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ABSTRACT

Two particular features of the Virginia education system were analyzed in light of a present constitutional requisite for equalized educational funding. The Virginia Quality Standards for Education were analyzed as to their impact on equalization of educational spending throughout the State. Particular attention was given to requirements for improved school facilities and personnel as well as to higher levels of mandated academic achievement. Secondly, the Virginia school financing system was evaluated for its existing deficiencies in revenue and expenditure matters, particularly with regard to fiscal disparities and local property tax reform. Potential remedies to these deficiencies were defined and analyzed, with many remedies being suggested from a Statewide survey of school superintendents on the broad issue of educational finance reform in Virginia. (Pages 24, 26, and 34 are missing data. Pages 37-40 may reproduce poorly.) (Author)

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THE VIRGINIA EDUCATIONAL SYSTEM:
CAPACITY FOR RESPONSE TO SERRANO V. PRIEST

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Purpose

The Bureau of Educational Research at the University of Virginia served as a co-ordinating facility for the Massachusetts and Connecticut reviews of educational finance, and began data collection for a review of the Virginia situation during the summer of 1972. A legal mandate for equalized funding of public schools within the state loomed as a possibility for Virginia as for every state as a possible outcome of the Rodriguez decision, and it was of concern to the Bureau staff whether problemmatical fiscal disparities existed within Virginia, and whether the particular features of the Virginia state system of educational support could be linked to equalization of educational opportunity for the pupils in the local school divisions.

Procedures

Three interrelated sub-studies composed the review of public school funding in Virginia. One was a review of school district superintendents' perceptions of the fiscal condition of their respective districts and of possible changes in the state and federal roles in educational finance, considering the options for utilization of existing revenue-raising instruments. The second sub-study

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consisted of a review of the state's fiscal capacity and tax effort, relative to other states in the region, and of a review of the existing disparities between school districts with simulated alternatives to the present scheme for distribution of state aid. Finally, the state's mandated standards of quality, and efforts of a Task Force project to explore methods of implementing them, were analyzed in light of the relationships between the programs required by the Standards, patterns of wealth distribution among the state's school divisions, and achievement test results used as a crude measure of educational production.

Each of these sub-studies will be discussed, and a set of general conclusions will follow.

Survey of Superintendents

The state's school division superintendents were polled to ascertain their feelings about their district's position with regard to various fiscal characteristics which play important roles in determining a school system's financial resources. The results of the poll were analyzed according to the districts' positions in rankings on five fiscal variables compiled by the state auditor and the State Department of Education, including the average daily attendance of the school system, the total revenue collected by the jurisdiction, the local wealth in property valuation per pupil, equivalent school tax rate, and true total tax rate.

Smaller district superintendents felt more often that the property tax was underutilized, called for more use of the specialized tobacco, alcohol, and services taxes, and felt that further fed-

eral aid was undesirable more often than in larger districts where federal assistance was more welcome and the income tax was branded as underutilized. All superintendents described total tax effort in their districts as average, and felt that state aid was desirable. School tax effort was perceived accurately in relation to computed index measures of actual situations, but superintendents in areas with low overall effective tax rates tended to feel that the property tax was being overused. Meanwhile, high effort areas displayed an understandable tendency to welcome further federal involvement. Such specific observations were rare, as broad trends were difficult to isolate, and oblique or contradictory patterns of response were more the rule. It proved to be a difficult task to summarize the superintendents' perceptions.

In general, it was discovered that superintendents in most of the school divisions felt that the sales tax and the personal income tax could be utilized at higher rates in order to provide more revenue to local school districts. Superintendents in smaller districts tended more than those in larger districts to feel that tax pressures in the locality were high, although the absolute proportions of respondents feeling this way were well below majority levels. Superintendents in lower wealth districts tended more often to feel that total tax effort in the jurisdiction was low and that specialized taxes were underutilized. Wealthier districts felt that the property tax was overutilized, although this perception was common to all districts to some degree.

School taxes were perceived accurately, while total taxes tended to be perceived as the inverse of the actual situation in the district more than was the case in perceptions of school taxes.

Superintendents revealed attitudes which encourage (1) increasing state aid programs, (2) raising the effort of existing revenue-raising instruments to generate more funds for these programs, and (3) making these recommendations in the context of increased support for education, rather than linking them to property tax relief, as many superintendents reflected views of local tax effort which contradicted empirically-determined indices of total local tax rates.

Disparities in the Present Educational Finance System

Introduction

In view of the recent state court rulings that fiscal disparities resulting in disparate per pupil expenditures violate equal protection guarantees under the Constitution, and of the pending review by the U.S. Supreme Court of one such case, Rodriguez v. San Antonio, methods of funding public education require urgent review. The importance of such a review in Virginia is uniquely enhanced by the state's constitutional mandate that public educational programs meet certain quality standards.

This report, the first phase of a detailed study of educational finance in Virginia, is conceived in three parts: (1) an analysis of Virginia's total wealth and revenue sources, and of the extent and sources of its funding of public educational programs in the context of a region of neighboring states (Chapter I); (2) an examina-

tion of the fiscal conditions of all of Virginia's school divisions, involving the analysis of data collected on each division (Chapter II); (3) a computer simulation of local budget figures that would result from changes in the method of measuring district wealth and in the state aid formula (Chapter III).

Virginia's State-Local Fiscal System

Placing Virginia's fiscal structure in a regional and national context, several significant features emerge. While in the region Virginia's relatively high income per capita is reflected in per capita revenue and tax capacities falling below only Maryland and Florida, these capacities represent only 85% of national norms (Tables I-1 and I-2). And, in a national perspective, Virginia's per capita income was only 89.7% of the United States' average in 1967.

Relative to tax capacities in 1966-67, Virginia's sales tax effort was low, property tax effort moderate, and income and other tax effort relatively high (Table I-6). In general, Virginia has been able to generate revenues with a modest tax effort, and with emphasis on more progressive tax instruments. For the state as a whole, it would seem that additional revenues could be generated without imposing a politically unfeasible burden in terms of new taxes or high effort (refer to Tables I-3, I-6 and I-8).

While in 1970-71 Virginia's total revenue-raising effort relative to its personal income was the lowest in the region, the state's spending for education at levels near regional and national norms shows the emphasis placed on educational funding relative to total state expenditures (Table I-5). To the extent that education

TABLE I-1
 PER CAPITA INCOME, SELECTED STATES
 1950-1970 (1967 Dollars)

State	Per Capita Income			Percentage Increase	
	1950	1960	1970	1950-60	1960-70
Virginia	\$1,228	\$1,842	\$3,650	50.0	98.2
North Carolina	1,037	1,558	3,218	50.2	106.5
Maryland	1,602	2,340	4,287	46.1	83.2
West Virginia	1,065	1,612	3,034	51.4	88.2
Kentucky	981	1,581	3,099	61.2	96.0
Tennessee	994	1,544	3,075	55.3	99.2
South Carolina	893	1,372	2,933	53.6	113.8
Georgia	1,034	1,637	3,354	58.3	104.9
Florida	1,281	1,946	3,664	51.9	88.3
(.D.C.)	2,221	3,023	5,466	36.1	80.8

U.S. Dept. of Commerce, Survey of Current Business, August, 1972.

Note: sources and methods for computing items in all Tables may be found in Appendix.

TABLE I-2
REVENUE AND TAX CAPACITY, REPRESENTATIVE
TAX SYSTEM, 1966-67*

State	Revenue Capacity Per Capita	Tax Capacity Per Capita	Revenue Capacity Index	Tax Capacity Index
Virginia	\$ 335	\$ 270	85	86
North Carolina	301	245	76	78
Maryland	389	317	98	101
West Virginia	285	234	72	75
Kentucky	307	249	78	80
Tennessee	320	243	81	78
South Carolina	259	202	65	64
Georgia	318	249	80	80
Florida	407	325	103	104
United States	396	313	100	100

*Advisory Commission On Intergovernmental Relations,
Measuring the Fiscal Capacity and Effort of State
and Local Areas: Information Report.

TABLE I-3

UNTAPPED TAX CAPACITY, SELECTED STATES, 1970

State	Percent Increase in Taxes If:		
	A+	B++	C+++
Virginia	54.0	26.3	40.2
North Carolina	56.4	28.3	42.3
Maryland	21.9	-	11.0
West Virginia	49.6	22.7	36.1
Kentucky	62.2	33.1	47.6
Tennessee	72.1	41.2	56.6
South Carolina	48.1	21.5	34.8
Georgia	61.9	32.8	47.3
Florida	80.1	47.8	63.9

+ Tax rates were similar to those levied in New York

++ Tax rates were similar to those levied in Maryland

+++ Average of A+ and B++

*John Shannon, "State Revenue Systems - How Do They Rate?"
Remarks before the Southeast Leaders' Seminar on Educational
Finance, Sea Island, Georgia, June 1972.

TABLE I-5

SELECTED ITEMS OF STATE AND LOCAL GOVERNMENT FINANCES,
PER \$1,000 OF PERSONAL INCOME BY STATES, 1970-71*

State	General Revenue Per \$1,000 of Personal Income	All State & Local General Revenue Sources	Property Taxes	All Functions	Total	Education	
						General Expenditure Per \$1,000 of Personal Income	Local Schools Only
Virginia	\$ 131.03		\$30.61	\$166.08	\$73.34	\$51.88	
North Carolina	133.64		26.58	166.16	74.41	48.83	
Maryland	148.85		39.68	185.73	77.20	57.19	
West Virginia	139.01		24.69	211.36	79.46	52.90	
Kentucky	140.06		23.31	191.20	77.49	50.20	
Tennessee	132.02		28.01	187.37	70.69	49.13	
South Carolina	133.17		22.77	172.95	78.86	56.14	
Georgia	138.54		32.52	187.10	74.51	51.34	
Florida	140.04		35.80	173.17	71.11	52.14	
Regional Average	137.37		29.34	182.35	75.23	52.19	
United States	148.67		47.37	188.59	74.36	52.27	

*U.S. Bureau of the Census, Governmental Finances, 1970-71.

TABLE I-6

MEASURES OF RELATIVE STATE-LOCAL TAX EFFORT IN INDIVIDUAL STATES,
 BY TYPE OF TAX: 1966-67 (PERCENT RELATION OF ACTUAL TAX REVENUE
 TO TAX CAPACITY ESTIMATED AT NATIONAL AVERAGE RATES)*

State	All Sales and Gross Receipts Taxes	All Property Taxes	Individual Income Taxes	All Other Taxes
Virginia	90	59	165	158
North Carolina	100	55	196	92
Maryland	91	105	151	105
West Virginia	154	55	77	214
Kentucky	99	50	196	131
Tennessee	118	67	11	71
South Carolina	115	57	142	69
Georgia	111	68	105	121
Florida	104	79	-	162

*Advisory Commission On Intergovernmental Relations, Measuring the Fiscal Capacity and Effort of State and Local Areas: Information Report.

TABLE I-8

NON FARM RESIDENTIAL PROPERTY TAX EFFORT AS MEASURED
BY AVERAGE FINANCING METHOD, 1966-67*

State	Non Farm Residential Property Tax Effort (Revenue Effort/Revenue Capacity)
Virginia	57
North Carolina	52
Maryland	101
West Virginia	53
Kentucky	51
Tennessee	75
South Carolina	30
Georgia	60
Florida	72

*Advisory Commission on Intergovernmental Relations, Washington, D.C., Measuring the Fiscal Capacity and Effort of State and Local Areas: Information Report.

is locally funded (localities funded an average of 55% of total costs in 1971), Virginia's tax structure suggests that divisions rich in property valuation or in retail sales can generate the highest per pupil revenues. Yet the state, with 80% of its General Funds generated by income and sales taxes, has available the means to redistribute aid to those districts with smaller per pupil tax bases. And Virginia, receiving on balance more than it contributes to the Treasury (Table I-14), has considerable federal aid available, as well.

State Aid and Local Fiscal Features

Relating state and local revenues per pupil to various measures of local wealth and of the need for compensatory programs, significant associations among fiscal variables become apparent. While no strong relationships between measures of wealth and proxies for the need for compensatory education emerge, we do find significant associations of lower median house values with larger non-white populations, and low per pupil equalized net property values with high proportions of AFDC recipients (Table II-1). Yet large and small urban areas, with the highest concentrations of both AFDC recipients and children whose families live in poverty (Table II-2), may find that funding needed compensatory programs is problematical, as competing municipal services place demands on per capita equalized property valuation tax bases comparable to or smaller than those of non-urban districts (Table II-4). In rural areas, the need for such programs may be masked by low AFDC counts that fail to reflect the high percentages of families living in po-

TABLE I-14

RATIO OF FEDERAL PAYMENTS TO FEDERAL REVENUES ORIGINATING IN THE STATE: FISCAL YEARS 1952-1967 PERCENT OF TOTAL ALLOCATED EXPENDITURES DIVIDED BY PERCENT OF TOTAL ALLOCATED REVENUE*

State	1952	1965-67
Virginia	1.57	1.73
North Carolina	1.07	1.21
Maryland	1.09	1.34
West Virginia	1.15	1.02
Kentucky	1.55	1.32
Tennessee	2.15	1.12
South Carolina	2.30	1.58
Georgia	1.40	1.52
Florida	.82	1.15

*U.S. Committee on Government Operations, Federal Revenue and Expenditure Estimates For States And Regions, Fiscal Years 1965-67.

TABLE II-1

CORRELATION: WEALTH AND NEED

Need Measures	WEALTH MEASURES		
	Per Pupil Equalized Net Property Value	Median House Value	Per Capita NEF? Income
Percent Negro	.096	-.265	-.030
Percent Poverty Enrollment	-.170(*)	-.116	.144

(*) significant at the .05 level or higher

Note: sources and computational methods for all tables are described in the Appendix.

TABLE II-2
 SELECTED SCHOOL POPULATION CHARACTERISTICS
 BY SCHOOL DISTRICT TYPE, 1970

District Type and Name	Number of School-Age Inhabitants	ADA	No. of AFDC Children	AFDC Children as % of ADA
<u>Central City</u>				
Newport News	39,704	28,977	2,724	9.4
Norfolk	73,099	49,297	9,062	18.4
Petersburg	10,641	7,472	1,340	17.9
Richmond	64,340	45,320	8,494	18.7
Roanoke	19,945	17,190	1,744	10.1
<u>Rapid Growth Suburban</u>				
Campbell Co.	14,133	9,882	285	2.9
Fairfax Co.	145,443	124,309	1,472	1.2
Loudoun Co.	12,474	9,199	149	1.6
Prince George Co.	7,210	5,258	87	1.7
York Co.	8,602	7,709	111	1.4
<u>Slow Growth Suburban</u>				
Alexandria City	19,347	15,752	700	4.4
Chesapeake City	29,220	23,056	1,584	6.9
Chesterfield Co.	22,005	22,878	226	1.0
Falls Church City	2,497	1,834	21	1.1
Roanoke Co.	19,952	20,270		
<u>City</u>				
Bristol	4,054	3,047	203	6.7
Charlottesville	7,872	6,542	339	5.2
Fredericksburg	2,795	2,531	128	5.1
Radford	2,188	2,026	3	.2
Winchester	4,337	3,729	101	2.7
<u>Rural</u>				
Clarke Co.	2,167	1,692	30	1.8
Fluvanna Co.	2,321	1,834	24	1.3
Franklin Co.	7,817	6,193	107	1.7
King William Co.	1,635	1,235	37	3.0
Montgomery Co.	10,352	7,710	130	1.7

TABLE II-4

SELECTED TAXABLE WEALTH CHARACTERISTICS
BY SCHOOL DISTRICT TYPE, 1970

District Type and Name	ADA	Per Pupil Equalized Net Property Value	Per Capita Equalized Net Property Value	Per Capita Income
<u>Central City</u>				
Newport News	28,977	\$ 35,466	\$ 7,438	\$ 3,034
Norfolk	49,297	35,987	5,761	2,797
Petersburg	7,472	28,333	5,864	2,544
Richmond	45,320	43,991	7,987	3,168
Roanoke	17,190	40,338	7,528	2,935
<u>Rapid Growth Suburban</u>				
Campbell Co.	9,882	33,806	7,712	2,634
Fairfax Co.	124,309	38,965	10,645	4,537
Loudoun Co.	9,199	46,842	11,599	3,070
Prince George Co.	5,258	28,364	5,126	2,563
York Co.	7,709	47,234	10,967	2,963
<u>Slow Growth Suburban</u>				
Alexandria City	15,752	82,282	11,683	4,631
Chesapeake City	23,055	30,504	7,851	2,628
Chesterfield Co.	22,878	57,053	16,983	3,266
Falls Church City	1,834	90,908	15,478	5,018
Roanoke Co.	20,270	22,353	6,728	3,247
<u>City</u>				
Bristol	3,047	31,786	6,519	2,376
Charlottesville	6,542	59,632	10,034	3,190
Fredericksburg	2,531	53,307	9,337	3,140
Radford	2,026	35,176	6,146	2,529
Winchester	3,729	35,611	9,069	2,954
<u>Rural</u>				
Clarke Co.	1,692	60,963	12,731	3,080
Fluvanna Co.	1,834	88,436	21,282	2,030
Franklin Co.	6,193	33,612	7,750	2,223
King William Co.	1,235	111,120	18,305	2,401
Montgomery Co.	7,710	37,079	6,062	2,604

verty (Table II-2).

In general, lower school and total tax rates are associated with higher per capita equalized valuations. However, both tax rates are significantly and positively correlated with NEFP income per capita and median house value (Table II-5), due probably to the existence of high wealth districts where the lack of taxable non-residential property necessitates higher tax rates.

While local revenues per pupil are directly related to school and total tax rates (Table II-7) and to the various measures of local wealth (Table II-10), the relationship of total expenditures per pupil to these measures is much weaker. State aid per pupil, negatively associated with local revenues (Table II-8) and with the various wealth measures (Table II-10), functions to help offset interdivision fiscal disparities. It is not large enough, however, in either total volume or in the variation between the amounts districts of different wealth receive, to neutralize the efforts of local division wealth.

Simulated Alternatives to the Present Aid System

Having examined Virginia's fiscal characteristics and its present system of educational funding, we turn to consider the elimination of interdivision disparities through revisions of the system used to distribute educational funds. This evaluation is based on simulated effects on the revenues and expenditures of local school divisions of various methods of measuring local wealth as a criterion for the distribution of state aid.

TABLE II-5

CORRELATION: WEALTH AND EFFORT

Effort Measures	Wealth Measures		
	Per Capita Equalized Net Property Value	Median House Value	Per Capita NEFP Income
Total Local Tax Rate**	-.344*	.488*	.521*
School Tax Rate***	-.401*	.484*	.397*

* Significant at the .05 level or better

** Net levy on local property plus local sales tax revenue divided by equalized net property value.

*** Total local revenue for education divided by equalized net property value.

TABLE II-7
CORRELATION: EFFORT AND REVENUE

Revenue Measures	Effort Measures	
	Total Local Tax Rate ¹	School Tax Rate ²
Per Pupil Current Revenue	-.001	.025
Per Pupil Local Revenue	.458(*)	.550(*)
Per Pupil State Revenue	-.146(*)	-.061
Per Pupil State Aid for Operations	-.121	-.070
Per Pupil State Aid for Transportation	-.783(*)	-.512(*)

(*) significant at .05 level or better

- 1 Net levy on local property plus local sales tax revenue divided by equalized net property value.
- 2 Total local revenue for education divided by equalized net property value.

TABLE II-8

CORRELATION: REVENUE AND AID

Aid Measures	Revenue Measures	
	Per Pupil Current Revenue	Per Pupil Local Revenue
Per Pupil Current State Aid	-.126	-.461(*)
Per Pupil State Aid for Operation	-.139	-.513(*)
Per Pupil State Aid for Transportation	-.067	-.406(*)
(*) significant at the .05 level or better		

TABLE II-10

CORRELATION: WEALTH AND REVENUE

Revenue Measures	Wealth Measures		
	Per Pupil Equalized Net Property Value	Median House Value	Per Capita NEFP Income
Per Pupil Current Revenue	.270(*)	.118	.077
Per Pupil Local Revenue	.457(*)	.688(*)	.425(*)
Per Pupil State Revenue	-.537(*)	-.455(*)	-.203(*)
Per Pupil State Aid for Operation	-.598(*)	-.477(*)	-.208(*)
Per Pupil State Aid for Transportation	.125	-.508(*)	-.372(*)

(*) Significant at the .05 level or better

For the purposes of the simulation, several key assumptions have been made. While these assumptions find strong support among experts in school finance, they are not intended as policy recommendations, but as artifices of the simulations. These assumptions standardize the funding system so as to set off features of local fiscal condition for comparison on an index basis. We assume that (1) to equalize differences between local fiscal capacities and expenditure alternatives, the state must assume a high proportion of total expenditures, 90% in our simulations; (2) to avoid interdistrict disparities in all areas of educational funding, the state should assume responsibility for all capital financing and debt retirement; and (3) the state must adopt provisions prohibiting divisions from spending over a defined ceiling above a general foundation level.

Simulated state aid is computed by the following variable-equalization general aid formula:

$$\text{State Aid} = \frac{\text{Foundation Expenditure Level}}{\text{Level}} \times \left(1 - \frac{\text{Local Fiscal Condition}}{\text{State Fiscal Condition}} \right) \times \frac{\text{Local Support Fraction}}{\text{Support Fraction}}$$

The amount each division would receive depends on (1) the foundation level to which the state would neutralize expenditures, (2) the fiscal condition of the locality relative to that of the state as a whole, and (3) the proportion of the foundation level to be provided by the locality. Under the assumptions made above, the local support fraction is set a .1, with the state assuming 90% of total expenditures. Ranking the school divisions by 1970-71 operational expenses (exclusive of capital outlay and debt service) per pupil, we

located expenditure levels corresponding to the 10th, 50th, 65th, 75th, and 90th percentiles. These expenditures of \$506, \$672, \$698, \$720, and \$807, respectively, were used as alternative foundation expenditure levels in the variable-equalization formula.

The nine simulation models differ in the measure used as an index of local fiscal capacity. Model one uses per pupil net equalized property valuation, model two uses per capita valuation, three uses per pupil income and four uses per capita income. Five uses a computed local effective school tax rate, six uses a computed local effective total tax rate, seven uses a combination of per pupil valuation and school tax rate, and eight combines total tax rate and valuation. Model nine is similar to one, but double-counts AFDC recipients in computing per pupil valuation.

If state aid were distributed on the basis of the fiscal capacities derived in the simulations, central cities in our demonstration sample would benefit from per capita valuation, school and total tax rate, and AFDC-weighted valuation models, but would receive relatively less aid under income and composite measures of wealth. Rapid growth suburbs would appear poorest under income and per pupil valuation models, but would suffer in the combination measures. Tax rate models would favor the stable suburbs, and income measures would not. Aid to independent cities would be highest if a total tax model were used; lowest under a per capita income model. Rural districts, faring poorly under valuation and tax rate models, would do well with income-based measures of local capacity (Tables III-1 and III-2).

COST TABLE 1

THE TOTAL COST OF THE 90% PERCENTAGE-EQUALIZING
AID FORMULA AT EACH LEVEL OF PER-PUPIL EXPENDITURE

Model	10th Percentile	50th Percentile	65th Percentile	75th Percentile	90th Percentile
I	\$509,717,322	\$605,106,969	\$628,727,005	\$648,177,741	\$726,908,116
II	509,127,042	604,406,223	627,998,906	647,427,116	726,066,311
III	481,057,385	571,083,547	593,375,497	611,732,573	686,036,211
IV	478,240,566	567,739,582	589,901,002	608,150,589	682,019,111
V	503,419,002	597,629,967	620,958,142	640,168,535	717,926,111
VI	502,927,183	597,046,108	620,351,493	639,543,118	717,224,111
VII	478,039,893	567,560,712	589,715,149	607,958,987	681,804,111
VIII	477,843,931	567,268,720	589,411,760	607,646,211	681,453,111
IX	502,382,021	596,398,924	619,679,046	638,849,868	716,447,111

SCHOOL DISTRICT FISCAL CAPACITY

MODEL 1

DISTRICT	CAPACITY
ABINGDON	0.30
ACCOMACK	.67
ALBEMARLE	1.60
ALEXANDRIA	2.31
ALLEGANY	.91
APELIA	1.07
AMHERST	.85
APPROMATTOX	1.27
ARLINGTON	2.39
AUGUSTA	.95
BATA	1.21
BEDFORDCO	.95
BLAND	.97
BOTETFORT	1.10
BRISTOL	.78
BURNSWICK	.91
BUCHANAN	.41
BUCKINGHAM	1.47
BUNAVISIA	.76
CARROLL	.82
CAPECHARLES	0.30
CAROLINE	.82
CARROLL	.74
CHARLESCITY	.71
CHARLOTTE	1.01
CHARLOTTEVILLE	1.45
CHESTER	.74
CHESTERFIELD	1.33
CLARKE	1.49
CLIFTONFORGE	.72
COLONIALHEIGHTS	0.30
COVINGTON	.99
CRAIG	.91
CULPEPER	1.35
CUMBERLAND	1.29
DANVILLE	.76
DICKENSON	.92
DINWIDDIE	.76
ESSEX	1.23
FAIRFAXCO	.55
FAIRFAXCY	1.13
FALLSCHURCH	2.52
FAUQUIER	2.22
FLOYD	.71
FLUYANNA	2.16
FRANKLINGO	.82
FRANKLINCY	.55
FREDERICK	1.24
FREDERICKSBURG	1.10
FRIS	0.30
GALAX	.98
GILES	1.94
GLOUCESTER	1.22
GOOCHLAND	1.50
GRAYSON	.68
GREENE	.84
GREENSVILLE	.59
HALIFAX	.75
HAMPTON	.61
HANOVER	1.01

KINGGEORGE	.95
KINGANDQUEEN	1.54
KINGWILLIAM	2.71
LANCASTER	1.43
LEE	.71
LEXINGTON	.95
LOUDOUN	1.14
LOUISA	1.42
LURENBURG	.97
LYNCHBURG	1.02
MAISON	1.25
MARTINSVILLE	1.00
MATHEWS	1.42
MECKLENBURG	.85
MIDDLESEX	1.27
MONTGOMERY	.90
MANSEMOND	.82
NELSON	1.29
NANKENT	1.51
NEWPORTNEWS	.06
NORFOLK	.86
NORTHAMPTON	.87
NORTHUMBERLAND	1.05
NORTON	.58
NOTTOWAY	1.01
ORANGE	1.03
PAGE	1.12
PATRICK	.92
PETERSBURG	.69
PITTSYLVANIA	.79
POQUOSON	0.00
PORTSMOUTH	.53
POWhatan	.84
PRINCEGEORGE	2.10
PRINCEGEORGE	.59
PRINCEWILLIAM	.93
PULASKI	.75
RADFORD	.96
RAPPANANNOCK	1.33
RICHMOND	1.14
RICHMOND	1.07
RICHMOND	.55
ROANOKE	.58
ROANOKE	.98
ROCKINGHAM	1.19
ROCKINGHAM	1.05
RUSSELL	1.25
SALVILLE	0.00
SCOTT	.77
SHERBROOK	1.42
SMITH	.85
SOUTHAMPTON	1.40
SOUTHAMPTON	.91
SPOILSYLVANIA	.90
STAFFORD	.49
STANTON	1.00
SUFFOLK	.68
SURREY	1.94
SUSSEX	1.04
TAZEWELL	.57
VIRGINIA BEACH	.90
WARREN	1.59
WASHINGTON	.77
WAYNESBORO	1.16
WESTMORELAND	1.34
WESTPOINT	0.00
WILLIAMSBURG	.70
WINCHESTER	.87
WISE	.58
WYTHE	.81

TABLE III-1

SELECTED FISCAL CAPACITY INDICES BY MODEL
AND SCHOOL DISTRICT TYPE

States	Model I Index	Model II Index	Model III Index	Model IV Index	Model V Index
<u>Central City</u>					
Newport News	.86	.83	*	*	.88
Norfolk	.88	.64	1.10	.92	.91
Petersburg	.69	.66	1.19	1.76	.74
Richmond	1.07	.89	1.32	2.35	.53
Roanoke	.98	.84	.78	.78	.73
<u>Rapid Growth Suburban</u>					
Campbell Co.	.82	.86	.69	.49	1.28
Fairfax Co.	.95	1.19	1.27	1.34	.72
Loudoun Co.	1.14	1.30	1.00	1.09	.80
Prince George Co.	.69	.57	.26	.21	.99
York Co.	1.15	1.23	.67	.39	1.55
<u>Slow Growth Suburban</u>					
Alexandria City	2.01	1.31	1.83	1.49	1.09
Chesapeake City	.74	.88	.85	.98	1.12
Chesterfield Co.	1.39	1.90	*	*	1.64
Falls Church City	2.22	1.73	2.92	2.54	1.01
Roanoke Co.	.55	.75	.87	1.16	.58
<u>City</u>					
Bristol	.78	.73	.79	1.65	1.40
Charlottesville	1.45	1.12	1.39	1.76	1.13
Fredericksburg	1.30	1.04	1.37	2.19	1.23
Radford	.86	.69	1.25	1.40	1.23
Winchester	.87	1.01	1.00	2.53	.90
<u>Rural</u>					
Clarke Co.	1.49	1.42	1.00	1.02	1.62
Fluvanna Co.	2.16	2.38	.49	.59	2.01
Franklin Co.	.82	.87	.70	.77	1.29
King William Co.	2.71	2.05	1.20	1.57	3.07
Montgomery Co.	.90	.68	1.01	.75	1.40

TABLE III-1 (continued)

SELECTED FISCAL CAPACITY INDICES BY MODEL
AND SCHOOL DISTRICT TYPE

States	Model VI Index	Model VII Index	Model VIII Index	Model IX Index
<u>Central City</u>				
Newport News	.80	1.31	1.27	.83
Norfolk	.75	1.33	1.25	.78
Petersburg	.55	1.06	.97	.61
Richmond	.67	1.34	1.41	.95
Roanoke	.69	1.35	1.33	.94
<u>Rapid Growth Suburban</u>				
Campbell Co.	1.37	1.46	1.51	.84
Fairfax Co.	.76	1.31	1.33	.99
Loudoun Co.	1.04	1.54	1.66	1.18
Prince George Co.	1.29	1.18	1.34	.71
York Co.	1.64	1.93	1.97	1.19
<u>Slow Growth Suburban</u>				
Alexandria City	.69	2.55	2.35	2.02
Chesapeake City	.88	1.30	1.18	.73
Chesterfield Co.	1.40	2.21	2.09	1.45
Falls Church City	.75	2.72	2.59	2.30
Roanoke Co.	.84	.83	.97	.56
<u>City</u>				
Bristol	.74	1.48	1.15	.76
Charlottesville	.82	2.02	1.86	1.45
Fredericksburg	.86	1.91	1.73	1.30
Radford	.10	1.47	1.41	.90
Winchester	.92	1.35	1.33	.89
<u>Rural</u>				
Clarke Co.	1.60	2.29	2.29	1.53
Fluvanna Co.	2.61	3.16	3.46	2.23
Franklin Co.	1.63	1.47	1.63	.85
King William Co.	3.14	4.24	4.28	2.76
Montgomery Co.	1.24	1.60	1.53	.93

TABLE III-2
 THE MEAN DIFFERENCE BETWEEN 1970-71 STATE AID AND SIMULATED STATE AID
 AT SELECTED 1970-71 CURRENT PER PUPIL EXPENDITURE LEVELS BY
 MODEL AND SCHOOL DISTRICT TYPE

District Type and Model	Additional Aid Per Pupil at Selected Current Expenditure Levels				
	10th Percentile	50th Percentile	65th Percentile	75th Percentile	90th Percentile
<u>Central City</u>					
I	260	357	381	401	481
II	264	362	386	406	487
III	253	348	372	392	471
IV	238	331	354	373	450
V	262	360	384	404	484
VI	267	365	390	410	491
VII	238	331	354	373	450
VIII	240	324	357	376	453
IX	263	360	384	404	485
<u>Rapid Growth Suburban</u>					
I	269	365	388	408	487
II	263	357	380	399	477
III	287	386	410	430	511
IV	287	386	410	431	512
V	270	365	389	408	487
VI	265	360	383	402	481
VII	241	332	354	372	447
VIII	239	329	351	369	444
IX	262	358	381	401	479

TABLE III-2 (Continued)
 THE MEAN DIFFERENCE BETWEEN 1970-71 STATE AID AND SIMULATED STATE AID
 AT SELECTED 1970-71 CURRENT PER PUPIL EXPENDITURE LEVELS BY
 MODEL AND SCHOOL DISTRICT TYPE

District Type and Model	Additional Aid Per Pupil at Selected Current Expenditure Levels					
	10th Percentile	50th Percentile	65th Percentile	75th Percentile	90th Percentile	
<u>Slow Growth Suburban</u>	I	249	342	365	384	460
	II	256	350	373	392	470
	III	249	342	365	384	461
	IV	262	357	381	401	479
	V	254	348	371	390	468
	VI	255	349	373	392	469
	VII	216	303	325	342	414
	VIII	217	304	325	343	415
	IX	247	339	362	381	458
	<u>Independent City</u>	I	270	365	388	408
II		282	379	403	422	502
III		253	351	374	392	469
IV		243	332	355	373	447
V		273	369	392	412	490
VI		283	380	404	424	504
VII		242	331	353	371	445
VIII		246	337	359	377	452
IX		270	365	388	407	485

TABLE III-2 (Continued)
 THE MEAN DIFFERENCE BETWEEN 1970-71 STATE AID AND SIMULATED STATE AID
 AT SELECTED 1970-71 CURRENT PER PUPIL EXPENDITURE LEVELS BY
 MODEL AND SCHOOL DISTRICT TYPE

District Type and Model	Additional Aid Per Pupil at Selected Current Expenditure Levels				
	10th Percentile	50th Percentile	65th Percentile	75th Percentile	90th Percentile
<u>Rural</u>					
I	236	330	353	373	450
II	236	330	354	373	451
III	262	361	386	406	427
IV	255	352	377	396	477
V	211	301	323	341	415
VI	209	298	320	338	412
VII	192	278	300	317	388
VIII	191	277	298	316	386
IX	234	328	351	371	448

Changing indices of fiscal capacity can cause significant redistributions of state aid. Models two and six would direct aid away from rapid growth suburbs and toward central cities, while model four would direct aid from urban districts to growing suburbs. Tax effort models, five and six, would benefit small cities at the expense of stable suburbs (Table III-2).

Looking at simulated state aid relative to total state-local revenues in 1970-71 (Table III-4), we find that only if the state neutralized expenditures to the 90th percentile level would a significant number of school divisions receive aid greater than the revenues they generated under existing aid formulas and local revenue-raising techniques. The cost of such a program to the state is shown in Cost Table I.

In the state as a whole, only six districts would exceed the expenditure ceiling (defined as 110% of the 90th percentile foundation level, or \$888 per pupil in ADA). After adjusting ADA to double-count AFDC recipients, Arlington, Falls Church, Alexandria, Fairfax City, and Fairfax County would be over the ceiling, with only Arlington, Falls Church, and Alexandria facing substantial expenditure reductions (Table III-7).

Translating possible reforms in the system for distributing state aid to education into changes in local tax structures, independent cities would benefit most in terms of increased state aid relative to local tax bases. And in general, districts low in property wealth would be afforded considerable tax relief (Table III-8).

TABLE III-4

1970-71 STATE-LOCAL REVENUE LESS SIMULATED STATE AID AT
SELECTED EXPENDITURE FOUNDATIONS BY SCHOOL DISTRICT
TYPE FOR VARIABLE EQUALIZATION MODEL I
(Per Pupil Amount)

District Name and Type	10th Pct. Fndation	50th Pct. Fndation	65th Pct. Fndation	75th Pct. Fndation	90th Pct. Fndation
<u>Central City</u>					
Newport News	-223	-126	-102	- 82	- 3
Norfolk	-222	-125	-101	- 82	- 2
Petersburg	-250	-151	-127	-107	- 25
Richmond	-729	-635	-611	-592	-514
Roanoke	-408	-315	-289	-270	-191
<u>Rapid Growth Suburban</u>					
Campbell Co.	- 78	20	44	64	144
Fairfax Co.	-371	-275	-251	-232	-153
Loudoun Co.	-397	-303	-280	-261	-184
Prince George Co.	-119	21	4	24	105
York Co.	-128	- 34	- 11	8	86
<u>Slow Growth Suburban</u>					
Alexandria City	-656	-571	-550	-533	-463
Chesapeake City	- 89	9	33	53	134
Chesterfield Co.	-154	- 63	- 41	- 22	53
Falls Church City	-864	-782	-761	-744	-676
Roanoke Co.	-210	-110	- 85	- 65	18
<u>City</u>					
Bristol	- 36	62	86	106	187
Charlottesville	-358	-268	-245	-227	-152
Fredericksburg	-235	-143	-120	-102	- 26
Radford	-112	- 15	9	29	108
Winchester	-103	- 7	17	37	117
<u>Rural</u>					
Clarke Co.	-222	-132	-109	- 91	- 17
Fluvanna Co.	-288	-205	-185	-168	- 99
Franklin Co.	-103	- 5	19	38	119
King William Co.	-266	-188	-169	-153	- 90
Montgomery Co.	- 83	14	38	57	137

TABLE III-7
SCHOOL DISTRICTS IN 1970-71 WITH CURRENT EXPENDITURES
PER-PUPIL GREATER THAN THE 90TH PERCENTILE
LEVEL CEILING

School District	Current Expenditure Per-Pupil	Current Expenditure Per AFDC-Weighted Pupil	Expenditure Reduction Needed to Reach Expenditure Ceiling
lington County	\$1,367	\$1,332	\$444
lls Church	1,273	1,259	371
exandria	1,097	1,050	162
irfax	944	944	56
irfax County	911	900	12
chmond	902	760	0

TABLE III-8

SIMULATED SCHOOL TAX RATE NECESSARY TO ELIMINATE THE GAP BETWEEN
 1970-71 STATE-LOCAL REVENUE AND SIMULATED STATE-AID
 AT THE 90th PERCENTILE EXPENDITURE LEVEL
 BY VARIABLE EQUALIZATION MODEL
 AND SCHOOL DISTRICT TYPE

District Name and Type	Model I	Model II	Model III	Model IV	Model V
<u>Central City</u>					
Newport News	.0	.0			.0
Norfolk	.0	.5	.0	.0	
Petersburg	.0	.0	.0	.0	.0
Richmond	.0	.0	.0	.0	.0
Roanoke	.0	.0	.0	.0	.0
<u>Rapid Growth Suburban</u>					
Campbell Co.	4.3	4.2	4.6	5.1	3.2
Fairfax Co.	.0	.0	.0	.0	.0
Loudoun Co.	.0	.0	.0	.0	.0
Prince George Co.	3.7	4.1	5.0	5.1	2.9
York Co.	1.8	1.7	2.6	3.1	1.1
<u>Slow Growth Suburban</u>					
Alexandria City	.0	.0	.0	.0	.0
Chesapeake City	4.4	4.0	4.1	3.8	3.4
Chesterfield Co.	.9	.2			.6
Falls Church City	.0	.0	.0	.0	.0
Roanoke Co.	.8	.0	.0	.0	.7
<u>City</u>					
Bristol	5.9	6.0	5.8	3.7	4.3
Charlottesville	.0	.0	.0	.0	.0
Fredericksburg	.0	.0	.0	.0	.0
Radford	3.1	3.5	2.2	1.8	2.2
Winchester	3.3	3.0	3.0	.0	3.1
<u>Rural</u>					
Clarke Co.	.0	.0	.4	.3	.0
Fluvanna Co.	.0	.0	.4	.3	.0
Franklin Co.	3.5	3.4	3.8	3.7	2.4
King William Co.	.0	.0	.3	.0	.0
Montgomery Co.	3.7	4.2	3.5	4.0	2.6

TABLE III-8 (Continued)

SIMULATED SCHOOL TAX RATE NECESSARY TO ELIMINATE THE GAP BETWEEN
1970-71 STATE-LOCAL REVENUE AND SIMULATED STATE-AID
AT THE 90th PERCENTILE EXPENDITURE LEVEL
BY VARIABLE EQUALIZATION MODEL
AND SCHOOL DISTRICT TYPE

District Name and Type	Model VI	Model VII	Model VIII	Model IX
<u>Central City</u>				
Newport News	.1	.0	.0	.0
Norfolk	.2	.0	.0	.0
Petersburg	.0	.0	.0	.0
Richmond	.0	.0	.0	.0
Roanoke	.0	.0	.0	.0
<u>Rapid Growth Suburban</u>				
Campbell Co.	3.0	2.7	2.6	4.2
Fairfax Co.	.0	.0	.0	.0
Loudoun Co.	.0	.0	.0	.0
Prince George Co.	2.0	2.3	1.9	3.7
York Co.	1.0	.5	.4	1.8
<u>Slow Growth Suburban</u>				
Alexandria City	.0	.0	.0	.0
Chesapeake City	4.0	2.9	3.2	4.4
Chesterfield Co.	.9	.0	.0	.9
Falls Church City	.0	.0	.0	.0
Roanoke Co.	.0	.0	.0	.7
<u>City</u>				
Bristol	6.0	4.1	4.9	5.9
Charlottesville	.0	.0	.0	.0
Fredericksburg	.2	.0	.0	.0
Radford	2.5	1.7	1.8	3.0
Winchester	3.2	2.2	2.2	3.2
<u>Rural</u>				
Clarke Co.	.0	.0	.0	.0
Fluvanna Co.	.0	.0	.0	.0
Franklin Co.	1.6	2.0	1.6	3.5
King William Co.	.0	.0	.0	.0
Montgomery Co.	3.0	2.0	2.3	3.6

Distribution of Federal Aid in Virginia

Collection of data concerning the fiscal characteristics of Virginia's public school divisions provided a basis for investigation of the equalizing effects of federal aid programs. Although federal contributions to funds for education in the state amount to only 10% of the total revenues, it was felt that analysis of the equalizing effects of federal programs would provide interesting views into the effects of Title I ESLA and Impact Aid programs, and would suggest appropriate approaches for further analysis of these programs in a fiscal context.

Total federal receipts in 1970-71 amounted to \$96,945,000 or just under 10% of total revenues. Of this sum, Title I and Impact programs accounted for \$67,262,000 or 6.1% of total revenues. It was felt that these two programs encompassed a substantial share of federal aid which could be defined as fiscally equalizing in intent, offsetting local disadvantages in wealth which could affect school programs, and so investigation was directed at ESLA Title I and P.L. 874 and 815 expenditures.

A set of ten variables was constructed, and data was gathered on these variables. For regression analysis, Impact Aid/ADA, instructional expenditures/ADA, and Title I revenues/ADA were designated as dependent variables. Title I pupils as a percent of ADA, Title I funds/Title I child, per capita income, percent families with poverty level incomes (U.S. Census), percent families with yearly incomes over \$15,000, per pupil equalized property values, and percapita equalized property values constituted independent variables. Data was collected for a

demonstration sample of 25 public school systems, five in each of the following categories: central city, slow growth suburb, rapid growth suburb, small independent city, and rural.

In simple intercorrelations of the ten variables, percent of ADA constituted by Title I students was related positively and significantly (.05 level) with Title I funds/ADA and percent families at the poverty level and negatively and significantly with percapita income and percent families in upper income levels. Impact Aid/ADA was not significantly related to any other variable. Title I revenue/ADA was related positively and significantly to Title I funds/Title I child and percent families at the poverty level, and negatively with percent families with incomes over \$15,000/yr. Per-pupil instructional expenditures were related positively with percapita income and percent families with upper level incomes, negatively with families at the poverty level for this sample of 25 school systems.

Step-wise regression analysis using Impact Aid as the dependent variable, though revealing no significant relationships to the independent variables, did provide an indication of the relative predictive power of local fiscal features. Title I pupils as a percent of ADA (inversely related) and per capita property value bore the most important relationships, though such considerations must be made in light of the failure to display statistical significance.

In analysis using Title I monies /ADA as the dependent variable, 98% of the variance was reduced in two steps, by introducing the two other Title I independent variables, Title I

students as a percent of ADA and Title I monies/Title I child. Significant initial correlations with the wealth variables suggested that the run should be made again, deleting the two independent Title I proportions. When this was done, percent families at the poverty level and instructional expenditures per pupil were selected in the first two steps, resulting in a multiple correlation coefficient of .643.

The analysis of the Impact Aid distribution is interesting, revealing no significant relationships in either direction with any of the measures of local wealth or with the current instructional expenditures. Much of the aid in Virginia is directed at affluent and moderately affluent areas in the Washington suburbs, and much is also directed at the urban Tidewater area encompassing Norfolk, Portsmouth, and Hampton. These two trends may be conflicting to result in the null relationship, while conflicting measures of urban wealth may obscure the relationship even further. Future analysis must control these effects by some method, such as matching Impact and non-Impact areas according to measures of wealth other than property values, so that these values may be compared for deficiencies in the areas receiving Impact aid.

Directions are indicated for further research on federal aid to schools in Virginia. While the relative importance of federal funding is low across the state, many of the individual districts receive substantial amounts of this aid, through Impact, Title I, and other ESEA programs. With changes in the federal aid system being considered, particularly the Impact program,

some urgency in the necessity for conclusive research findings is indicated.

The Standards of Quality and Fiscal Reform

Virginia's recently revised state constitution contains a series of provisions unique to such documents, and of particular relevance to the issue of equalization of educational opportunity. The constitution mandates that programs for public education in the state meet certain standards of quality, specified in terms of personnel-to-student ratios, kindergarten and other types of special education programs, and the proportions of other instructional professional personnel besides classroom teachers and administrators. It was felt that the presence of these standards should affect any consideration of equalization of educational opportunity, and that the relationship of the standards to current features of the educational programs operating in the state and their attained outputs should be defined.

To test out these relationships, variables in three areas were selected and values for the districts in the state were compiled for analysis. The areas under consideration and their variables were:

- (1) District Wealth--property valuation per pupil, valuation per capita, income per pupil, income per capita, total expenditures, operating expenditures, and instructional expenditures.
- (2) Program Features--average teacher salary, average instructional salary, elementary pupil-teacher ratio, secondary pupil-teacher ratio, and the percentage of instructional personnel holding degrees.
- (3) School District Output--graduates as a percent of grade nine enrollment three years earlier,

percent of graduates continuing their education, grade 4 SRA scores, grade 7 reading test scores, grade 4 achievement adjusted for aptitude, and grade 7 achievement adjusted for aptitude.

These variables were processed against one another in a simple multiple regression analysis in order to discover which of one class of variables defined as independent most strongly predicted a given dependent variable. It was felt that the emergent relative strengths would reveal areas where equalization was not urgently needed, and whether the

The drop-out rate, grade 9 to graduation was predicted most strongly by the number of instructional personnel holding degrees, followed by the elementary and secondary pupil-teacher ratios. Total R-square attained in the prediction was .117. Teacher salary and the pupil-teacher ratio at the secondary level proved to be strongest predictors of the proportion of students continuing their educations, and with the lesser variables entered R-square reached .308. Teacher salary also proved the best predictor of grade 4 SRA test scores, though R-square for this relationship equalled only .175 and only .191 for the full prediction by program feature variables. Prediction of grade 7 reading scores was somewhat stronger, with an R-square of .217 achieved primarily by teacher salary, and .264 for the complete equalization. Indexing grade 4 and 7 achievement by aptitude provided only very weak relationships with the program features. Summarizing the prediction of output by program variables, pupil-teacher ratios and teacher salaries were consistently strong, among sets of generally weak overall relationships.

Predicting program features with variables indicating measures of local wealth provided a look at suggested direction for equalization. Teacher salary was most strongly related to operating expenditure, with an R-square of .429, followed by per pupil income with a marginal R-square change of .111. Adding the valuation variables, and other expenditure measures pushed the total to .588. Virtually identical results were found when instructional salary was related to the wealth measures. Similar ordering, at lower levels of strength, was found for the prediction of elementary pupil-teacher ratio, and for secondary ptr. The proportion of instructional personnel with degrees was predicted most strongly by income measures, with R-square equalling .230 for per pupil income and .272 when per capita income is introduced.

Program output was found to be related to program features, and these features were found to be related to measures of local wealth. These relationships suggest that more careful analysis, on an individual school basis rather than on a district basis, utilizing measures more effectively isolating the variable in question, would provide information useful in guiding equalization effects. Nonetheless, the indication is clear that these relationships form a series of factors which lead from the resources available to the division to the output attained in the student.

Reflecting this knowledge is the activity of the Governor's Task Force on Educational Finance in Virginia. This group costed out the average cost of the programs of the quality standards, and has suggested an equalization system for providing resources to

each district in order to fund the programs. A foundation level of \$638 per pupil was defined, and a required local effort combined with a state supplemental aid program has been designed to achieve this level in each district.

The \$638 figure represents the state-wide average cost of those programs in the overall public education program which the Task Force could define as corresponding to the quality standard, requisites. Two questions might be: (1) Is equalization to a state-wide average a sufficient objective in striving to eliminate inter-district disparities; and (2) Is equalization on core instructional programs sufficient to ameliorate differences in educational services resulting from disparities in local fiscal condition which persist throughout the state?

The Task Force recommendations have resulted in legislative action to provide for this amount of equalization for the upcoming school year. For us the issue remains: will a more careful and sophisticated analysis reveal other types of educational programs which bear on outcomes, and other bearing less significantly?

General Conclusions

The groundwork has been laid for fiscal reform in the educational system in Virginia. Current disparities in local condition are alleviated somewhat by a moderately equalizing basic aid formula. Unfortunately, inequities persist. What remains to be decided is whether they can be resolved through general neutralization of the resources available at the local level, or through a targeted program aimed at those areas in the make-up of local educational ser-

vices which most strongly affect local ability to attain satisfactory levels of output. We have indications that the latter may be true, and the state has a newly instituted equalization system based on this premise which may serve as a base for a vigorous effort to equalize educational opportunity. With further study, it is hoped that we may ascertain where in the educational program equalization is most needed, and to what level the state must neutralize differences.