Federal Reserve Bank of Cleveland — 1965

To the Banks in the Fourth Federal Reserve District:

We are pleased to present the Annual Report of the Federal Reserve Bank of Cleveland for 1965. On behalf of the directors, officers, and staff, we gratefully acknowledge the cooperation and assistance of the agricultural, commercial, educational, financial, and industrial leaders of the Fourth District, who have given generously of their time and effort in helping us carry out our responsibilities.

By almost any standard of measurement, the year 1965 was one of the most successful in the nation's and the District's economic history. In the jargon of the times, nearly all economic indicators were "A-O.K." Thus, both in the District and in the nation, production and income expanded substantially, employment rose markedly, and unemployment receded significantly. Indeed, by year end, the problem of a possible straining of resources was coming to the fore. During 1965, the nation's balance of international payments showed moderate improvement over previous years. Bankers in the Fourth District made an important contribution to this improvement.

Against the background of a vigorous, expanding economy, we have devoted this Annual Report to a discussion of the "challenge of education." Quality education at all levels and ample educational opportunities are basic ingredients of a favorably performing economy. Education in the nation is a major growth industry that constantly faces new and exciting challenges. This is no less true in the four states that are wholly or partly within the Fourth Federal Reserve District. In these states, enrollments at all levels of education account for about 14 percent of enrollments in the nation, and spending for education accounts for approximately 10 percent of the national total. Considerable progress has been made in meeting the burgeoning demands of education in recent years, but the accomplishment is by no means complete. Indeed, the task is only beginning since demands for education in the years ahead will necessarily mount. Success in meeting these demands—in the Fourth Federal Reserve District as well as in the nation—will go a long way towards enhancing the quantity and quality of our future economic output.

Chairman

President

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challenge four fourth

Education in the United States is a major growth industry. While substantial progress has been made in meeting burgeoning needs, demands for education, particularly beyond high school, will continue to rise sharply, thus posing a major challenge to the responsible authorities.

Enrollment (public and private) at all levels of education (elementary, secondary, and higher) increased by about one-half between 1954 and 1964, or from 36 to 53 million. In the elementary schools, where registration is greatest, the increase was 36 percent; enrollments in the high schools and in the colleges and universities advanced much more rapidly, or 82 percent and 97 percent, respectively. The greater rate of expansion of enrollments in secondary and higher education reflects in part the relatively large rise in

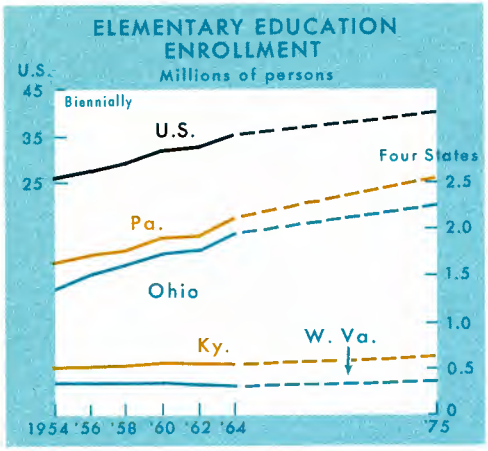
# of education
district states

the birth rate following World War II. It also reflects, particularly in recent years, an increased awareness of the importance of education as a means of broadening individual economic and social opportunities. While high school was a common standard of achievement a generation ago, college and graduate school education have now become more frequent goals.

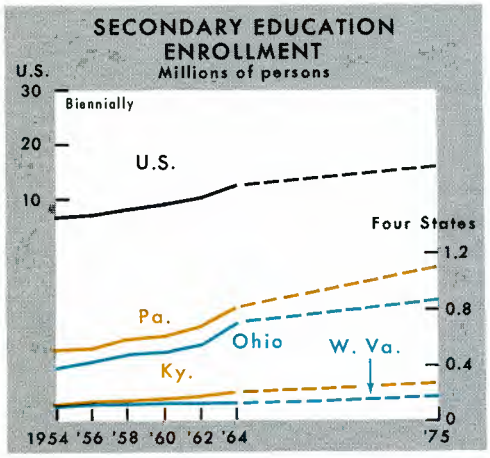
Total expenditures for education in the United States are an indication of the magnitude of the expansion. The costs of elementary, secondary, and higher education in the United States increased from nearly $14 billion in 1954 to $36 billion in 1964, or at an average annual rate of growth of $2.2 billion. Spending for education, which in 1954 accounted for less than 4 percent of Gross National Product, had increased to nearly 6 percent of GNP by 1964.

While future increases in enrollments and expenditures may not occur in all cases at the same rates as those of the past decade, they nevertheless are expected to be substantial. For example, by 1975, if current trends continue, enrollment in higher education will have doubled again. On the other hand, projected rates of increase from the present to 1975 in elementary and secondary enrollments are less than the college rate, or 20 percent and 25 percent, respectively. In short, enrollment at all levels is expected to total over 70 million students by 1975, as compared with 53 million in 1964. These projected demands for education indicate that the tasks of providing educational facilities and teaching staffs with an adequate financial base are indeed formidable.

Enrollment. Problems involved in meeting the needs of education are equally important to those states that are wholly or partly within the Fourth Federal Reserve District — Kentucky, Ohio, Pennsylvania, and West Virginia. (The relationship of these four states to the Fourth District is shown on the map on the back cover. For the purposes of this report, each of the four states identified above is considered in its entirety, irrespective of its relationship to the Fourth District.) Total enrollments of students at all levels of education in the four states in 1964 were as follows: Pennsylvania, 3,166,000; Ohio, 2,909,000; Kentucky, 829,000; and West Virginia, 495,000. Combined, these figures amounted to



Source of data: U.S. Department of Health, Education, and Welfare Projections, Federal Reserve Bank of Cleveland



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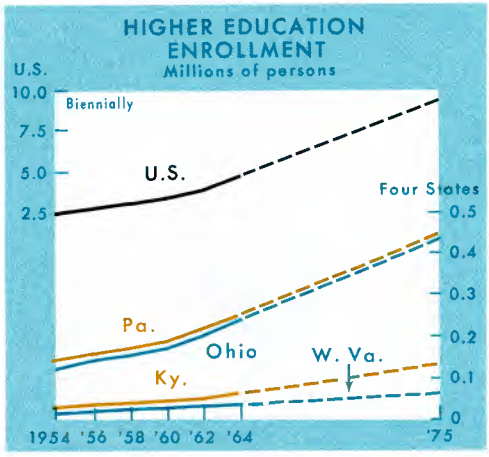


Source of data: U.S. Department of Health, Education, and Welfare

NOTE: Data in the three charts include public and nonpublic enrollment.

7,399,000 students, or nearly 14 percent of the total enrollment at all levels of education in the United States. Similarly, spending for education in the four states taken together amounted to 10.5 percent of the total in the nation in 1964, or more than $3.7 billion.

In each of the four states, higher education during the past decade experienced a considerably more rapid rate of increase in enrollment than did either elementary or secondary education, thus paralleling the pattern for the United States as a whole. During 1954-64, college enrollment in Kentucky increased by 120 percent, virtually doubled in West Virginia and Ohio, and increased by about 70 percent in Pennsylvania (see center table). Moreover, enrollment in higher education in Kentucky is expected to double again by 1975 (see accompanying chart). The number of college-bound students in Pennsylvania and Ohio is expected to increase by three-fourths and in West Virginia by two-thirds.

Recent and projected increases in higher education enrollment in the four states are based in large part upon the sharp gains in secondary enrollment between 1954 and 1964. As in the nation as a whole, high school enrollment increased by more than four-fifths in Ohio, while Kentucky and Pennsylvania with increases of about three-fifths were not far behind (see chart). The 30-percent increase in secondary enrollment in West Virginia during 1954-64 was considerably less than in the other states of the Fourth District. In none of the states, however, is secondary enrollment expected to rise nearly as fast in the next ten years as in the preceding decade. The projected rates of increase cluster at 25 percent for Ohio, Pennsylvania, and West Virginia. For Kentucky, the projected rate is 29 percent. The higher rate projected for Kentucky reflects mainly the relatively large number of children in the early school years. (The median age of the population in Kentucky is the lowest of any of the four states and two years below the national median.)

The expected slower rate of increase in high school enrollment in turn is based

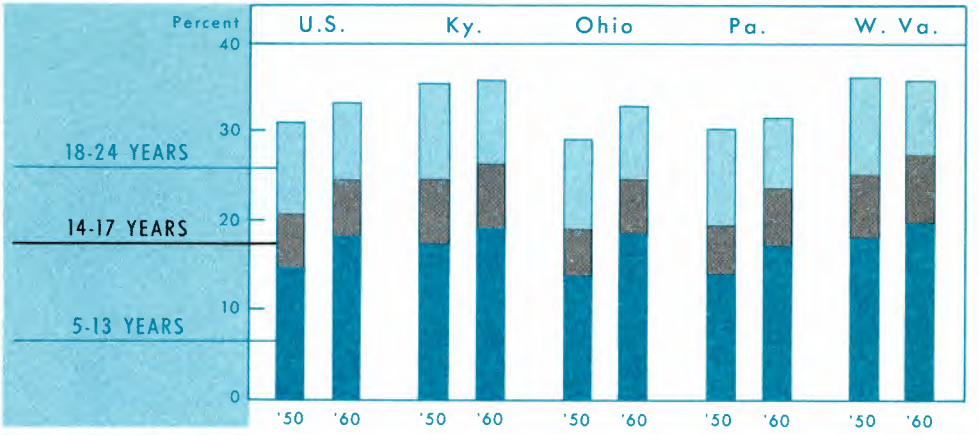
on the relatively slow growth in elementary school population (kindergarten through the eighth grade) during the 1954-64 period. Ohio, with an enrollment increase of over two-fifths, experienced by far the largest relative gain of the four states at the elementary level. The increase in elementary enrollment in Pennsylvania during the ten-year period was about 30 percent. West Virginia and Kentucky were among the few states in the nation to experience a decline or only a small increase in elementary enrollment.

Demographic Characteristics. Changes in the number of students enrolled at the various levels of education reflect at least three demographic factors — changes in the total number of persons of school age, changes in the age distribution within this group, and changes in the percentage of each of the subgroups enrolled in school. Latest data available on the school-age population in each state are from the 1960 Census. As shown in an accompanying chart, between 1950 and 1960 the school-age population (5 to 24 years of age) as a percent of the total population increased markedly in Ohio and somewhat less in Pennsylvania. Although the school-age population in Kentucky remained virtually unchanged during the period and that of West Virginia declined, those two states in 1960 still had larger school-age populations in proportion to total population than either Ohio or Pennsylvania. Thus, Kentucky and West Virginia have had greater burdens in educating their youth than have the other two states.

Of the three school-age groups, the number of persons in the elementary school group (5 to 13 years of age) increased as a percent of the total population in each of the four states during the period under review. In contrast, the college-age group (18 to 24 years of age) declined relatively in each state and the secondary or high school group was stable. In the years ahead to 1975, the movement of those now in the elementary-age group to the higher-age groups will result in greater increases in the population groups at the secondary and higher education levels.

Despite the varying percentage changes in the three school-age groups between 1950 and 1960, the percentage of individuals enrolled in school climbed for each state. At the same time, there was an overall increase in the educational attainment level of the population. The adult population (25 years of age and over) in each of the states had relatively more education — college, secondary, and elementary — in 1960 than in 1950 (see accompanying chart). While the number of those who had "some high school" increased by at least 6 percent in each of the four states between 1950 and 1960, Ohio and Pennsylvania maintained their relative advantage. By 1960, all four states were fairly close in the proportion of the adult population that had had "some college" training, with Ohio maintaining its relative leadership in the

SCHOOL-AGE GROUPS as a PERCENT of TOTAL POPULATION



Source of data: U.S. Department of Commerce

percent of those who had had four years or more of college.

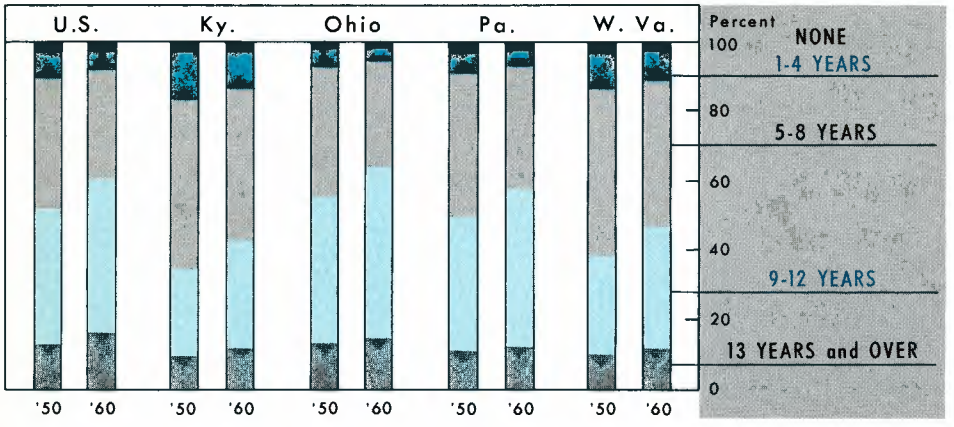
The rise in the level of educational attainment is due to a number of factors. A major reason is the increase in the real income of families both in the United States and in the four states under review. With each succeeding generation, a larger proportion of families has been able to afford the cost of educating their children through high school and college. Another long-term factor has been the substantial and continuing movement of the population from a rural, agricultural environment to urban, industrial areas where the importance of higher education is more apparent, and its attainment more readily available.

More recently, rapid gains in the technology of the economy have greatly increased the demands for persons with advanced education. For example, a recent study of the characteristics of the labor force indicated a marked difference in the level of educational attainment of employed and unemployed persons. Thus, as shown in an accompanying chart, in March 1964 nearly three-fifths of employed persons (18 years and over) had four years of high school or more. In contrast, of the unemployed members of the labor force, only two-fifths had at least graduated from high school. These figures suggest a correlation between employment and completion of high school. Other studies have shown that increased demands for workers with more education are not concentrated in occupations requiring the highest levels of training, but rather are distributed over a wide range of occupations.

Role of the Federal Government. Recognizing that the national interest requires an educated citizenry, the

YEARS of SCHOOL COMPLETED by POPULATION
25 YEARS of AGE and OVER

Percentage distribution



Source of data: U.S. Department of Commerce

Federal Government has moved toward helping improve education and educational opportunities at all levels. In general, this represents a shift in emphasis by the Federal Government in the area of education from expenditures for special purposes, somewhat narrowly defined, to more broadly conceived programs.

The Elementary and Secondary Education Act of 1965, which authorized a total expenditure of $1.3 billion during the first year, was signed into law last April. The Act is the largest legislative commitment to improve elementary and secondary education ever made by the Federal Government. The bulk of the funds is authorized for a three-year program of grants to states, which will be allotted for current expenditures to school districts where 3 percent or more of the children between 5 and 17 years of age come from families with annual incomes below a specified minimum, currently set at $2,000. On the basis of such criteria, school districts in Kentucky and West Virginia will receive nearly twice as much per pupil as those in Pennsylvania and Ohio.

Other smaller programs of the Elementary and Secondary Education Act include grants to help purchase books and other materials for libraries of nonprofit schools, both public and private; grants for educational research and training of personnel; grants to strengthen state departments of education; and grants for supplemental education centers that will offer comprehensive guidance and counseling, specialized instruction in advanced science, foreign languages, art and music, as well as for centers that will develop radio and television broadcasts for classroom use. In some of these programs, special incentive grants are offered to those school

districts that show increased efforts on their own, as measured by current expenditures for education.

The Congress has also provided assistance to higher education. In 1965, it renewed and expanded the Higher Education Act of 1963. This legislation authorized $845 million during the first year to assist public and other nonprofit institutions of higher education to finance the construction of academic facilities, to provide loans and scholarships to students from low- and middle-income families, and to provide funds for libraries and for extension programs.

Sources of Funds. An accompanying chart shows the sources of funds for current expenditures on education in 1959-60, the most recent period for which data are available for all levels of education. As indicated in the chart, federal aid is proportionately greater for higher education than for public elementary and secondary schools. Moreover, the contribution of the Federal Government to higher education is actually understated in the accompanying chart. For one thing, only federal funds for current expenditures (but not for capital purposes) are included; also, federal payments to higher education made indirectly through state governments are included under state funds. As the chart indicates, the Federal Government is a more important source of funds for higher education in the nation as a whole than in the states of the Fourth District. One reason is that these states received proportionately smaller amounts for research, which is the most important source of federal aid to higher education.

Public elementary and secondary schools obtain most of their funds from local governments, which in turn rely heavily on property taxes levied for school purposes. State support of public schools is usually financed by nonproperty tax sources such as income, sales, and excise taxes. State support of public elementary and secondary education helps to broaden the school tax base and makes possible a greater equalization of educational opportunity within the state. Revenue sources tapped by states also tend to keep better pace with rising price levels and increasing personal incomes than do revenues derived from property taxes. As the chart indicates, support of public elementary and secondary schools by the state is a more important source of funds in Kentucky, Pennsylvania, and West Virginia than in Ohio, or in the nation as a whole.

All levels of government, taken together, provide about 45 percent of the current funds for education beyond high school in the United States. In West Virginia, where government contributes more than one-half of current operating expenses for higher education, the government share exceeds the national average. Government provided about 36

percent of funds to higher education in Kentucky, 24 percent in Pennsylvania, and 27 percent in Ohio in the academic year 1959-60. As would be expected, the financial contribution of government to higher education for current purposes in each state is influenced by the extent to which public institutions are dominant in terms of enrollment. Although private colleges and universities receive some financial support from all levels of government, such aid is a relatively minor source of funds and is primarily from the Federal Government for research purposes.

Funds for higher education provided by local governments have been comparatively small. Contributions have been primarily to municipal institutions. Support of this type of higher education by local governments, however, is expected to become more important in the years ahead with the growth of community colleges.

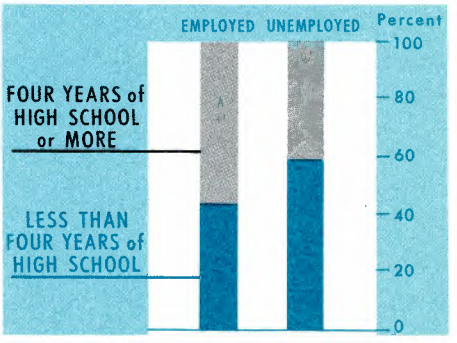
The major sources of funds for private higher education are student fees (including tuition), income from related services, endowments, gifts, and grants. Related services include the amounts spent by colleges and universities for cafeterias, residence halls, student unions, and bookstores, and are approximately covered by student expenditures for these services.

Elementary & Secondary Education. The table in the center of this report presents a profile of significant physical and financial trends in education for the decade 1954-64.

Schools and Students. More than 85 percent of the enrollment in elementary and secondary schools in the nation is accounted for by public schools, and the remainder by nonpublic schools. This proportion has remained approximately constant over the past decade. Among the four states of the Fourth District, the extent of nonpublic education varies substantially. In 1964, enrollment in nonpublic elementary and secondary schools in Pennsylvania was the largest of the four states — about one-fourth of total enrollment. West Virginia, with less than 5 percent enrolled in nonpublic schools, had by far the lowest proportion. Kentucky and Ohio, with 13 percent and 16 percent, respectively, enrolled in nonpublic schools, were closer to the proportion for the nation as a whole.

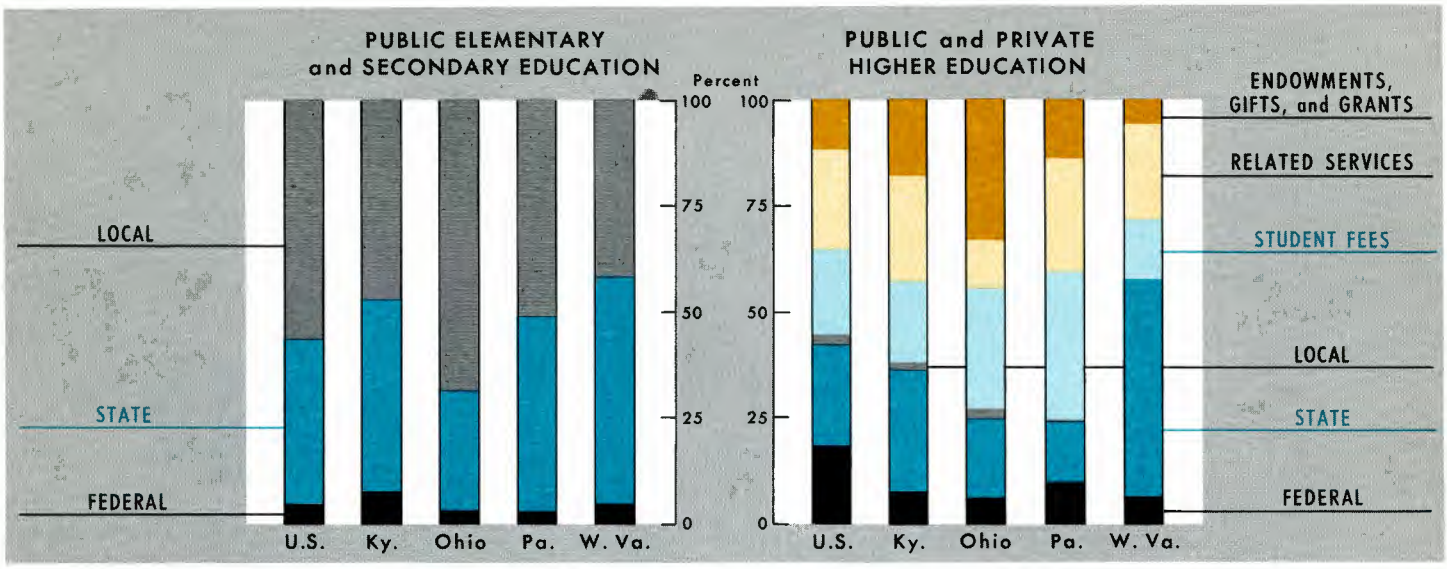
YEARS of SCHOOL, EMPLOYED and UNEMPLOYED, U.S. LABOR FORCE 18 YEARS and OVER, MARCH 1964

Percentage distribution



Source of data: *Monthly Labor Review*, May 1965

SOURCES of FUNDS for CURRENT EXPENDITURES
Academic year 1959-1960
Percentage distribution



Source of data: U.S. Department of Health, Education, and Welfare

Enrollment in the elementary schools in Kentucky and Pennsylvania increased during the ten-year period under review, although the number of elementary schools in those states declined. In the case of West Virginia, both the number of pupils and the number of schools declined, and in Ohio both increased. Insofar as the secondary level is concerned, there were reductions in the number of schools in all four states, against the background of rising enrollments. Reduction in the number of elementary schools was due to the widespread closing of one-teacher schools, which in turn was facilitated by school district reorganization and consolidation of smaller districts. School districts provide the machinery through which local control of schools is exercised, and are largely responsible for the location and size of schools, the types of educational programs and services offered, and the amount of financial support provided locally.

As would be expected, the size and characteristics of local school districts vary from state to state. Thus, Ohio had relatively fewer one-teacher schools in 1954 than any of the other states in the Fourth District because a reorganization program had already been instituted. Although an extensive school building program to accommodate rising enrollments occurred throughout the United States during the past decade, the total number of public schools did not increase. This was because the new schools, whether built for replacement or expansion, were designed to accommodate more pupils per school.

The number of classroom teachers in the United States in both the public elementary and secondary schools has kept pace with enrollment. (Complete data

on classroom teachers are not available for nonpublic schools in 1954.) However, in individual states the balance was not always maintained. In Ohio, for example, the number of public secondary classroom teachers increased by 70 percent, while the number of students in the public high schools of the State increased by 87 percent. Similarly in Kentucky, public high school enrollment rose by 68 percent while the number of classroom teachers increased by 50 percent. On the other hand, in Pennsylvania and West Virginia the increase in classroom teachers at the secondary level was greater than the rise of enrollment.

(Although not shown separately in the center table, in the United States as a whole, the size of "other instructional staff," which includes principals, librarians, and guidance and psychological personnel, virtually kept pace with mounting enrollment.)

As would be expected from the growth of secondary school enrollment, the number of high school graduates increased rapidly during the 1954-64 period. In part, this reflected an improvement in the "retention rate" (the complement of the "dropout rate") that occurred during the most recent five-year period. Thus, public high school graduates in the United States in the academic year 1963-64 represented nearly three-fourths of the class that entered the ninth grade in 1960-61, as compared with two-thirds of the ninth grade class of 1955-56 that graduated in 1958-59. (Comparable figures are not available for the four states being discussed here.)

Finances. A major problem at all levels of education is that of raising funds to meet steadily increasing costs. (Discussion refers only to public elementary and secondary schools, since historical data are not available for nonpublic schools.) Current expenditures have increased rapidly throughout the United States as well as in the four states of the Fourth District, even after adjustment for changes in enrollment, indicating that influences other than enrollment also contribute heavily to the costs of education.

Pennsylvania, with $479 per pupil, was the only Fourth District state that spent about as much as the United States average of $484 per pupil in 1964, although Ohio, with an average of $465, was not far behind. Kentucky and West Virginia each spent considerably less, or about $325 per pupil.

One of the factors contributing to increased expenditures per pupil has been higher salaries for instructional staff. The estimated national average annual salary for all instructional staff in 1964 was about $6,200, which compared with a figure of $3,800 in 1954. The salary figure includes compensation of principals and

profile of

	United States			Kentucky	
	1954	1964	% Change	1954	1964
PHYSICAL					
Elementary					
Full-time enrollment (in thousands)	26,138	35,525	+ 36	529	561
public	22,546	30,025	+ 33	484	482
nonpublic	3,592	5,500	+ 15	45	79
Number of schools	122,614	96,672[a]	− 21	4,496	2,761[a]
public	110,875	81,910[a]	− 26	4,258	2,501[a]
nonpublic	11,739	14,762[a]	+ 26	238	260[a]
Number of one-teacher schools	42,825	13,333[a]	− 69	2,389	993[a]
Secondary					
Full-time enrollment (in thousands)	7,037	12,791	+ 82	123	202
public	6,290	11,391	+ 81	108	181
nonpublic	747	1,400	+ 87	15	21
Number of schools	29,550	29,479[a]	[g]	619	510[a]
public	25,637	25,350[a]	− 1	508	429[a]
nonpublic	3,913	4,129[a]	+ 5	111	81[a]
Number of high school graduates (in thousands)	1,276[E]	2,296	+ 80	21[E]	35
public	1,129	2,021	+ 79	18	31
nonpublic	n.a.	275	n.a.	n.a.	4
Total Instructional Staff[b], Elementary and Secondary (in thousands)	1,232	1,933[E]	+ 57	22	32[E]
public	1,098	1,718[E]	+ 56	20	28[E]
nonpublic	134	215[E]	+ 60	2	4[E]
Classroom teachers — elementary (in thousands)	737[E]	1,078	+ 46	14[E]	18
public	658	940	+ 43	13	16
nonpublic	n.a.	138	n.a.	n.a.	2
Classroom teachers — secondary (in thousands)	421[E]	755	+ 79	7[E]	10
public	375	685	+ 83	6	9
nonpublic	n.a.	70	n.a.	n.a.	1
Higher Education					
Enrollment in degree credit programs (in thousands)	2,515	4,950	+ 97	30	66
public	1,357	3,179	+134	19	46
nonpublic	1,158	1,771	+ 53	11	20
Number of institutions	1,863	2,168	+ 16	37	38
public	662	784	+ 18	9	8
nonpublic	1,201	1,384	+ 15	28	30
Earned degrees conferred	356,608	610,982	+ 71	4,613	8,909
bachelor's or first professional	290,825	495,898	+ 71	3,944	7,820
master's or second professional	56,788	100,599	+ 77	595	1,027
doctor's	8,995	14,485	+ 61	74	62
FINANCIAL					
Elementary and Secondary Public Schools					
Revenues per pupil[c]	$272	$486	+ 79	$153	$309
Current expenditures per pupil	$265	$484	+ 83	$153	$324
Capital outlays per pupil	$ 80	$ 85	+ 6	$ 11	$ 35
Interest on school debt per pupil	$ 6	$ 19	+217	$ 2	$ 12
Average annual salaries					
instructional staff (including classroom teachers)	$3,825	$6,164	+ 61	$2,526	$4,620
classroom teachers	$3,615[E]	$5,963	+ 65	$2,465	$4,400

Source: U. S. Department of Health, Education, and Welfare
E — estimated n.a. — not available

education

Ohio			Pennsylvania			West Virginia		
1954	1964	% Change	1954	1964	% Change	1954	1964	% Change
1,371	1,966	+ 43	1,623	2,110	+ 30	361	320	− 11
1,145	1,615	+ 41	1,268	1,558	+ 23	351	306	− 13
226	351	+ 55	355	552	+ 55	10	14	+ 40
3,563	3,764[a]	+ 6	6,248	5,170[a]	− 17	3,416	2,117[a]	− 38
2,926	3,058[a]	+ 5	5,209	3,881[a]	− 26	3,352	2,053[a]	− 39
637	706[a]	+ 11	1,039	1,289[a]	+ 24	64	64[a]	—
200	6[a]	− 97	1,431	118[a]	− 92	1,759	632[a]	− 64
374	701	+ 87	506	804	+ 59	104	136	+ 31
329	616	+ 87	431	655	+ 52	101	130	+ 29
45	85	+ 89	75	149	+ 99	3	6	+100
1,297	1,252[a]	− 3	1,538	1,370[a]	− 11	403	387[a]	− 4
1,139	1,092[a]	− 4	1,252	1,047[a]	− 16	382	365[a]	− 4
158	160[a]	+ 1	286	323[a]	+ 13	21	22[a]	+ 5
67[E]	123	+ 84	100[E]	155	+ 55	18[E]	24	+ 33
60	108	+ 80	81	125	+ 54	18	23	+ 28
n.a.	15	n.a.	n.a.	30	n.a.	n.a.	1	n.a.
61	101[E]	+ 66	74	113[E]	+ 53	16	18[E]	+ 13
53	89[E]	+ 68	62	92[E]	+ 48	16	18[E]	+ 13
8	12[E]	+ 50	12	21[E]	+ 75	[f]	[f]	—
35[E]	59	+ 69	40[E]	54	+ 35	9[E]	8	− 11
31	51	+ 65	33	42	+ 27	9	8	− 11
n.a.	8	n.a.	n.a.	12	n.a.	n.a.	[f]	n.a.
23[E]	37	+ 61	29[E]	49	+ 69	6[E]	10	+ 67
20	34	+ 70	25	43	+ 72	6	10	+ 67
n.a.	3	n.a.	n.a.	6	n.a.	n.a.	[f]	n.a.
126	242	+ 92	148	252	+ 70	20	39	+ 95
67	146	+118	26	66	+154	15	30	+100
59	96	+ 63	122	186	+ 52	5	9	+ 80
62	75	+ 21	115	129	+ 12	21	20	− 5
9	11	+ 22	16	16	—	10	10	—
53	64	+ 21	99	113	+ 14	11	10	− 9
16,917	29,982	+ 77	22,995	38,671	+ 68	3,195	5,296	+ 66
14,571	25,359	+ 74	19,529	32,929	+ 69	2,620	4,563	+ 74
2,012	4,031	+100	2,982	4,986	+ 67	565	716	+ 27
334	592	+ 77	484	756	+ 56	10	17	+ 70
$263	$530	+102	$273	$513	+ 88	$185	$316	+ 71
$254	$465	+ 83	$299	$479	+ 60	$186	$327	+ 76
$ 93	$ 83	− 11	$ 65[d]	$ 68[d]	+ 5	$ 49	$ 34	− 31
$ 8	$ 20	+150	$ 4	$ 28	+600	[e]	$ 4	—
$4,012	$6,100	+ 52	$4,074	$6,060	+ 49	$3,058	$4,800	+ 57
$3,886	$5,850	+ 51	$4,012	$5,908	+ 47	$2,969	$4,725	+ 59

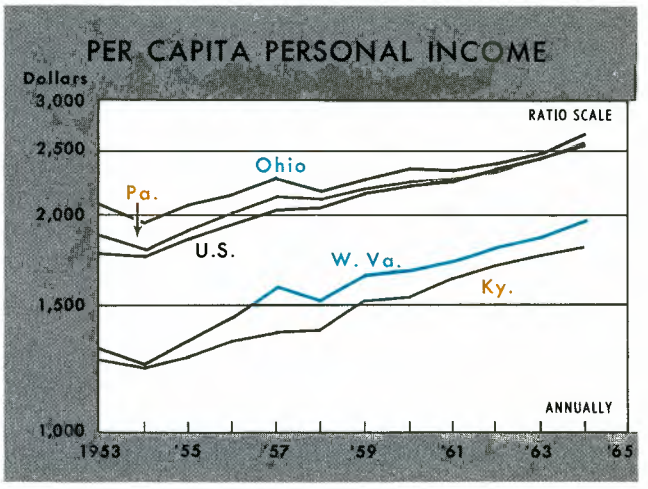
a) Latest data available are for 1962.
b) Includes librarians, principals, guidance counselors, and other supervisory personnel.
c) Does not include funds from short-term loans, bonds, and other long-term loans.
d) Includes outlays by nonschool agencies.
e) Less than $1.00.
f) Less than 1,000.
g) Less than plus or minus 0.5%.

supervisors whose salaries tend to be considerably higher than those of classroom teachers. The Fourth District states in 1964 included two of the more typical states, Ohio and Pennsylvania, with teachers' salaries averaging about $6,100, as compared with $4,000 in 1954; they also included two of the lower paying states, West Virginia and Kentucky, at $4,800 and $4,620, respectively. Another reason for the comparatively large increase in expenditures per pupil is that secondary enrollment, which usually involves higher costs of operation per student, has accounted for an increasing proportion of total enrollment.

In contrast to current expenses, capital outlays are made for additions to fixed assets such as land, plant, and equipment. These outlays are financed usually from bond issues or other types of borrowing and tend to fluctuate somewhat more widely than current expenditures. Capital outlays for the United States as a whole grew from $80 to $85 per pupil between 1954 and 1964. Comparable expenditures per pupil in Ohio and Pennsylvania also showed little change. In Kentucky, however, they increased substantially, but remained well below the national average. In West Virginia, capital outlays remained below the national average and showed a declining trend over the ten-year period. (Analysis of the data during the intervening years indicates that the terminal dates of 1954 and 1964 are representative of the period as a whole.)

The third major category of school expenditures is interest payments on funded and unfunded school debt. Between 1954 and 1964, interest payments per pupil more than tripled for the United States, reflecting increasing indebtedness of local school districts and state agencies, and a general rise in the level of interest rates. The four Fourth District states also experienced large increases in interest on school debt. Moreover, in view of the long-term financing necessitated by a high level of school construction, interest payments are expected to rise further and to account for an increasing proportion of school expenditures in ensuing years.

Higher Education. The number and variety of institutions of higher education in the United States have increased markedly during the past decade. Institutions of higher education cover a wide range of instruction. For example, a junior college offers the first two years of training at the college level, while a university usually offers full undergraduate programs in liberal arts, graduate courses leading to the doctorate, and courses



Source of data: U.S. Department of Commerce

preparing for entrance into various professions. Many other types of educational and technical institutions have developed recently in response to special needs.

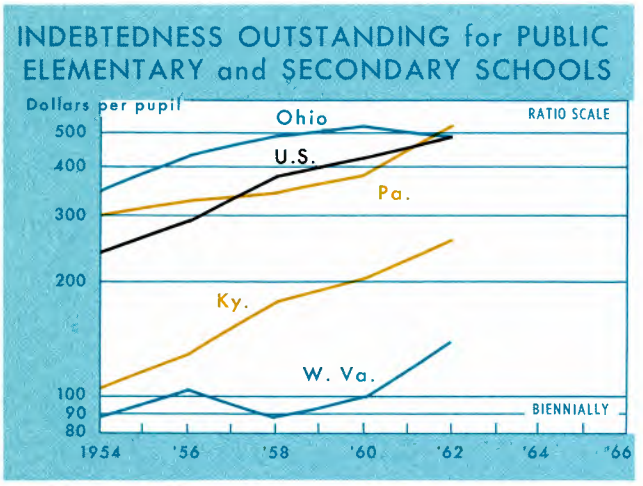
The enrollment in public colleges and universities has expanded much more rapidly in recent years than in private colleges. Thus, in 1964, enrollment in public institutions of higher education in the United States was about two-thirds of total enrollment. Only ten years earlier, in 1954, enrollment in private educational institutions was almost equal to that in the public institutions. (Data on higher education enrollment include all students in degree credit programs, as reported by the Department of Health, Education, and Welfare.) Although much of the growth in enrollment has occurred at existing colleges and universities and their branches, a number of new two- and four-year colleges have been established in response to rising needs.

Public colleges and universities in West Virginia now account for one-half of the institutions and over three-fourths of total enrollment in that State. In Pennsylvania, corresponding figures are about 12 percent of all institutions of higher education and 26 percent of enrollment. These two states have the largest and smallest proportions associated with public and private higher education in the Fourth District states. In Ohio, public colleges and universities account for almost 15 percent of all educational institutions beyond high school and for over one-half of total enrollment. While public educational institutions in Kentucky account for only 21 percent of all institutions of higher education, they include more than two-thirds of total enrollment.

On the inside back cover of this report is a map showing the location of four-year regionally accredited nonprofessional colleges and universities in the states of the Fourth District that offer a general course of instruction leading to a baccalaureate degree. These institutions vary widely in size and tend to be concentrated in large urban areas.

As would be expected from the large rise in enrollment, the number of college graduates has also increased substantially in the United States and in each of the Fourth District states (see center table). Kentucky had the largest relative increase in the number of students earning the bachelor's or first professional degree during the 1954-64 period, while Ohio experienced the largest percentage rise in graduate degrees.

Basic Economic Factors. Economic achievement is important in determining the ability of a state to maintain and/or expand education programs. The level of



Sources of data: U.S. Department of Health, Education, and Welfare and U.S. Department of Commerce

personal income is one measure of this ability. On a per capita basis, personal incomes in Ohio and Pennsylvania in 1964 were slightly higher than those for the United States as a whole. However, while per capita income in the United States increased by 44 percent between 1954-64, per capita income in Ohio increased by only 35 percent. The percent of increase in Pennsylvania was almost identical with that for the United States.

In Kentucky and West Virginia, per capita income in 1964 was about three-fourths that for the nation as a whole. Nevertheless, per capita income in those states increased faster than in the United States as a whole during the ten-year period; per capita income increased by 62 percent in West Virginia and by 50 percent in Kentucky.

In addition to income, another economic factor is the effort or willingness of the states to support education. Effort can be measured in two ways — by willingness to incur debt for school construction and by the relationship between spending on education and income.

As shown in an accompanying chart, the amount of debt outstanding for public elementary and secondary schools was approximately $500 per pupil in 1962 for the United States as a whole. School debt per pupil in Ohio was almost the same amount as that for the United States in 1962, while per pupil debt in Pennsylvania exceeded the national average by more than $30. In Kentucky and West Virginia debt was considerably lower, or $258 and $140, respectively. Outstanding school debt, even after adjustment for the rise in enrollment, more than doubled in the United States between 1954 and 1962. Kentucky, with an increase of 142 percent, was the only State in the Fourth District in which school debt per pupil increased more rapidly than the national average. School debt outstanding in Pennsylvania rose by three-fourths and in West Virginia by about three-fifths, while in Ohio it increased by about two-fifths.

In an accompanying table, spending on education as a percent of personal income, which is a second measure of effort, is shown for the states of the Fourth District and for the nation as a whole. Spending for public elementary and secondary schools includes current expenditures, capital outlays, and payments for interest. Spending on higher education, however, includes only current expenditures because funds for capital expenditures are more likely to be obtained from gifts, grants, and special building fund drives. It would not be appropriate to relate capital outlays of col-

leges and universities to the incomes of the states.

As shown in the table, each of the four states of the Fourth District spent a smaller percent of its income on education than did the United States as a whole, despite the fact that per pupil expenditures in Ohio and Pennsylvania are close to the national average (see center table). The smaller percent of income spent on education in both states reflects the fact that per capita income is well above the national median, and that spending for education absorbs progressively smaller increments of income as incomes rise. Of the four states, Ohio and West Virginia were closest to the United States in the percent of income spent on public elementary and secondary schools; in order of spending on higher education Pennsylvania was first, followed by Kentucky, West Virginia, and Ohio.

Concluding Comments. This survey of education in the four states of the Fourth Federal Reserve District indicates that progress has been made in meeting the needs of increasing numbers of students. The task, however, is by no means finished as demands for education in the years ahead will continue to grow. Although the Federal Government has become increasingly interested in improving education and educational opportunities, the funds appropriated so far are small compared with total expenditures on education. At the National Conference of State Governors in July 1965, the governors pledged their support for an interstate compact to improve the quantity and quality of education. Thus, the evidence mounts that government at all levels is aware that, if anticipated needs are to be met, not only a larger effort but also a more cooperative one is required.

SPENDING on EDUCATION as a PERCENT of PERSONAL INCOME

	PUBLIC ELEMENTARY and SECONDARY EDUCATION (1) (1963-1964)	HIGHER EDUCATION (PUBLIC and NONPUBLIC) (2) (1961-1962)	TOTAL
U.S.	4.60%	1.70%	6.30%
Ky.	3.77	1.42	5.19
Ohio	4.48	1.26	5.74
Pa.	3.76	1.50	5.26
W. Va.	4.37	1.37	5.74

(1) Spending includes current expenditures, capital outlays, and interest.
(2) Spending includes only current expenditures.

Sources of data: U.S. Department of Health, Education, and Welfare and U.S. Department of Commerce

comparative statement of condition

ASSETS	Dec. 31, 1965	Dec. 31, 1964
Gold Certificate Account	$1,027,788,063	$1,146,855,209
Redemption Fund for Federal Reserve Notes	147,919,600	137,794,660
Total Gold Certificate Reserves	1,175,707,663	1,284,649,869
Federal Reserve Notes of Other Banks	70,087,483	47,080,029
Other Cash	12,346,414	10,554,686
Discounts and Advances	3,790,000	22,730,000
U. S. Government Securities:		
Bills	772,221,000	505,161,000
Notes	2,106,682,000	2,105,047,000
Bonds	555,763,000	440,816,000
Total U. S. Government Securities	3,434,666,000	3,051,024,000
Total Loans and Securities	3,438,456,000	3,073,754,000
Cash Items in Process of Collection	586,241,928	616,036,242
Bank Premises	5,271,050	5,930,897
Other Assets	83,397,615	47,990,376
Total Assets	$5,371,508,153	$5,085,996,099
LIABILITIES		
Federal Reserve Notes	$3,232,281,011	$3,004,814,099
Deposits:		
Member Bank—Reserve Accounts	1,445,338,569	1,350,868,097
U. S. Treasurer—General Account	67,818,951	69,558,192
Foreign	13,500,000	20,020,000
Other Deposits	11,019,221	8,396,712
Total Deposits	1,537,676,741	1,448,843,001
Deferred Availability Cash Items	486,774,242	481,765,168
Other Liabilities	15,301,059	56,392,031
Total Liabilities	$5,272,033,053	$4,991,814,299
CAPITAL ACCOUNTS		
Capital Paid In	49,737,550	47,090,900
Surplus	49,737,550	47,090,900
Total Liabilities and Capital Accounts	$5,371,508,153	$5,085,996,099
Contingent Liability on Acceptances Purchased for Foreign Correspondents	$ 12,924,000	$ 11,174,800

comparison of earnings and expenses

	1965	1964
Total Current Earnings	$ 127,241,656	$ 110,642,402
Net Expenses	16,633,918	16,449,582
Current Net Earnings	110,607,738	94,192,820
Additions to Current Net Earnings:		
Profit on Sales of U. S. Government Securities (Net)	—0—	51,271
Profit on Foreign Exchange Transactions (Net)	83,349	13,545
All Other	99,191	26,569
Total Additions	182,540	91,385
Deductions from Current Net Earnings:		
Loss on Sales of U. S. Government Securities (Net)	862	—0—
All Other	46	3,991
Total Deductions	908	3,991
Net Additions	181,632	87,394
Net Earnings Before Payments to U. S. Treasury	110,789,370	94,280,214
Dividends	2,899,235	2,762,834
Payments to U. S. Treasury (Interest on F. R. Notes)	105,243,485	134,215,180
Transferred to Surplus	$ 2,646,650	$ –42,697,800

directors

(as of January 1, 1966)

Chairman

JOSEPH B. HALL . . . . . *Director, Former Chairman of the Board*
The Kroger Co. . . . . Cincinnati, Ohio

Deputy Chairman

LOGAN T. JOHNSTON . . . . . *Chairman of the Board*
Armco Steel Corporation . . . . . Middletown, Ohio

WALTER K. BAILEY . . . . . *Chairman of the Board*
The Warner & Swasey Company . . . . . Cleveland, Ohio

ALBERT G. CLAY . . . . . *President*
Clay Tobacco Company . . . . . Mt. Sterling, Kentucky

RICHARD R. HOLLINGTON . . . . . *President*
The Ohio Bank and Savings Company . . . . . Findlay, Ohio

DAVID A. MEEKER . . . . . *Chairman of the Board and Chief Executive Officer*
The Hobart Manufacturing Company . . . . . Troy, Ohio

EVERETT D. REESE . . . . . *Chairman of the Board*
The City National Bank & Trust Company of Columbus . . . . . Columbus, Ohio

SEWARD D. SCHOOLER . . . . . *President*
Coshocton National Bank . . . . . Coshocton, Ohio

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The Goodyear Tire & Rubber Company . . . . . Akron, Ohio

Member, Federal Advisory Council

LELAND A. STONER . . . . . *President*
The Ohio National Bank of Columbus . . . . . Columbus, Ohio

officers

(as of January 1, 1966)

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EDWARD A. FINK ..... *First Vice President*

GEORGE E. BOOTH, JR. ..... *Vice President and Cashier*

PAUL BREIDENBACH ..... *Vice President and General Counsel*

ROGER R. CLOUSE ..... *Vice President and Secretary*

PHILLIP B. DIDHAM ..... *Vice President*

ELMER F. FRICEK ..... *Vice President*

CLYDE HARRELL ..... *Vice President*

JOHN J. HOY ..... *Vice President*

HARRY W. HUNING ..... *Vice President*

FRED S. KELLY ..... *Vice President*

FRED O. KIEL ..... *Vice President*

MAURICE MANN ..... *Vice President and General Economist*

CLIFFORD G. MILLER ..... *Vice President*

ELFER B. MILLER ..... *General Auditor*

ADDISON T. CUTLER ..... *Assistant Vice President and Economist*

R. JOSEPH GINNANE ..... *Assistant Vice President*

WILLIAM H. HENDRICKS ..... *Assistant Vice President*

ROBERT G. HOOVER ..... *Assistant Vice President*

H. MILTON PUGH ..... *Chief Examiner*

OSCAR H. BEACH, JR. ..... *Assistant Cashier*

DONALD G. BENJAMIN ..... *Assistant Cashier*

ROBERT D. DUGGAN ..... *Assistant Cashier*

ANNE J. ERSTE ..... *Assistant Cashier*

THOMAS E. ORMISTON, JR. ..... *Assistant Cashier*

JAMES H. CAMPBELL ..... *Assistant General Auditor*

LESTER M. SELBY ..... *Assistant Secretary*

branch directors

(as of January 1, 1966)

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University of Cincinnati, Cincinnati, Ohio

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President
The Second National Bank and Trust Company of Lexington
Lexington, Kentucky

KROGER PETTENGILL
President
The First National Bank of Cincinnati
Cincinnati, Ohio

JOHN W. HUMPHREY
President
The Philip Carey Manufacturing Company
Cincinnati, Ohio

JAMES B. PUGH
President
The Security Central National Bank of Portsmouth
Portsmouth, Ohio

R. STANLEY LAING
President
The National Cash Register Company
Dayton, Ohio

BARNEY A. TUCKER
President
Burley-Belt Fertilizer Company
Lexington, Kentucky

OFFICERS

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Vice President

WALTER H. MacDONALD
Cashier

JOSEPH W. CROWLEY
Assistant Cashier

GEORGE W. HURST
Assistant Cashier

HOWARD E. TAYLOR
Assistant Cashier

and officers

PITTSBURGH BRANCH

DIRECTORS

Chairman

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Carnegie Institute of Technology, Pittsburgh, Pennsylvania

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President and Trust Officer
The Grove City National Bank
Grove City, Pennsylvania

S. L. DRUMM
President
West Penn Power Company
Greensburg, Pennsylvania

F. L. BYROM
President
Koppers Company, Inc.
Pittsburgh, Pennsylvania

ROBERT C. HAZLETT
President
Wheeling Dollar Savings & Trust Co.
Wheeling, West Virginia

ROBERT DICKEY III
President
Dravo Corporation
Pittsburgh, Pennsylvania

EDWIN H. KEEP
President
First National Bank of Meadville
Meadville, Pennsylvania

OFFICERS

CLYDE HARRELL
Vice President

ROY J. STEINBRINK
Cashier

J. ROBERT AUFDERHEIDE
Assistant Cashier

PAUL H. DORN
Assistant Cashier

CHARLES E. HOUPT
Assistant Cashier

four-year accredited nonprofessional schools in four fourth district states

KENTUCKY

College	Community	Map Code
Asbury College	Wilmore	F-3*
Bellarmine College	Louisville	F-2
Berea College	Berea	G-3*
Brescia College	Owensboro	F-1
Campbellsville College	Campbellsville	G-2
Catherine Spalding College	Louisville	F-2
Centre College of Kentucky	Danville	G-3
Cumberland College	Williamsburg	H-3*
Eastern Kentucky State College	Richmond	G-3*
Georgetown College	Georgetown	F-3*
Kentucky State College	Frankfort	F-3
Kentucky Wesleyan College	Owensboro	G-1
Morehead State College	Morehead	F-3*
Murray State College	Murray	H-1
Nazareth College of Kentucky	Nazareth	F-2
Pikeville College	Pikeville	G-4*
Transylvania College	Lexington	F-3*
Union College	Barbourville	H-3*
University of Kentucky	Lexington	F-3*
University of Louisville	Louisville	F-2
Ursuline College	Louisville	F-2
Villa Madonna College	Covington	E-3*
Western Kentucky State College	Bowling Green	G-2

OHIO

College	Community	Map Code
Antioch College	Yellow Springs	D-3*
Ashland College	Ashland	C-4*
Athenaeum of Ohio (The)	Cincinnati	E-3*
Baldwin-Wallace College	Berea	B-4*
Bluffton College	Bluffton	C-3*
Borromeo Seminary of Ohio	Wickliffe	B-4*
Bowling Green State University	Bowling Green	B-3*
Capital University	Columbus	D-4*
Case Institute of Technology	Cleveland	B-4*
Central State University	Wilberforce	D-3*
Cleveland State University (Fenn)	Cleveland	B-4*
College of Mt. St. Joseph-on-the-Ohio	Mt. St. Joseph	E-3*
College of St. Mary of the Springs	Columbus	D-4*
College of Steubenville (The)	Steubenville	C-5*
College of Wooster	Wooster	C-4*
Defiance College (The)	Defiance	B-3*
Denison University	Granville	D-4*
Findlay College	Findlay	B-3*
Hebrew Union College	Cincinnati	E-3*
Heidelberg College	Tiffin	B-3*
Hiram College	Hiram	B-4*
John Carroll University	Cleveland	B-4*
Kent State University	Kent	B-4*
Kenyon College	Gambier	C-4*
Lake Erie College	Painesville	A-4*
Malone College	Canton	C-4*
Marietta College	Marietta	D-4*
Mary Manse College	Toledo	B-3*
Miami University	Oxford	D-3*
Mount Union College	Alliance	B-4*
Muskingum College	New Concord	D-4*
Notre Dame College	Cleveland	B-4*
Oberlin College	Oberlin	B-4*
Ohio Northern University	Ada	C-3*
Ohio State University (The)	Columbus	D-3*
Ohio University	Athens	D-4*
Ohio Wesleyan University	Delaware	C-3*
Otterbein College	Westerville	D-4*
Our Lady of Cincinnati College	Cincinnati	E-3*
St. John College of Cleveland	Cleveland	B-4*
University of Akron (The)	Akron	B-4*
University of Cincinnati	Cincinnati	E-3*
University of Dayton	Dayton	D-3*
University of Toledo	Toledo	B-3*
Ursuline College	Cleveland	B-4*
Western College for Women	Oxford	D-3*
Western Reserve University	Cleveland	B-4*
Wilberforce University	Wilberforce	D-3*
Wilmington College	Wilmington	D-3*
Wittenberg University	Springfield	D-3*
Xavier University	Cincinnati	E-3*
Youngstown University (The)	Youngstown	B-5*

PENNSYLVANIA

College	Community	Map Code
Academy of the New Church	Bryn Athyn	C-7
Albright College	Reading	C-7
Allegheny College	Meadville	A-5*
Alliance College	Cambridge Springs	A-5*
Beaver College	Glenside	C-7
Bloomsburg State College	Bloomsburg	B-6
Bryn Mawr College	Bryn Mawr	C-7
Bucknell University	Lewisburg	B-6
California State College	California	C-5*
Carnegie Institute of Technology	Pittsburgh	C-5*
Cedar Crest College	Allentown	B-7
Chatham College	Pittsburgh	C-5*
Chestnut Hill College	Philadelphia	C-7
Cheyney State College	Cheyney	C-7
Clarion State College	Clarion	B-5*
College Misericordia	Dallas	B-7
Dickinson College	Carlisle	C-6
Drexel Institute of Technology	Philadelphia	C-7
Duquesne University	Pittsburgh	C-5*
East Stroudsburg State College	East Stroudsburg	B-7
Eastern Baptist College	St. Davids	C-7
Edinboro State College	Edinboro	A-5*
Elizabethtown College	Elizabethtown	C-6
Franklin and Marshall College	Lancaster	C-7
Gannon College	Erie	A-5*
Geneva College	Beaver Falls	C-5*
Gettysburg College	Gettysburg	D-6
Grove City College	Grove City	B-5*
Gwynedd-Mercy College	Gwynedd Valley	C-7
Haverford College	Haverford	C-7
Holy Family College	Philadelphia	C-7
Immaculata College	Immaculata	C-7
Indiana State College	Indiana	C-5*
Juniata College	Huntingdon	C-6
King's College	Wilkes-Barre	B-7
Kutztown State College	Kutztown	C-7
Lafayette College	Easton	B-7
La Salle College	Philadelphia	C-7
Lebanon Valley College	Annville	C-6
Lehigh University	Bethlehem	B-7
Lincoln University	Lincoln University	D-7
Lock Haven State College	Lock Haven	B-6
Lycoming College	Williamsport	B-6
Mansfield State College	Mansfield	A-6
Mary Immaculate Seminary	Northampton	B-7
Marywood College	Scranton	A-7
Mercyhurst College	Erie	A-5*
Messiah College	Grantham	C-6
Millersville State College	Millersville	C-7
Moore College of Art	Philadelphia	C-7
Moravian College	Bethlehem	B-7
Mount Mercy College	Pittsburgh	C-5*
Muhlenburg College	Allentown	C-7
Pennsylvania Military College	Chester	C-7
Pennsylvania State University (The)	University Park	B-6
Philadelphia College of Art	Philadelphia	C-7
Rosemont College	Rosemont	C-7
St. Francis College	Loretto	C-5
St. Joseph's College	Philadelphia	C-7
St. Vincent College	Latrobe	C-5*
Seton Hill College	Greensburg	C-5*
Shippensburg State College	Shippensburg	C-6
Slippery Rock State College	Slippery Rock	B-5*
Susquehanna University	Selinsgrove	B-6
Swarthmore College	Swarthmore	C-7
Temple University	Philadelphia	C-7
Thiel College	Greenville	B-5*
University of Pennsylvania	Philadelphia	C-7
University of Pittsburgh	Pittsburgh	C-5*
University of Scranton	Scranton	A-7
Ursinus College	Collegeville	C-7
Villa Maria College	Erie	A-5*
Villanova University	Villanova	C-7
Washington and Jefferson College	Washington	C-5*
Waynesburg College	Waynesburg	D-5*
West Chester State College	West Chester	C-7
Westminster College	New Wilmington	B-5*
Wilkes College	Wilkes-Barre	B-7
Wilson College	Chambersburg	C-6

WEST VIRGINIA

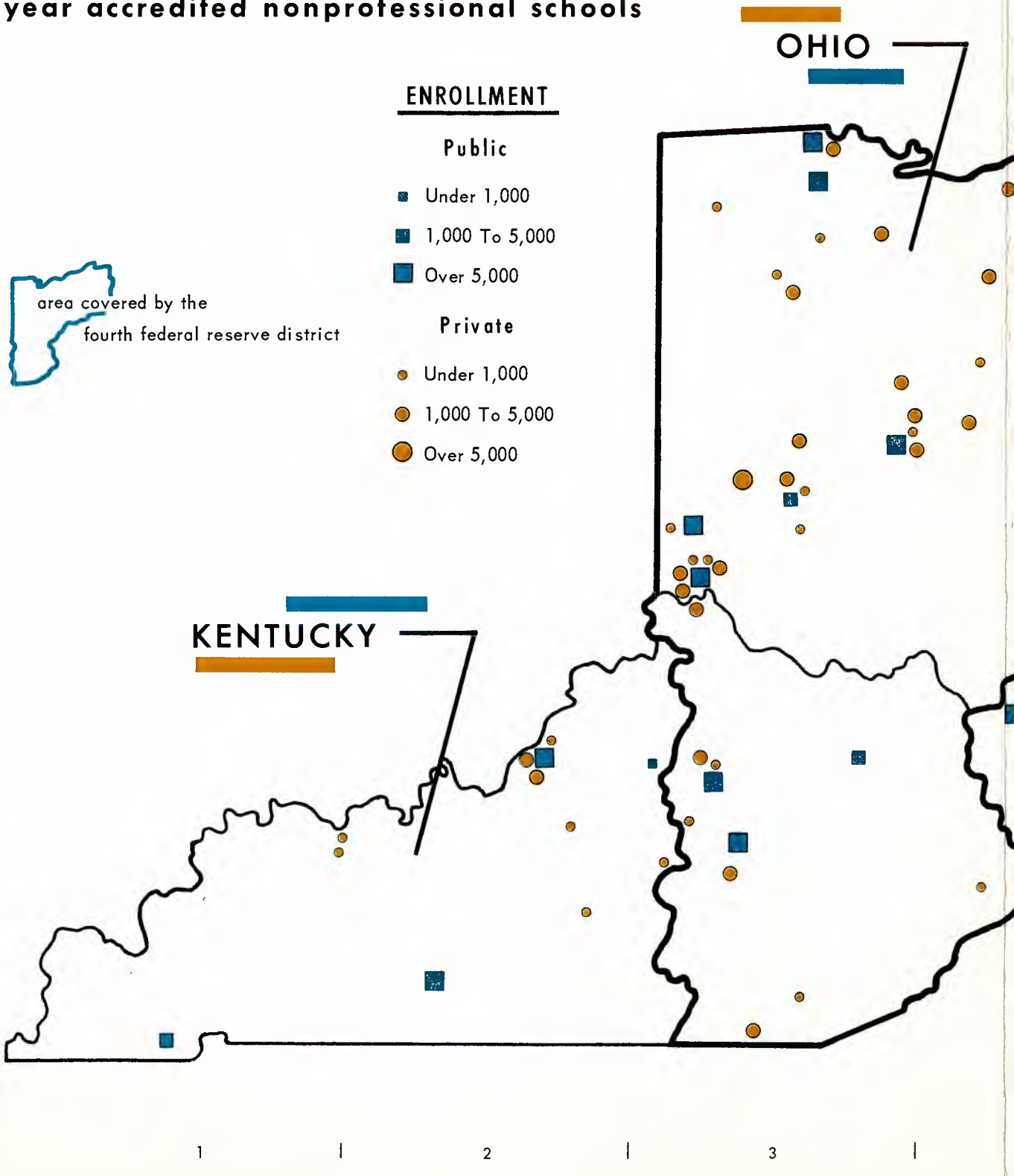
College	Community	Map Code
Alderson-Broaddus College	Philippi	E-5
Bethany College	Bethany	C-5*
Bluefield State College	Bluefield	G-4
Concord College	Athens	G-4
Davis and Elkins College	Elkins	E-5
Fairmont State College	Fairmont	D-5
Glenville State College	Glenville	E-4
Marshall University	Huntington	F-4
Morris Harvey College	Charleston	F-4
Salem College	Salem	D-5
Shepherd College	Shepherdstown	D-6
West Liberty State College	West Liberty	C-5*
West Virginia Institute of Technology	Montgomery	F-4
West Virginia State College	Institute	F-4
West Virginia University	Morgantown	D-5
West Virginia Wesleyan College	Buckhannon	E-5
Wheeling College	Wheeling	C-5*

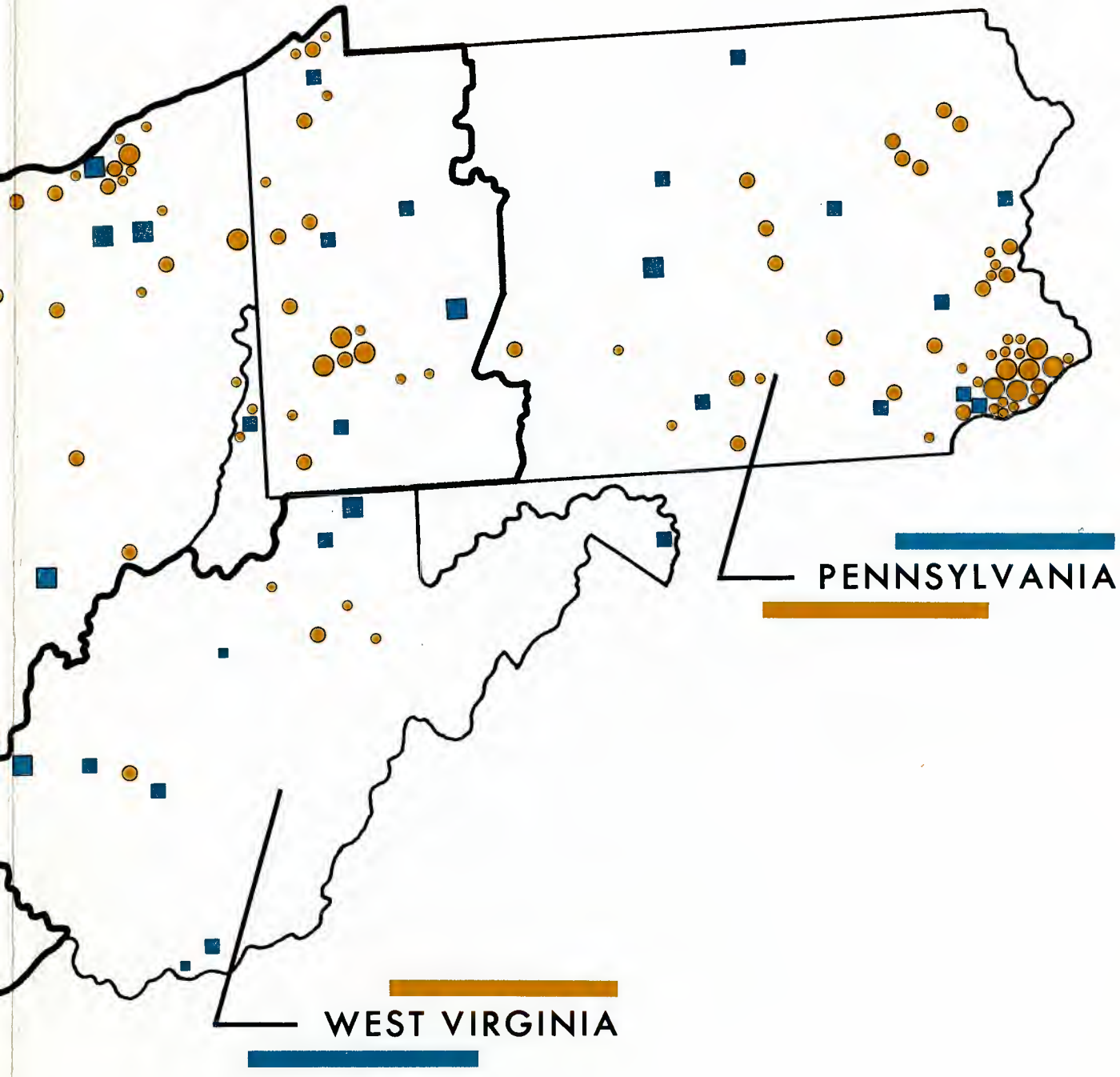
*Located in the Fourth Federal Reserve District.

institutions of higher education

in four fourth district states

four-year accredited nonprofessional schools





A
B
C
D
E
F
G
H

4 5 6 7

Source of data: U.S. Department of Health, Education, and Welfare (information as of academic year 1964-65)

Fourth Federal Reserve District