378	163,905	33,548	238,609	254,444	4,504,071
RAILROAD	230,347	14,624	1,417	6,441	7,698	20,210	261,557	372,673
CIVIL SERVICE	2,025,331	166,241	324,660	713,257	214,175	1,362,653	3,718,054	1,002,645
GENERAL	3,304,386	609,712	92,534	449,515	302,505	1,489,746	4,467,137	7,004,745
CONSTRUCTION	8,413,374	1,615,180	644,351	1,373,057	469,734	4,624,576	13,447,470	49,041,826
DEPARTMENT	43,454,250	3,604,634	590,246	2,120,451	1,264,342	7,174,546	51,273,770	74,911,678
DEPARTMENT - 10%	53,024,404	17,225,404	2,215,710	11,811,427	8,401,941	38,654,571	53,647,375	162,173,638
SUBTOTAL	314,705,471	61,705,507	3,450,207	26,460,064	9,400,312	41,816,000	113,400,171	383,773,930
WESTERN	23,343,401	4,163,035	641,276	3,942,687	2,133,564	10,186,542	33,730,644	52,353,169
INDUSTRIAL	416,366	26,252	1,421	11,342	14,147	50,472	75,434	101,266
LAND	9,627,133	1,121,041	113,743	483,367	724,065	2,452,018	12,134,164	17,007,348
WESTERN INVESTMENT	158,446,797	10,723,117	1,942,446	8,485,866	12,317,141	31,447,110	21,443,567	346,061,714
RECEIPTS	33,627,180					9,504,228	34,374,426	3,476,408
PUBLIC SCHOOL	6,072,410	2,558,051	358,507	1,835,734	1,489,655	6,274,618	12,311,420	23,670,161
UNIVERSITY	24,411,144	433,566	66,787	317,511	263,802	1,081,726	3,512,472	5,474,322
FRAGILE	34,754,250	5,006,569	1,460,459	4,085,563	5,009,707	25,637,914	62,441,714	156,253,499
GENERAL	26,511,043	1,403,745	202,054	1,162,760	1,206,400	4,030,545	33,443,628	40,794,044
STATE	3,025,822	617,016	95,046	451,857	375,507	1,530,440	4,089,342	7,704,637
TOTAL	214,273,402	17,016,178	2,754,408	13,120,356	10,413,502	44,045,456	146,161,352	222,213,732
MISC. TRANS. & OTHER	100,461,618					44,045,456		146,161,352
TOTAL	685,201,501					336,067,426	1,016,225,627	1,453,226,537
	36,47					17,81	54,78	103,00

SOURCE: SEE TEXT FOR DISCUSSION AND REFERENCES PP. 42 - 45

TABLE F
 PERCENTAGE DISTRIBUTIONS USED FOR ALLOCATING STATE PURPOSES FUND

		N.Y.C.	NASSAU	HOCK- LAND	SUFFOLK	WEST- CHESTER	FOUR COUNTIES
POPULATION (EST.)	1967	44.63	7.93	1.13	5.58	4.82	
	1969	44.41	7.92	1.22	5.80	4.82	
POPULATION USED FOR	1967	---	14.32	2.05	10.07	8.71	
STATE POLICE	1970	---	14.25	2.19	10.43	8.66	
MOTOR VEHICLE REGIS.	1968	25.57	10.94	1.51	7.73	6.26	
FARMS	1964	0.17	0.28	0.15	1.71	0.35	
S.U.N.Y. ENROLLMENT	1968	8.74	11.48	0.99	7.33	2.64	
ACRES OF STATE PARKLANDS	1968	0.00	0.22	1.35	0.76	0.04	
RESIDENT PATIENTS-MENTAL	1968	57.21	3.09	0.56	2.44	3.55	
HOSPITALS AND SCHOOLS							
NEW COMMITMENTS TO	1967	61.90	5.08	0.55	2.99	1.78	
CORRECTIONAL INSTITUTIONS							
FULLTIME STATE EMPLOY.	1967	19.10	1.56	3.65	8.57	2.01	
EMPLOY. INSURANCE INDUST.	1968	69.60	4.54	0.22	1.64	2.67	
	1969	68.44	4.81	0.25	1.70	2.95	
EMPLOY. BANKING & OTHER	1968	71.11	4.55	0.44	1.94	2.51	
CREDIT INSTS.	1969	71.52	4.55	0.44	2.00	2.39	
EXPENDITURE IN STATE	1967	69.57	3.12	0.59	2.87	2.88	
AIDED SOC. SERV. PRGMS	1969	72.59	3.49	0.51	2.80	3.08	
EMPLOYMENT	1968	54.27	6.61	0.70	2.87	4.21	
	1969	55.32	6.41	0.65	2.79	4.16	
STATE SENATORS & ASSEM.	1967	45.41	8.21	0.72	3.86	4.59	
	1969	45.41	8.21	0.72	3.86	4.59	
MILES OF HIGHWAY	1969	5.41	3.81	0.82	5.54	2.75	
PUBLIC SCHOOL ENROLL.	1967	33.18	10.21	1.42	7.78	4.93	
	1969	32.87	9.74	1.55	8.38	4.94	
RECIPIENTS RECEIPTS	1967	34.86	11.90	1.00	5.26	5.64	
SCHOLARSHIPS	1970	33.55	12.31	1.18	5.94	5.66	
HIGH SCHOOL GRADUATES	1966	33.91	11.11	1.01	5.73	5.68	
	1968	35.02	11.55	1.12	6.00	5.48	
TAX PAYMENTS	1967	43.66					23.38
	1970	42.55					24.43

TABLE G

LOCAL CURRENT EXPENDITURE BY CATEGORY 1967

(THOUSAND DOLLARS)

CATEGORY	N.Y.C.	NASSAU	ROCKLAND	SUFFOLK	WESTCHESTER
EDUCATION(OTHER THAN CAPITAL)	1,031,936	348,881	45,187	230,446	171,085
PUBLIC WELFARE	716,125	30,954	6,057	29,877	28,989
POLICE PROTECTION	309,888	37,250	2,281	17,524	20,638
FIRE PROTECTION	141,802	6,184	754	5,176	12,167
HIGHWAYS	106,870	20,419	3,227	19,500	11,610
HOSPITALS	399,864	15,964	591	4	8,530
HOUSING & URBAN RENEWAL	208,710	716	192	106	24,839
PARKS & RECREATION	76,711	32,215	245	10,418	11,421
CORRECTION	53,014	5,045	255	3,768	2,846
NATURAL RESOURCES	2,742	901	126	2,895	83

SOURCE: U.S. BUREAU OF THE CENSUS, CENSUS OF GOVERNMENTS, 1967
 VOL. 7 STATE REPORTS NO. 32 NEW YORK, U.S. GOVERNMENT PRINTING OFFICE,
 WASHINGTON, D.C. 1970 TABLE 32 PP. 48-53

TABLE H

PERCENTAGE DISTRIBUTION OF TAX PAYMENTS

TAXES	N.Y.C.		FOUR COUNTIES		AREA	
	1967	1970	1967	1970	1967	1970
PERSONAL INCOME	41.89	40.81	27.57	28.37	69.46	69.1
BUSINESS	57.84	59.21	12.97	12.86	70.81	71.0
SALES AND USE	41.50	41.50	22.55	22.55	64.05	64.0
MOT. VEH. FEES & INSP.	25.57	25.57	26.44	26.44	52.01	52.0
MOTOR FUEL	25.57	25.57	26.44	26.44	52.01	52.0
ALCOH. REV. & LIC.	54.34	54.34	10.95	10.95	65.29	65.2
CIGARETTE	44.63	44.41	19.46	19.76	64.09	64.2
HIGHWAY USE	5.41	5.41	12.92	12.92	18.33	18.3
ESTATE	60.06	50.40	20.54	28.45	80.59	78.8
R.E. TRANSFER	---	44.32	---	24.94	---	69.2
PARI-MUTUAL	48.21	31.16	39.36	55.59	87.56	86.7
RACING ADMISS.	46.69	30.25	37.27	51.08	83.97	81.5
BOXING	44.63	44.41	19.46	19.76	64.09	64.2
LOTTERY	---	44.41	---	19.76	---	64.2

SOURCE: COMPUTED FROM DATA IN TABLES A AND B

BIBLIOGRAPHY

- Andrews, Richard "Mechanics of the Urban Economic Base" in The Techniques of Urban Economic Analysis - Pfouts, Ralph, ed. (Chandler-Davis Publishing Co., 1960) pp. 6-17, and pp. 40-152.
- Bahl, Roy W., Metropolitan City Expenditures (University of Kentucky Press, Lexington, Ky., 1969).
- Bahl, Roy W., "Public Policy and the Urban Fiscal Problem: Piecemeal vs. Aggregate Solutions", Land Economics, vol. XLVI, No. 1 (February 1970) pp. 41-50.
- Blair, George American Local Government (Harper & Row, New York, 1964).
- Bogue, Donald J., State Economic Areas (U. S. Government Printing Office, Washington, D. C., 1951).
- Bogue, Donald J. and Beale, Calvin Economic Areas of the United States (Free Press of Glencoe, Inc., New York, 1961).
- Bollens, John and Schmandt, Henry The Metropolis (Harper & Row, New York, 1965).
- Campbell, Alan and Sacks, Seymour Metropolitan America (Free Press, New York, 1967).
- Citizens Budget Commission, Does New York State Shortchange New York City? (December 1969).
- Gillespie, W. Irwin, "Effect of Public Expenditures on the Distribution of Income" in Essays in Fiscal Federalism, Musgrave, Richard, ed. (Brookings Institute, Washington, D. C., 1965) pp. 122-186.
- Graduate School of Public Administration, New York University Financing Government in New York City (June 1966).
- Gras, N. S. B., An Introduction to Economic History (Harper Brothers, Publishers, New York, 1922).
- Griffin, John, ed. Fact Book: New York Metropolitan Region (N. Y. C. Council on Economic Education, 1965).
- Hawley, Amos, The Changing Shape of Metropolitan America (Free Press, Glencoe, Ill., 1956).

- Hirsch, Werner, "Local vs. Areawide Urban Government Services"
National Tax Journal, vol. XVIII, No. 4 (December 1964) pp. 331-339.
- Hirsch, Werner, "The Supply of Urban Public Services" in Issues in Urban Economics, Perloff, Harvey and Wingo, Lowdon, eds. (Johns Hopkins Press, Baltimore, Md., 1968) pp. 477-525.
- Hoover, Edgar and Vernon, Raymond, Anatomy of a Metropolis (Doubleday & Co., Garden City, N. Y., 1962).
- McKenzie, Roderick, Metropolitan Community (McGraw-Hill, New York, 1933).
- Margolis, Julius "Metropolitan Finance Problems: Territories, Functions and Growth" in Public Finances: Needs, Sources and Utilization, Universities - National Bureau Committee for Economic Research (Princeton University Press, Princeton, N. J., 1961) pp. 229-270.
- Margolis, Julius "The Demand for Urban Public Services" in Issues in Urban Economics, Perloff, Harvey and Wingo, Lowdon, eds. (Johns Hopkins Press, Baltimore, Md., 1968) pp. 527-565.
- Maxwell, James, Financing State and Local Governments (Brookings Institute, Washington, D. C., 1965).
- Musgrave, Richard The Theory of Public Finance (McGraw-Hill Book Co., New York, 1959).
- Neenan, William "Suburban-Central City Exploitation Thesis: One City's Tale"
National Tax Journal, vol. XXIII, No. 2 (June 1970) pp. 117-139.
- Netzer, Dick "Federal, State and Local Finance in a Metropolitan Context"
Issues in Urban Economics, Perloff, Harvey and Wingo, Lowdon, eds. (Johns Hopkins Press, Baltimore, Md., 1968) pp. 435-476.
- New York-New Jersey Transportation Agency, Journey to Work: Manhattan Central Business District (June 1964).
- New York City, Mayor Executive Budget, 1971-72.
- New York State, A Citizens' Handbook (League of Women Voters of New York State, 1963).
- New York State, Department of Audit and Control - Comptroller's Studies in Local Finance, vols. 1-3.
- New York State, Department of Audit and Control - Municipal Affairs Division
Special Report on Municipal Affairs by the State Comptroller 1960-1968.

- New York State, Department of Audit and Control - Municipal Affairs Division
State Aid to Local Government (November 1967).
- New York State, Department of Audit and Control - Office of the State Comptroller
Annual Report, 1966, 1967 and 1970.
- New York State, Department of Commerce - Research Bulletin, Nos. 7, 9, 11
and 14.
- New York State, Department of Social Services - Statistical Supplement to the
Annual Report, 1967 and 1969.
- New York State, Department of Taxation and Finance - New York Personal Income
and Tax Liability, Income Years 1965, 1966, 1967, 1968 and 1970.
- New York State, Department of Taxation and Finance - New York State and Local
Sales Tax Information Booklet No. 4.
- New York State, Department of Taxation and Finance - New York State and Local
Tax System (January 1970).
- New York State, Department of Taxation and Finance - Statistical Supplement
Fiscal Years 1964-5, 1965-6, 1966-7, 1967-8, 1968-9 and 1969-70.
- New York State, Governor - Executive Budget 1966-7, 1969-70 and 1971-2.
- New York State, Joint Legislative Committee - Metropolitan Area Study 1965
and 1968.
- New York State - New York City Fiscal Relations Committee - Interim Report
(January 31, 1956).
- New York State, State Department - Manual for the Use of the Legislature,
1966-7 and 1969-70.
- New York State, Tax Commission, The Division of the Treasury and the Division
of the Lottery - Annual Report, 1969-70.
- New York Times, September 2, 1970.
- Pidot, George "A Principal Components Analysis of the Determinants of Local
Government Fiscal Patterns", Review of Economics and Statistics, vol. LI,
No. 2 (May 1969) pp. 176-188.
- Regional Planning Association, Region's Growth: Report on the 2nd Regional
Plan, 1967.

- Regional Planning Association, Spread City, Bulletin No. 100 - September 1962.
- Schaller, Howard, ed. Public Expenditure Decisions in the Urban Community (Resources for the Future, Inc., Washington, D. C., 1963).
- State of New Jersey - Division of Budget and Accounting Fiscal Report, 1966 and 1967.
- State University of New York, Geographic Origins of Students, Report No. 5, September 1969.
- Tauber, Gilbert and Kaplan, Samuel, The New York City Handbook (Doubleday, Inc., Garden City, N. Y., 1968).
- Tax Foundation, Fiscal Outlook for State and Local Government to 1975 (Tax Foundation, Inc., New York, 1966).
- Temporary Commission on City Finances, City of New York - Better Financing for New York City Final Report, August 1966.
- Tiebout, Charles "An Economic Theory of Fiscal Decentralization" in Public Finances: Needs, Sources and Utilization Universities - National Bureau Committee for Economic Research (Princeton University Press, Princeton, N. J., 1961) pp. 76-96.
- Tiebout, Charles "A Pure Theory of Local Expenditures", Journal of Political Economy, vol. LXI, No. 5 (October 1956) pp. 416-424.
- Tiebout, Charles "The Urban Economic Base Reconsidered" in The Techniques of Urban Economic Analysis, Pfouts, Ralph, ed. (Chandler Davis, Publishing Co., 1960) pp. 280-289.
- Tri-State Transportation Commission, Measure of a Region, May 1967.
- Tri-State Transportation Commission, Regional Forecast 1985, December 1967.
- Tri-State Transportation Commission, Streets and Highways: A Regional Report, January 1968, Parts I and II.
- Tri-State Transportation Commission, Tri State Transportation 1985, May 1966.
- Tri-State Transportation Committee, Journey to Work in the Tri-State Region June 1964.
- U. S. Bureau of the Census, Census of Governments, 1967, vol. 3, No. 2 "Compendium of Public Employment" U. S. Government Printing Office, Washington, D. C., 1969.

- U. S. Bureau of the Census, Census of Governments, 1967, vol. 4, No. 3
"Finances of County Government" U. S. Government Printing Office,
Washington, D. C., 1967.
- U. S. Bureau of the Census, Census of Governments, 1967, vol. 6, No. 4
"State Payments to Local Governments" U. S. Government Printing Office,
Washington, D. C., 1967.
- U. S. Bureau of the Census, Census of Governments, 1967, vol. 7, State Reports,
No. 32 New York, U. S. Government Printing Office, Washington, D. C., 1970.
- U. S. Bureau of the Census, Census of Population 1970, General Population
Characteristics Final Report PC(1) B-34 New York, U. S. Government
Printing Office, Washington, D. C., 1971.
- U. S. Bureau of the Census, County and City Data Book, 1967 (A Statistical
Abstract Supplement) U. S. Government Printing Office, Washington, D. C.,
1967.
- U. S. Bureau of the Census, County Business Patterns, 1968 New York CBP-68-34
and 1969, New York CBP 69-34, U. S. Government Printing Office, Washington,
D. C., 1969 and 1970.
- U. S. Bureau of the Census, U. S. Census of Population 1960, Subject Reports
"Journey to Work" Final Report P C (2)-6B, U. S. Government Printing
Office, Washington, D. C., 1963.
- University of the State of New York, State Education Department Bureau of
Statistical Services, Annual Education Summary 1965-6.
- University of the State of New York, State Education Department Division of
Educational Finance, A Guide to Programs of State-Aid for Education in
New York State, 1966-7.
- University of the State of New York, State Education Department Winners and
Alternates in the Regents College Scholarship Competition 1967 and 1970.
- Wood, Robert, 1400 Governments (Harvard University Press, Cambridge, Mass.,
1961).