

COMPARATIVE STATE TAX SUPPORT OF HIGHER EDUCATION  
IN THE EAST NORTH CENTRAL REGION: INDIANA  
AND FOUR NEIGHBORING STATES

M. M. Chambers

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## PREFACE

It is fascinating to compare Indiana, Illinois, Ohio, Michigan and Wisconsin as to their state tax support of higher education, and to observe various other features of the condition of higher learning in those states.

The fifty state legislatures may continue for some time to be the most productive single source of operating income for the whole of the nationwide complex of institutions offering instruction above the high school. For the fiscal year 1981 their aggregate appropriations for that purpose were nearly \$21 billion.

During the 1970's continued progress was made toward wider access to choices and opportunities for people of all social and economic classes. Odious discrimination on grounds of age, sex, race, religion, national origins, physical handicaps, and financial deprivation all tended to be reduced, albeit not as rapidly as some of the disadvantaged persons properly hoped.

It is clear that the positive aim of "more and better higher education for more people" is an essential of the American tradition. It will inevitably overcome the darker mood of defeatism and cynicism that gained some unwarranted prominence in recent years.

Normal, Illinois  
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Synopsis

One of the merits of the federal form of government in the United States is that each of the fifty state constitutions makes the state legislature the residual receptacle of power in matters within the jurisdiction of the state. While the state governments may casually seem to be much alike, there is immense diversity. This provides opportunity for observation and comparison of different policies and practices.

Rankings and Priorities

Applying a few statistical measures to the current state tax support of higher education in the five East North Central states produces consistent showings of the standing of each state among the five, and also its ranking among the fifty states of the entire nation.

On a majority of the scales, the ranking of the five states among themselves is: first, Wisconsin; second, Michigan; third, Illinois; fourth, Indiana; fifth, Ohio.

These standings turned up consistently, with some exceptions explainable by unique features of the statewide systems of higher education, in tables of (1) appropriations per capita of state tax funds for annual operating expenses of all higher education, (2) use of the state tax potential based on average rates of each major type of tax, and (3) the ratio of combined state and local taxes collected to personal incomes.

On the third test just mentioned, Wisconsin comes out with state and local taxes collected being 13.7 percent of personal incomes. This ranks ninth among the fifty states and first among the five. Michigan, at 12.4 percent, is eighteenth among the fifty and second among the five. Illinois, at 11.2, is thirty-third in the nation and third in the region. Indiana and Ohio, both at 9.8 percent, vie for forty-ninth and fiftieth places in the nation and fourth and fifth in the region. The average among the fifty states is 12 percent.

The spread among the fifty states. Among the various tests, Wisconsin is often first among the five and in or near the top quartile among the fifty states. Michigan is often second among five and very near the median of the national scale. Illinois is usually third in the region and almost always below the median nationally. Indiana is generally fourth, with Ohio trailing as a poor fifth. Both are often low nationally.

Appropriations per capita for annual operating expenses of all higher education provide a beginning simple clue to the relative adequacy of the state's support. As of recently available statistics, these figures appear to be \$100.15 in Wisconsin, \$87.97 in Michigan, \$78.00 in Illinois, \$76.52 in Indiana, and \$62.26 in Ohio. On the same scale, the national average is 87.48. The five states, in the order named, rank respectively among the fifty states as seventeenth, twenty-fourth, thirty-third, thirty-sixth, and forty-fifth.

The average direct state tax cost of all higher education in Ohio for each man, woman and child in the state was \$62.26; and \$100.15 in Wisconsin, with Indiana, Illinois and Michigan ranging between. Michigan

was practically at the national average; Illinois, Indiana and Ohio substantially below it.

Appropriations per \$1,000 of personal income. On this yardstick the five states arrange themselves in similar order. State tax dollars appropriated per one thousand dollars of personal income are in Wisconsin, 13.30; in Michigan, 10.37; in Indiana, 9.93; in Illinois, 8.76; in Ohio, 7.93.

The rankings of the five states among the fifty are: Wisconsin, sixteenth; Michigan, thirty-fifth; Indiana, thirty-seventh; Illinois, forty-second; Ohio, forty-sixth. Two differences are evident from their standings on the preceding scale of appropriations per capita: Indiana displaces Illinois in third place among the five states, and Illinois descends to what was Indiana's fourth place. On the scale of fifty states, Wisconsin rises from seventeenth place to sixteenth, but all four of the other states take lower places than before. In fact, all four are below the national average, with Wisconsin only barely above it.

Enrollments and percentages public and private. Early in any comparison of states it is necessary to note what percentage of all students is enrolled in public vis-a-vis private institutions of higher education. Private colleges in most states get relatively little state tax support other than exemption from property taxes and indirect support through state scholarship systems which are generally regulated so that about three-fourths of the money involved winds up in private college coffers. A few are exclusively for students in private colleges. A wide disparity among the states in proportionate enrollments in public and

private colleges would tend to invalidate the kinds of comparisons inspected in the foregoing paragraphs.

Fortunately this is not a dominating factor in the East North Central states. The percentage of all students in public institutions is close to the national average in all five. It ranges from 76 percent in Indiana to 87 in Michigan and Wisconsin, with Illinois at 77 and Ohio at 78, which is the national average. The differences may be regarded as marginal and not of sufficient magnitude to necessitate a diversion from the concept of statewide higher education as a whole.

Appropriations per headcount student. Adhering to the whole-state concept, one finds that the macro-statistic derived by dividing total headcount enrollment into total appropriations of state tax funds for annual operating expenses varies from \$1423 annually in Illinois to \$1921 in Wisconsin, with Indiana at \$1827, Michigan at \$1678, and Ohio at \$1478.

The relatively high place of Indiana may be partly explained by the fact that among the five states Indiana has the smallest percentage of its total population engaged as students in higher education (4.167 percent), and the smallest percentage of its students enrolled in two-year institutions (11.1 percent), and with only a negligible percentage of these latter in colleges receiving any local tax support for operating expenses.

On the other hand, the relatively low position of Illinois may be in part due to the fact that it has 53.5 percent of all its students in two-year colleges which get nearly half of their annual tax support not

from state appropriations, but from local taxing subdivisions. Somewhat similar facts may account for Michigan's descent to third place in the ranking of the five states according to overall state tax-fund appropriations per headcount student.

Ratio of all students to total population varies from 4.2 percent in Indiana to 5.5 percent in Illinois. In Ohio it is 4.2; in Wisconsin 5.2; in Michigan 5.2. The national weighted average is 5.1; the weighted average for the five East North Central states is 4.9 percent.

Indiana has 14 percent more people than Wisconsin, but 8 percent fewer students in higher education. Illinois has 5 percent more people than Ohio, but 36 percent more students.

These are significant indicators of how higher education (and in fact all education) is progressing in the respective states.

Comparative use of state and local tax potential. Against the hypothetical standard of levying each of the principal state and local taxes at the current average rate for that type of tax, only Wisconsin is found to be exceeding that potential, and only by a small margin. Wisconsin in 1978 had total state and local revenue collections 109.3 percent of that standard. The other four states were short of it: Michigan reached 96.7 percent; Illinois 90.0; Indiana 78.3; Ohio 75.5—only three-fourths of the revenue that could be had by levying taxes at average current rates.

These figures were developed by Professor Kenneth E. Quindry of the College of Business Administration at the University of Tennessee, who has studied and reported on the subject for many years. He is

senior author of State and Local Tax Performance, 1978, published in 1980 by the Southern Regional Education Board, 130 Sixth Street, N.W., Atlanta, GA 30313 (147 pp.).

Priority of higher education among state services. Practical politicians and others often view the state bureaucracy as a dozen or more major departments plus scores of minor agencies, all fighting tooth-and-nail for larger appropriations from the legislature to support their annual operating expenses. Hence there is much argument as to the priority ratings each deserves.

A partial clue to the status quo is the percentage of total tax collections appropriated to each service. Matching state tax collections (not state and local combined), with state appropriations for all higher education, it turns out that Indiana and Ohio are at the top of the list, with 14.36 percent and 13.03 percent of state tax collections going to higher education; with the other three states following: Wisconsin, 12.93; Illinois, 12.82; Michigan, 11.96. The national average is 13.42 percent. This may be explained in large part by the fact that Indiana and Ohio have conspicuously the least productive state revenue systems in the region (Section XII, pages 128-143), combined with good midwestern respect for the value of higher education.

Expanded and improved higher education is the key to better schooling at all levels from preschool through postdoctoral studies; to the upgrading of the national way of life, cultural and vocational; to increasing productivity in agriculture and industry; to technological advances and ethical inspirations now only dimly dreamed of.

Recognition of these potentials will raise the priority rating of universal higher education. (Section II, pages 27-34.)

### The Panorama of the Institutions

It would be rash to rely on statewide macro-statistics alone without at least a sketchy examination of the anatomy and operation of the some 265 institutions of public higher education in the region. The campus as an academic community of students and teachers is the crucial operating unit, whether it is "free-standing" or is administratively tied to a multi-campus university or to some other type of consolidated system of governance or coordination.

Convenient categories of the campuses are treated separately in the five sections of the discourse which follow.

The seven flagship state universities: two each in Indiana and Michigan, and one each in Illinois, Ohio, and Wisconsin, have obvious pre-eminence, statewide, nationwide, and internationally. Not only is the region one of the most fertile agricultural spots on the globe; it is also rich in this cluster among the world's greatest state universities.

One of the foremost imperatives for the immediate and continuing future is that these topmost universities of the region be given the earned esteem of the people of these states, and enabled to carry forward their ongoing advancement of the uppermost reaches of instruction, research, and public service.

Ten other large state universities, mostly urban, are indispensable allies in the trend toward higher educational opportunities and

choices for all Americans. These, too, tend to become comprehensive and cosmopolitan, leavening in multiple ways the life of their respective habitats.

They open up vistas of improvement in one or more large metropolitan environments in each state; of the increasing complexity of the economy and of the society; of redoubled needs for technological know-how; for skills in the social sciences; for growing sensitivity to ethics; for solicitude for personal integrity—all of which are fostered on university campuses.

Multi-purpose state universities having normal school antecedents.

Each of the five states has its complement of medium-echelon multi-purpose state universities developed from former normal schools since World War Two (with a few exceptions). There are twenty-five of them, ranging in enrollment from 2,500 to near 25,000. Half of them range from 15,000 upward. Some had long histories before emerging from the normal school chrysalis. All have made important contributions to the advancement of education at all levels, in both of their successive incarnations.

Several now offer doctoral degrees in some departments. The leading former normal schools and teachers colleges are now not only respectable and popular state universities, but have expansive futures of broadening service. The name of normal school has disappeared from the dictionary and vanished from the map.

Other state universities and colleges, mostly of more recent establishment and at somewhat earlier stages of development, form another species of "growing edge." They number 23—nearly equal to the number of

former normal schools and teachers colleges—but they are a more diverse group, in general somewhat younger and smaller.

They are accredited, permanently established, performing their missions well, and alert to improve. Hardly a handful carry the name "state college," nearly all having been renamed "state University" after meriting the change. Here, as in other parts of the country, the tripartite or three-segment styling of the public sector of higher education has virtually been compressed into two segments: (1) universities, and (2) two-year colleges. For example, that is also the case in Florida, the eighth most populous state, as well as in Wyoming, the least populous state.

Two hundred two-year colleges in the region. Both Illinois and Michigan have nearly inclusive networks of local public state-aided comprehensive community colleges.

Ohio has only a few of these, with larger numbers of two-year university branch campuses on the one hand and, on the other, technical institutes limited exclusively to occupational programs.

Wisconsin has some fourteen two-year university branches, now known as the system of university centers, coexisting with more than twice that number of Vocational-Technical and Adult Schools, of which only a few of the older and larger as yet offer additional studies acceptable for transfer of credits to universities.

Indiana has the unique 180-year-old Vincennes University, which is now actually a local public state-aided community college—the only one in the state. Of more recent origin is a system of thirteen

vocational technical institutes organized under a statewide public corporation known as the Indiana Vocational-Technical College (Ivy Tech). Two of the regional campuses of Indiana University and Purdue University (at Richmond, Indiana University East; and at Westville, Purdue University North Central) have not yet "grown up" to four- and five-year degree-granting status.

The merits of the comprehensive community college, offering liberal and vocational instruction, include "open door" admissions, low fees (in California, no tuition fees), the opportunity to choose either liberal or vocational studies or both, within commuting distance from every citizen's home insofar as practicable, permitting students to live at home and avoid the expense of travel and separate maintenance.

Such a college is of optimum benefit to students who would not otherwise be able to attend any college; but it also attracts many local people of financial means and of above-average intellectual capacity and educational backgrounds.

Graduate, graduate professional, doctoral, and postdoctoral learning. It is appropriate that the work of the university graduate schools be discussed immediately following the discourse on the two-year colleges, because when the inevitable next spurt of expansion and development in all higher education occurs, these two will be the most rapidly growing elements.

Doctoral and postdoctoral education could be called the capstone, implying a solid terminality; but the better metaphor is the spear-point, implying sharpness and forward movement into new realms of knowledge,

dispelling ignorance, prejudice, superstition and myth along the way. The graduate schools are the ultimate elevators of the quality of teachers for all schooling at all levels, as well as leaders in science, technology, business administration, and a hundred other professions and occupations.

Some types of pre-doctoral instruction and research are provided at a cost to the university of as much as ten times the unit cost of instructing undergraduates; but the long-term gains to the state and to the whole society are more than worth the tax cost, which is often fully recouped in the form of additional income taxes paid by the graduate on increased income earned over a long working lifetime.

#### Statewide Structures of Governance or Coordination

In the Michigan state constitution is the historic principle of constitutional autonomy, under which the Regents of the University of Michigan are a "fourth coordinate arm of the state," having exclusive control of the academic and fiscal affairs of the University. This principle was first placed in the constitution of 1850, which was amended in 1911 and 1959 to give similar independence to the Trustees of Michigan State University and the Governors of Wayne State University.

In the wholly new constitution of 1963 it was reaffirmed and extended to all governing boards of state universities or colleges then existing and such others as might be established in the future. Many times over more than a century it has been sustained by the Michigan supreme court. It is not unique to Michigan, but also is in the constitutions of a dozen other states, prominent among which are Minnesota and

California, each having one of the most renowned state universities in the nation.

Among the East North Central states, only four—Wisconsin, Illinois, Indiana, and Ohio—have statewide governing or coordinating boards for higher education.

Wisconsin's statewide governing board. In 1973 a legislative act for the reorganization of public higher education in Wisconsin took effect, placing all state universities and university centers (the latter are two-year branch campuses formerly known as extension centers) under the direct authority of one statewide board—the Regents of the University of Wisconsin System—with full powers of governance.

This board supplanted the former Regents of the University of Wisconsin (governing the institution at Madison and its system of extension centers and its branch campus at Milwaukee); the former Regents of the State Universities (formerly the Normal School Board); and a statewide coordinating board with limited powers, which had functioned for about a dozen years.

The years following the consolidation of 1973 were difficult ones for several reasons: the shock of such a massive reorganization, considerable harassment and repressive tactics by a wrong-headed governor of the state, and others.

Wisconsin and Michigan are at opposite poles in the matter of state-level structure: Michigan has neither a statewide governing board nor a coordinating board with any duty other than advisory; while Wisconsin is an example of the most completely centralized governance of higher

education to be found anywhere. One exception: Wisconsin's historic system of Vocational-Technical and Adult Schools is not under control of the Regents of the University of Wisconsin System, but continues under the oversight of the State Board for Vocational Education.

Coordinating boards in Illinois, Ohio, and Indiana. None of these three states has a consolidated statewide governing board. Each has a coordinating board with limited powers, in general including review of institutional budget requests (with power only to recommend); approval or disapproval of plans for new colleges, schools, or degree programs (subject to the authority of the legislature).

Sometimes these boards are charged ad hoc by the legislature with monitoring both the academic and business management of all the institutions, and with inventing and implementing supposedly beneficial changes in any and all institutional management processes. This is usurpation of the duties of institutional governing boards. Moreover, it is virtually impossible of accomplishment in a populous state without the addition of a numerous and well-paid staff equipped with generous travel allowances for the purpose. This is usually not provided for, with the result that the legislative bark is much worse than its bite.

The coordinating boards and their staffs. Looking at the three statewide coordinating boards, it appears that the total staff is 15 persons in Indiana, 45 in Illinois, and 64 in Ohio; with total salaries aggregating \$429,000, \$1,035,000, and \$1,514,000. Overall total operating expenses of the boards in these three states are respectively \$788,000, \$1,441,000, and \$2,404,000;—amounting to approximately 0.2

percent, 0.2 percent, and 0.4 percent of the total state appropriation for operating expenses of all higher education. The salaries of the chief executive officer of the coordinating board staff in each state are clustered closely around \$65,000 a year. Roughly two-thirds, one-half, and one-third of the staff are reported as receiving salaries of \$20,000 or more.

### State Tax Systems

On the basis of state and local taxes collected per capita for the year 1978 as a percentage of personal incomes, Wisconsin shows 13.7 percent, Michigan 12.4, Illinois 11.2, Indiana 9.8, and Ohio 9.8. When ranked among the fifty states on that basis, Wisconsin is ninth, Michigan eighteenth, Illinois thirty-third, Indiana forty-ninth, and Ohio fiftieth. The ranks of the five states among themselves alone are obviously the same as disclosed in several other tests and reported in the early paragraphs of this synopsis.

State income taxes in the five states. Confining attention here, for the sake of brevity, to personal income taxes: three of the states levy only flat rates—Indiana 1.9 percent, Illinois 2.5 percent, and Michigan 4.6 percent. Ohio's graduated levy of 0.5 to 3.5 percent seems ridiculously low. Wisconsin's graduated tax of 3.5 percent to 10 percent appears better from the standpoints of equity and productivity.

All state tax systems are complicated. They are often quickly and intimately affected by changes in economic conditions. Most types of taxes tend to be regressive—to bear more heavily upon low and middle-income taxpayers than upon the well-to-do. Continuous observation of all

these matters is essential.

### The Gains Over Two Decades.

Records of state tax-fund appropriations for annual operating expenses of all higher education in each of the fifty states, circulated annually for the past twenty years by the National Association of State Universities and Land-Grant Colleges, provide a source for calculating and comparing the ten-year percentages of gain for the decades 1960-1970 and 1970-80.

Briefly, the record shows that for the decade of the 1960s the ten-year rates of gain were: Ohio 453 percent, Illinois 348 percent, Wisconsin 338, Indiana 239, Michigan 219. This gave the five states the following standings among fifty states on this scale: Ohio twelfth, Illinois twenty-first, Wisconsin twenty-third, Indiana thirty-third, and Michigan thirty-seventh.

Now for the 1970s the ten-year percentages of gain were respectively 179, 116, 183, 166, and 165—all conspicuously lower than in the preceding decade, as would be expected; and all were well below the median among the fifty states. But this is not the main point, which is that the East North Central states rankings among the fifty states on this scale show indisputably that these five states lost momentum and lost some of their former pre-eminence to other states, as far as rates of gain in state tax support of higher education were concerned.

A vernacular interpretation is that the Sun Belt states in general gained faster than the Frost Belt states, especially those in the north-eastern quadrant of the nation.

### Condensed Recommendations

The foremost imperative for all concerned with higher education (and this is everybody) is to cast off the mood of gloom and projection of disaster that characterized the whole of the 1970s. The period of temporary economic uncertainty will not continue forever. Instead of hysterically crying "Wolf!" the call is to take a thoughtful and positive attitude, to resume the reasonable optimism that has always been the essence of American life.

The shortcomings of the present and of the past can be overcome or minimized, but not by a mood of despair or cynicism.

Appraise the achievements of past years fairly and recognize that they are no final summit, but only a good beginning for further advances. The pendulum swings upward, eventually if not immediately.

Regarding the two-year colleges. Each state that does not have a well-established statewide network of local public comprehensive community colleges should consider the necessary steps to accomplish that result; not hastily and by some mandated drastic reorganization, or the abolition or consolidation of any existing institutions, but by formulating and enacting a policy of the state, under which within perhaps three to ten years a solid beginning can be made toward blanketing the state with such a network in such manner that insofar as practicable a comprehensive community college will be within twenty miles from the home of every resident of the state.

This is the means by which opportunities and choices for liberal, general, vocational and technical schooling for two years beyond the high

school can become within the reach of all. It is the broad base of the pyramid of higher education. Without it, millions of people will continue unable to attend any college at all.

This recommendation applies to all of the East North Central states, but especially to Indiana, Ohio, and Wisconsin, each of which has only few two-year colleges performing the functions of the comprehensive community college; and each of which has a considerable number of public two-year institutions without any programs other than the strictly vocational or technical; and each of which has lesser or greater numbers of university branch campuses offering only college parallel studies of duration of two years but less than the baccalaureate.

None of these varied types of institutions should be dismantled; but ultimately means should be found to convert them gradually to two-year comprehensive community colleges (unless the future demand proves sufficiently strong to bring them up to the baccalaureate level). The goal is a statewide system of basic colleges wherein all students will form a local academic community on the same campus, with choice of studies, insofar as practicable, including liberal or vocational or both; not a system of fractionated schools, some exclusively vocational and others exclusively liberal, with the unavoidable implication of social class divisiveness because they are separate and segregated, each offering only closely restricted choices, resulting in a great deal of limitation of opportunity for all students in the state.

Michigan and Illinois exemplify the statewide network of comprehensive local public community colleges. Both merit being regarded as

models in that respect. Both will need to take measures to improve the accessibility of their community colleges to more residents of the state; and to update their systems to keep abreast of economic and social changes in future decades.

Accessibility, freedom of choice, and breadth of opportunity translate into economic and social gains for the states and the nation.

I

FIRST COMPARISONS

In their tax support of higher education proportionate to their population, their aggregate of personal incomes, and three other simple measures, the five East North Central states can be ranked in descending order: one, Wisconsin; two, Michigan; three, Illinois; four, Indiana; five, Ohio.

# I

## FIRST COMPARISONS

Comparisons are odious. This is because they must usually be in part subjective or judgmental, and may become prejudiced by the observer's blind spots. Except for the simple weighing or measuring of commodities on standard scales, and the fixing of monetary values in terms of currencies and credit, there is little else in human experience that can be quantified with any close approach to exact precision.

Progress goes on in the science of statistics, but the stage has not been reached wherein all available figures, manipulated in all conceivable ways, can be guaranteed to produce "the truth, the whole truth, and nothing but the truth." All numerical appraisals contain disputable elements. For practical purposes they are often useful, but their reliability ought not to be exaggerated. They ought to be arrived at with care and interpreted with restraint not to overstate, understate, or misconstrue their meaning.

The five states: Indiana, Ohio, Michigan, Illinois and Wisconsin, all have records of a century or more of state support of universities and colleges. Is it possible to detect substantial differences among them as to the relative adequacy of their support of higher education? A similar question is "How does Indiana fare among the four East North Central states surrounding it?"

### State Appropriations Per Capita

The simplest clue comes from discovery of the ratio between each state's total population and its total appropriation of net state tax funds for annual operating expenses of higher education for the current fiscal year.

This discloses that the sums appropriated per capita vary from \$62.26 in Ohio to \$100.15 in Wisconsin. This measure ranks the five states in the following descending order: Wisconsin, Michigan, Illinois, Indiana, and Ohio. The figures are exhibited in Table 1.

Table 1. State Appropriations Per Capita

States (1)	Dollars per capita (2)	Rank among 5 states (3)	Rank among 50 states (4)
WI	100.15	1	17
MI	87.97	2	24
IL	78.00	3	33
IN	76.52	4	36
OH	62.26	5	45
Fifty-state average		87.48	

2	1
4	3
6	5
8	7
10	9
12	11
14	13
16	15
18	17
20	19
22	21
24	23
26	25
28	27
30	29
32	31
34	33
36	35
38	37
40	39
42	41
44	43
46	45
48	47
50	49

Source: Chronicle of Higher Education,  
October 9, 1979, p. 9.

The same tabulation also reveals that the five states, when placed on a scale of all fifty states by the same measure, continue in the same order, but range among the fifty states from forty-fifth place to seventeenth place, with only Wisconsin somewhat above the median, Michigan practically at the median, and the other three states at varying distances below the median. Ohio, for example, appropriates less per capita than any of forty-four other states. Indiana appropriates less per capita than any of thirty-five other states.

State Tax-Fund Appropriations Per  
\$1,000 of Personal Income

Another indicator of the relative positions of the states in state tax-fund support of higher education is appropriations per \$1,000 of personal income. This tends to measure support alongside ability to pay taxes, for income is today's best single yardstick of taxpaying capacity.

For the year 1980 the five East North Central States distributed themselves on that scale as in Table 2.

On this scale, our five states range from sixteenth to forty-seventh place among the fifty states. Four of them are well below the median, nationally. Indiana is 37th among the fifty, and third among the five.

Table 2. Appropriations per \$1,000 of Personal Income

States (1)	Dollars per \$1,000 of personal income (2)	Rank among 50 states (3)	
Wisconsin	13.30	16	WI
Michigan	10.37	35	MI
Indiana	9.93	37	IN
Illinois	8.76	42	IL
Ohio	7.93	46	OH
Fifty-state average	11.16		

Source: Chronicle of Higher Education, October 9, 1979, p. 9.

2	1
3	2
4	3
5	4
6	5
7	6
8	7
9	8
10	9
11	10
12	11
13	12
14	13
15	14
16	15
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41	40
42	41
43	42
44	43
45	44
46	45
47	46
48	47
49	48
50	49

#### Percentages of All Students in Private and Public Institutions

One factor which obviously affects the foregoing yardsticks is the percentages of all students in higher education enrolled in private institutions and public institutions in each state. This is not as influential as sometimes imagined, because large private universities usually draw large proportions of their students from other states and other countries in the world, and regard residence in the state of their location as more or less irrelevant. Data on the ratio between private and public enrollments are in order at this point.

In Fall 1978, of nearly eleven and one-half million students in colleges and universities in the United States, 22 percent were reported as in private institutions, and 78 percent in public.

Prior to 1930, a majority of all students were always in private colleges. Between 1930 and 1950, the ratio was generally about 50-50, fluctuating only slightly. Since 1950, the percentage enrolled in the private sector has steadily declined. The absolute total, however, in private institutions has continued to grow; but at a rate markedly slower than that in the public sector. Today the private sector has more students than it ever had, but the public sector outnumbers it four to one.

None of the East North Central states varies far from the national average in this respect.

Table 3. Percentages of Total Enrollments  
Public and Private

States	Public %	Private %
(1)	(2)	(3)
Indiana	76	24
Illinois	77	23
Michigan	87	13
Ohio	78	22
Wisconsin	87	13
United States	78	22

Source: Chronicle of Higher Education,  
January 8, 1979, p. 12.

As exhibited in Table 3, the variations among the East North Central states are not wide. The nationwide average percentage of all students in public institutions is 78. The extreme range among the fifty states is from 44 percent in Massachusetts to 100 percent in Wyoming (where there are no private institutions). Among our five states, Ohio is at the national average (78), and the percentage in Indiana is 76 and in Illinois is 77. In the other two states it is: Michigan, 87; and Wisconsin, 87. The range among all five is only 11 percentage points, 76 to 87, closely clustered at and slightly above the national average.

Moreover, in Illinois and Ohio, this is partially offset by the fact that there are annual direct appropriations of state tax funds to some private universities and colleges (and these are a part of the picture of state tax support of all higher education, and are included in our appropriation figures).

Illinois currently subsidizes all reputable private colleges at the annual rate of \$112.50 for each freshman and sophomore in the previous academic year, and \$225 for each junior and senior. In fiscal 1981 this amounts to nearly \$10 million. There is also a system of Health Education grants which go exclusively to private colleges, for a total of nearly \$16 million; also there is a Higher Education Cooperation Act program of grants for which nearly \$2 million is appropriated, going to selected private and public institutions for consortial work, probably half or more of which goes to private colleges. All together Illinois currently appropriates approximately \$27 million annually for direct support of private institutions.

To this could be added the indirect subsidy to all institutions of higher education in Illinois in the form of state scholarships awarded annually by the Illinois State Scholarship Commission, currently amounting to an appropriation of \$72 million, of which about two-thirds goes to students in private colleges; but this is not precisely pertinent at this point because all five states have systems of tax-paid student aids, more or less comparable.

Ohio currently subsidizes the private Case-Western Reserve University Medical Center in Cleveland, for medicine and dentistry, at an annual rate of \$6,217,000 for fiscal 1980, raised to \$6,697,000 for fiscal 1981.

The point being made here about direct state subsidies in Illinois and Ohio is that these two states offset this condition somewhat by making direct tax-paid subsidies to some private colleges. Thus the variations among the five states as to the percentages of their students in public and private colleges become a little less significant as far as these two states are concerned. The five states are clustered so closely that the variations are practically negligible as bearing on the several other bases of comparison used in this section.

It might be unrealistic and "unfair" and erroneous to apply these same bases of comparison to Massachusetts, with 44 percent of its students in public universities and colleges, and Wyoming, with 100 percent, but among the five East North Central states the differences in that respect are not substantial enough to make very appreciable difference in the results, or to change the rankings as derived from the other bases of comparison.

Net State Tax-Fund Appropriations for All Higher  
Education Per Headcount Student

By a species of macro-calculation, one can divide the total of all students enrolled in all higher education in a state into the total of all state tax-fund appropriations for annual operating expenses of all higher education in that state.

Table 4. Appropriations Per Headcount Student

States (1)	Total Fiscal 1980 Appropriations (2)	Total headcount students (3)	Per headcount student (4)
WI	\$468,618,000	243,876	\$1921
IN	\$411,198,000	224,992	\$1827
MI	\$808,320,000	494,048	\$1636
OH	\$669,197,000	452,754	\$1478
IL	\$876,951,000	616,209	\$1423
5-states	3,234,284,000	2,031,879	\$1592
U.S.	19,075,829,000	11,354,756	\$1680

This produces a dollar figure representing the amount appropriated per headcount student in all types of state tax-supported higher education. This turns out to range from \$1,423 in Illinois to \$1,921 in Wisconsin, with Indiana at \$1,827, Michigan at \$1,678, and Ohio at \$1,478. The figure for the composite fifty states is \$1,680. This puts Michigan very close to the national weighted average, with Indiana and Wisconsin well above and Ohio and Illinois well below.

The figures can be taken literally only to a limited extent, because they are macro-figures embracing all types and levels of higher educational institutions, and take no account of the fact that actual cost-per-student may vary widely, depending on the level and type of instruction. Thus a state having an above-average number of students in the two-year institutions might show a macro-figure of appropriation per headcount student such as to give it a low over-all ranking for the whole statewide system.

It is only necessary to remember that column 4 of Table 4 is not based on cost studies, but is on a much higher level of generality.

The order of rank among the five states is not quite consistent with what it is in appropriations per capita (Table 1) and in appropriations per \$1,000 of personal income (Table 2), chiefly because Indiana rises to second place, Michigan drops to third, and Illinois drops to fifth, allowing Ohio to rise to fourth. Nevertheless, the order of rank indicated in Tables 1 and 2 is, to a considerable extent, reinforced, with Wisconsin continuing as Number One, and the order of the other four states not drastically changed except that Illinois descends from its usual third place to fifth. These variations may be explained by the numbers and distribution of different segments and types of institutions of higher education and their respective headcount enrollments. For example, Illinois has 53 percent of its students in local public community colleges, where only 37 percent of annual operating expenses are state-paid.

Ratio of the Total of All Students in Higher Education  
to the Total Population

Comparing total college and university enrollments with the total population of the state is an increasingly useful tactic, because increasingly the enterprise of higher education is peopled by part-timers. Already half of all students in the United States attend part-time; it makes less and less sense to speak exclusively of full-time students, part-time students, and the fictional "full-time equivalents"—the "F. T. E." beloved of meticulous accountants and auditors. The term defies precise definition and can never be reduced to exact comparability unless by exclusive resort to accounting of credit-hours, which takes no notice of the human element in higher education.

The ratio between the total number of persons engaged as students in higher education to the state's total population at a given time is an increasingly useful indicator of the level of civilization or the "quality of life," if you will.

Illinois, with 616,209 students, has roughly 30 percent of all students in the entire region. The ratio of students to entire population in Illinois is nearly 5.5 percent—higher than in any of the other four states in the region.

Indiana, with 225,000 students, has fewer than any other state in the region, putting it in fifth place as to the ratio of students to population. Contrast it with Wisconsin, which has 244,000 students in a total population of 4,720,000, while Indiana's total population is 5,400,000.

Wisconsin is near the national average (slightly above it); Illinois and Michigan, above it; Ohio and Indiana, well below it.

Table 5. All Students Engaged in Higher Education,  
as a Percentage of Total Population

States (1)	Total Population (2)	Total Enrollment (3)	All students as percent of total population (4)
IL	11,230,000	616,209	5.487
MI	9,208,000	481,767	5.232
WI	4,720,000	243,876	5.167
OH	10,731,000	452,754	4.219
IN	5,400,000	224,992	4.167
5-states	41,289,000	2,019,598	4.891
U.S.	220,000,000	11,354,000	5.143

The figures speak nothing but the cold and sterile language of mathematics. Other sections of the report speak of possible reasons for what is, and for what ought to be.

#### Utilization of Tax Potential in the Five States

There are close parallels between state support of higher education and state revenue systems. Accordingly this report includes a separate section on state tax systems. At this point, however, observe that the five East North Central states seem to arrange themselves in a similar order of rankings on a measure of the extent to which they make use of their respective taxing abilities.

Taking the principal sources of state and local tax collections, and the sums collected from each by each state each year, for comparison with hypothetical figures showing for each type of tax what would have been collected for a given year if that type of tax had been levied by each state at a rate equaling the average rate at which it is actually levied in many states, it is possible to determine whether each state is levying that type of tax up to the standard of the average rate among many states.

Taking this standard as the potential for each state, one can readily see whether a state is using its potential 100 percent, or is exceeding its potential in that regard, or is levying only a lesser percentage of its potential as thus measured. Combining these major sources of state and local revenues provides a similar yardstick for the entire state.

A 1980 publication of the Southern Regional Education Board, State and Local Tax Performance, 1978, purports to show that Wisconsin collects state and local taxes equal to 109 percent of its ability by this standard; Michigan, 96.7 percent; Illinois, 90 percent; Indiana, 78.3 percent, and Ohio, only 75.5 percent.

This is the most recent of many publications by Kenneth E. Quindry, a scholar who has studied and developed this subject for many years.

Quindry's technique measures the extent to which each of the fifty states levies taxes as against a standard under which each state would levy each of the principal types of state taxes at rates equal to the average rates now levied in all the states.

Table 6. Use of State and  
Local Tax Potential

State (1)	Percent (2)
WI	109.3
MI	96.7
IL	90.0
IN	78.3
OH	75.5

Source: AASCU Memo to the President,  
August 7, 1980, p. 5.

Table 6 says that among the five East North Central states, Wisconsin is the only one currently levying state taxes above its potential by that measure. The other four (Michigan, Illinois, Indiana, Ohio) are below their potential for revenue raising, in that order. Ohio currently levies only three-fourths of its potential.

The relative tax capacity of the states, and the degree of its utilization, is treated more fully in a later section on State Revenue Systems (Section XII, pages 129-143).

#### Summary of Comparisons by Five Simple Measures

The composite rankings derived from all five scales are: Wisconsin, 1.4; Michigan, 2.2; Illinois, 3.2; Indiana, 3.8; Ohio, 4.6. This leaves the five states in the same order of rank as in columns 2 and 6 in Table 7, and as in Tables 1 and 6.

Table 7. Rankings of the Five States on Five Yardsticks

Ranks (1)	Appropriations of State Tax Funds			All students as percent of total population (5)	Use of state tax potential (6)
	Per capita (2)	Per \$1,000 personal income (3)	Per headcount student (4)		
1	WI	WI	WI	IL	WI
2	MI	MI	IN	MI	MI
3	IL	IN	MI	WI	IL
4	IN	IL	OH	OH	IN
5	OH	OH	IL	IN	OH

Notice that in the handful of statistical yardsticks used in this brief section, there is a remarkable consistency in the rankings of the five East North Central states: with respect to state tax-fund appropriations per capita for annual operating expenses of higher education, the same appropriations per \$1,000 of personal income, and the relative productivity of their state and local tax systems. It appears in general that Wisconsin ranks first, Michigan second, Illinois third, Indiana fourth, and Ohio fifth.

Let no one suppose that a few statistical measures tell the whole story. Nor would a hundred statistical measures which could be made. They provide only a preliminary and tentative "handle" on a large and complex scene, in which it is necessary to look further at five among the best of the nation's state systems of higher education: the institutions they encompass, the major segments of higher education represented, the accessibility of instruction above the high school level to all residents, and many other factors.

## II

### PRIORITY OF HIGHER EDUCATION AS A STATE FUNCTION

An amendment to the Constitution of California adopted in 1933, in the depths of the Great Depression: (Article XIII, Section 15) "Out of the revenues provided for in this article, and out of all other revenues collected, there shall first be set apart the moneys to be applied by the state to the support of the public schools and the State University."

## II

### PRIORITY OF HIGHER EDUCATION AS A STATE FUNCTION

One ready clue to the relative emphasis placed on state tax support of all higher education by any particular state is the percentage of total state tax revenues for a given fiscal period which is appropriated for all higher educational operating expenses. Two bases have to be dealt with. One is state taxes levied, collected and disbursed solely for purposes of the state government and its agencies, as distinguished from local governmental subdivisions—counties, cities, townships, villages, school districts, and various other types, including community college districts.

State and local tax revenues are therefore a second concept necessary in the picture. Speaking of the fifty states and of the most recent decade, state taxes and local taxes in many states turn out to be about equal in productiveness. In other words, state and local taxes in a given state are likely to produce roughly twice as much revenue as taxes for state purposes alone.

#### Ratio of Appropriations to State and Local Tax Revenues

It is desirable to use both concepts to obtain an approximation of the percentages appropriated for all higher education, because although state tax support of public universities and four-year institutions is almost wholly through state taxes (except, for example, comparatively negligible amounts from counties for land-grant universities). Yet in

the case of the two-year institutions, support from local taxing subdivisions may play a much larger role, varying in different states up to half or more of the institutions' annual operating expenses.

In Illinois, where the prevailing type of public two-year institutions is the local public state-aided community college, the total of state funds appropriated for operating expenses of 51 such campuses for fiscal 1981 was \$134,364,000; but local tax-levying community college districts provided an approximately equal total from their own local revenues. In contrast, in states where an element of the statewide two-year system consists of two-year branch campuses of parent universities, the practice has been to integrate their budgets into that of the parent institution, so that they get almost all their tax support from the states, but the trend is now toward regarding these networks of two-year institutions as separate systems, whose operating funds are budgeted and appropriated separately from those of the parent campuses, but continue to be tax-supported virtually wholly by the state.

The Michigan network of 28 local public state-aided community colleges is financed in a manner similar to that already sketched for Illinois. In Wisconsin, the system of two-year "university centers" originally developed by the University of Wisconsin at Madison currently gets \$13,853,000 from the state; and there is in addition the wholly distinct statewide system of two-year Vocational, Technical, and Adult schools, receiving \$55,220,000, performing some of the functions that are performed by comprehensive community colleges in Michigan and Illinois, and under the jurisdiction of the State Board of Vocational, Technical, and Adult Education;—not of the Regents of the statewide

University of Wisconsin system.

Ohio has at least four types of two-year institutions in its statewide system; while Indiana's facilities of this kind are virtually limited to thirteen local vocational-technical schools, all offshoots of the Indiana Vocational-Technical College, a statewide corporation authorized to establish such schools in selected localities, either directly or by contract with existing private schools or otherwise. Indiana has a proportionately small number of students in two-year institutions and a relatively smaller proportion of all students in separate two-year institutions than any of the other four states. (This does not necessarily mean that Indiana has fewer freshmen and sophomores in all colleges and universities, though that may indeed be the fact.)

The foregoing diversities among the five states are only mentioned at this point. They will be examined in a further section (Section VII: The Two-Year Institutions, pages 75-92). The purpose here is merely to justify the introduction of both percentages of state and local taxes collected, as vehicles of comparison among the five states.

The two tabulations (Tables 8 and 9) exhibit no spectacular differences in the ranking among the five states when compared on the basis of percentages of state taxes and of state and local taxes appropriated for annual operating expenses of all higher education. This means that either basis would furnish a fairly satisfactory measure of the relative emphasis given to higher education as a state function in each of the five states. This emphasis seems to vary substantially.

Table 8. Appropriations for Higher Education, 1972, as Percentage of Total State Tax Revenues, and Total State and Local Tax Revenues, 1972, in Thousands of Dollars

Five States (1)	State Tax Revenues (2)	Total State and Local Tax Revenues (3)	1972 Appropriations for Higher Education (4)	Col 4 as percentage of Col 2 (5)	Col 4 as percentage of Col 3 (6)
IN	1,187,234	2,374,954	201,345	16.96	8.48
IL	3,397,844	6,517,564	470,413	13.84	7.22
MI	3,032,665	5,235,831	379,409	12.51	7.25
OH	2,189,413	4,632,030	293,677	13.41	6.34
WI	1,628,043	2,736,154	226,403	13.91	8.27

Source: Quindry, Kenneth E., William A. Perry and Irma Perry. State and Local Potential to Support Higher Education. Center for Business and Economic Research, University of Tennessee, 1976.

Table 9. Appropriations for Higher Education, 1978, as Percentage of Total State Tax Revenues, and Total State and Local Tax Revenues, 1978, in Thousands of Dollars

Five States (1)	State Tax Revenues (2)	Total State and Local Tax Revenues (3)	1978 Appropriations for Higher Education (4)	Col 4 as percentage of Col 2 (5)	Col 4 as percentage of Col 3 (6)
IN	2,454,685	3,800,485	352,406	14.36	9.27
IL	5,774,368	10,309,268	740,190	12.82	7.17
MI	5,520,181	8,885,981	660,404	11.96	7.43
OH	4,230,607	7,625,707	551,174	13.03	7.23
WI	3,089,233	4,535,153	399,410	12.93	8.81

Source: Quindry, Kenneth and Niles Schoening, State and Local Tax Performance, 1978. Southern Regional Education Board, 1980.

Table 10. Six-year Change, 1972-78, in Ratio of  
Appropriations for Higher Education to  
Total State Tax Revenues Only

Five States (1)	Appropriations as percentage of state tax revenue only		Change in percentage points (4)
	1972 (2)	1978 (3)	
IN	16.96	14.36	Down 2.60
IL	13.84	12.82	Down 1.02
MI	12.51	11.96	Down 0.55
OH	13.41	13.03	Down 0.38
WI	13.91	12.93	Down 0.98

Table 11. Six-Year Change, 1972-78, in Ratio of  
Appropriations for Higher Education to  
Total State and Local Revenues

Five States (1)	Appropriations as percentage of state and local revenue		Change in percentage points (4)
	1972 (2)	1978 (3)	
IN	8.48	9.27	UP 0.79
IL	7.22	7.17	DOWN 0.05
MI	7.25	7.43	UP 0.18
OH	6.34	7.23	UP 0.89
WI	8.27	8.81	UP 0.54

In 1972 the ratio of state appropriations for operating expenses of higher education to total revenues collected for state purposes ranged from 12.51 percent in Michigan to 16.94 in Indiana, with Wisconsin at second place with 13.91, followed by Illinois at 13.84, and Ohio at 13.41.

The ratio to state and local taxes collected ranged from 6.34 in Ohio to 8.48 in Indiana, with Wisconsin in second place with 8.27, followed by Michigan with 7.25, and Illinois with 7.22. (Table 8)

In 1978, six years later, the figures had changed somewhat, but not drastically, as shown in Table 9. Tables 10 and 11 deal in some detail with the changes over the six-year recent period, and give a notion of increase or decrease of both the ratios in each of the five states.

These figures cannot point to any detailed conclusions until they can be considered in the light of such factors as the size and distribution of the statewide higher educational establishment in each state, and the principal features of each state's revenue system, as well as other influences. The ratios as exhibited here serve merely to indicate that in general the ratio of state tax-fund appropriations to total state taxes for state purposes may be about 13 percent for the five states collectively, and that the ratio to the total of state and local taxes may be about 8 percent; further, that these percentages may be, for four of the five states, somewhat below the national average for the fifty states (Table 9, p. 20).

Here it is perhaps appropriate to show a bit of the short-term history of these measures, 1972-1978, over the "anxious period" of the major part of the 1970s.

Table 10 says if we look at net state appropriations for annual operating expenses of all higher education as a percentage of total state revenues only (excluding local tax collections), we find that in each of the five states the ratio became a little smaller over the six years, and most markedly in Indiana; but the ratio in Indiana continued higher than in any of the other four states.

At first this might seem to confirm the fears of the panicky prophets of doom who shrilly predict that higher education is a loser. But Table 11 says if we look at the ratio to total state and local revenues, the trend was upward in four of the five states (all except Illinois, and there it was downward only by a hair's breadth).

Perhaps the most obvious question raised at this point is "Why does Indiana rank distinctly at the top among the five states as to these ratios while usually ranking in fourth place (and never above second) on the several measures applied in Section I?"

The question can be approached only by noting that Indiana has the smallest number of students in higher education in proportion to its total population (Table 5, Section I, p. 12); and that it may possibly have relatively the least productive state revenue system of any of the five states (though Ohio is certainly a close competitor for that dubious designation).

This latter is dealt with to a limited extent in Section XII (State Tax Systems, pages 129-143). Beyond these features, there are many other influences, including imponderables not susceptible of statistical treatment of any precision. Therefore no statement in this report is to be taken as an ironclad infallible. They are no more than

signboards erected on slender supports set in the squashy ground of the vast quagmire which is our present knowledge of many problems of public policy for which well-substantiated solutions are urgently necessary.

#### Other Major Functions of the States

There are twenty or more other functions of the fifty states which legislators and governors are obliged to take into account when considering the relative place of higher education.

K-12 Schooling. In pecuniary terms, as well as in numbers of people concerned, the largest of these is public schooling from early childhood through the high school. This domain is commonly known as K-12 education. It is based on local taxing subdivisions in all states except Hawaii, and generally speaking, local taxes supply roughly half of its operating income (varying from state to state). The state governments also supply roughly half, from state revenues.

The consequential distinction economically is that local revenues come almost entirely from property taxes, while state revenues come largely from "broad-based" general and special sales taxes and state income taxes, personal and corporate. Property taxes, especially on real estate, can become confiscatory. They are sometimes very oppressive on farmers and elderly home-owners. The administration of real property taxes is so minutely decentralized in most states, and is subject to such erratic definitions of "market value" and what proportions thereof shall be assessed, as well as other volatile rules on the essentials of assessment, that probably decades will have to elapse before a much greater semblance of uniformity and equity will come into being.

The upshot is that no large increases in revenue from property taxes seem likely in the reasonable future. The result is that as the financial necessities of the K-12 public school districts grow, as they inevitably will, it will be equally imperative that larger proportions of their operating revenues come from state taxes. This is also true of all the local public state-aided comprehensive community-junior college districts, now getting varied fractions of their annual operating funds from locally-levied taxes. (But they are in the domain of higher education, not K-12.)

The promise of improved financing of state and local services rests with more use of broad-based state taxes and with increased federal subsidies to the states, their local subdivisions, and their institutions. Meantime, there should be no adversary lobbying between higher education and K-12, as there has been at some times and places in the past.

This present report has space and time to mention only a few other major state services, each of which could be the subject of comparative cost-benefit studies of vast scope and brain-boggling detail, if such accounting efforts were practicable. This report can be concerned only with a few prima facie remarks:

Health Services. With hospital stays in 1980 generally charged at about \$300 per day; with continuing large shortages of registered nurses in practice; and a hundred other shortfalls, health services rapidly continue to become a national disgrace and a national calamity that must be corrected. It is manifest that all levels of higher education can make important contributions here, by producing more and better-educated professional nurses and a score of types of other medical paraprofessionals,

as well as physicians, surgeons, dentists, pharmacists, optometrists, and doctors of veterinary medicine; and above all, more ethical researchers in biological and related sciences capable of reaching levels of expertise not known before.

Corrections. The outstanding fact here is that it is well-known that it costs the taxpayers from two to five times as much to keep a person in prison for a year as it would cost to keep the same person in college. Considering the tendency of reactionary self-righteous "Law-'n'-Order" moralists to insist on the death penalty, to praise vigilante tactics, to advocate the building of more prisons and the keeping of more persons incarcerated for mandatory terms, coupled with the widespread failures of federal and state prisons and local jails either to employ, educate, or rehabilitate their victims, higher education also has a crucial role here. Universities and community colleges are offering college programs in corrections and police science, and many send their own faculty members to teach voluntary students in nearby prisons. This says nothing about what university law schools will eventually accomplish toward gradual rectification of the antiquated, reactionary, and boggling features of our federal, state and local judicial systems, wherein too commonly "justice delayed is justice denied."

Welfare Services. Everyone has humane instincts, and does not enjoy seeing innocent and well-meaning people suffer. Our complicated, multi-plex federal-state welfare system had its beginnings nearly half a century ago. It will never be destroyed, dismantled, or heavily cut back unless we decide to turn down the lights and turn back toward barbarism. The besetting cause of what is too often called a "mess"

has been a lack of clear-cut, wise and devoted non-bureaucratic administration and operation of the system at all levels, enlightened throughout by a decent ethic and official integrity. Here again universities and colleges are crucial. Departments of political science and public administration, departments of sociology, anthropology and social work, and the related disciplines in colleges of arts and sciences and graduate schools, are producing men and women who can improve performance in positions from social worker to top administrator, and who can help plan "shaping up" at points in the complex where they are needed.

State Highway and Other Construction. University colleges of engineering and applied science will continue to contribute much, by producing men and women who raise the expertise and elevate the ethics of the several engineering professions, in state employ and elsewhere.

Even university and college economists, after they more nearly get their act together and talk sense about the facts, apart from their respective inborn political and social prejudices, could advise Presidents and governors wisely instead of merely confusing them, as they do now.

It is thrilling to think of what the effect will be of the rapidly growing number of graduates of university colleges of commerce and business administration on the efficiency and general health of business and industrial firms in this country. It is difficult to believe that the nineteenth century truism, "the ethics of business is the ethics of the pig-pen" will continue to be repeated; or that allegiance will forever be given exclusively to Adam Smith's two-hundred-year-old dictum, "every man for himself and the Devil take the hindmost"—"the law of the

fang and the claw"—"the law of the jungle" will always prevail.

### Education Is Forever

The foregoing handful of illustrations serves to suggest that every university, every college, every department in all higher education has important missions toward the advancement of civilization. Higher education of every person to the limit of ambition and capacity is a long-term productive investment of public money. Its returns extend through a 40 or 50-year working life, and beyond for generations. It has been demonstrated that through increased personal income and consequently added income taxes alone, even a four-year college education for an average student may be expected to recoup for state and federal governments in actual dollars much more than the total tax outlay for the four years of instruction provided.

A moment's thought will lead to the conclusion that higher education is to a very large extent the essential key to the development of all the professions, paraprofessions, semiprofessions and subprofessions, by whatever name called; and the door to advancement in all walks of life for individuals. The benefits are private and personal in some degree, yes, but the far weightier gains are to the public at large—the state, the nation, and the world—benefits to the whole society. This has an important bearing on the public financing of the instructional and research facilities and opportunities.

Useful knowledge or literary or other skills learned early are generally retained and often improved throughout the span of working life. "Education creates an appetite for more education." Moreover, no matter what the level of learning attained, it tends to upgrade the individual's

way of life culturally and vocationally; and to raise permanently the quality of upbringing received by the successive generations of the same family.

#### The Faith and Good Will of Parents

An almost universal feeling among parents is "I want my child to have a better life than I have had." This is evidenced by the results of many surveys in which thousands of parents representative of the general public have responded, about three to one, that they want and expect their children to go to college.

Parents also usually hope that their children will have better jobs than they themselves had; and this is not unreasonable, because the economy is not frozen. With the advance of technology, gradually all jobs are being upgraded: and the same is true of the increasing growth of the service occupations. These are elements in the advance of civilization. Even if the economy were temporarily to stabilize fully or recede, the possibility of more fulfilling work for all would not be precluded.

It can also be reflected, from the standpoint of the states and the nation and of the whole society, that the effects of education are durable. "No people can remain ignorant and continue free." The colleges of law, the humanities, and the social sciences are the hope for improved social justice. The colleges of medicine and related sciences are the fount of discoveries in health and preventive medicine. The agricultural colleges and experiment stations are the principal reasons for this nation's vast productivity of foods and fibers.

Schooling for all children up to the age of eighteen seems of matchless importance; but it depends on the colleges and universities for

its teachers. In turn, the advancement of all education at all levels and of all types, and the practice of all the professions and vocations depends in great part on better-educated teachers in the lower schools. The increasing stream of discoveries in engineering and technology are often made in university laboratories; and, if not, almost invariably they are made by persons who come via the universities.

The foregoing are only a handful of illustrations of the key position of higher education among the functions of the state and of society.

It appears that higher education merits first priority among all state functions.

The people of California expressed this idea in an amendment to the California Constitution (Article XIII, section 15), adopted in 1933, in the depths of the Great Depression: "Out of the revenues from state taxes for which provision is made in this article, together with all other state revenues, there shall first be set apart the moneys to be applied by the state to the support of the public school system and the State University."

#### An Upturn in Public Esteem

This brief section on "Priority of Higher Education as a State Function" should not be concluded without mention of two very significant recent publications which may signal an upward turn from the seeming mixture of panic and cynicism which infects many of those who are seriously concerned about the subject, in recent years and at present.

Howard R. Bowen, distinguished economist, former president of the University of Iowa, now honored with an endowed professorship of

economics and education at the Claremont Graduate School in California, is principal author of the best work of the twentieth century on this subject, entitled Investment in Learning: The Individual and Social Value of American Higher Education (San Francisco: Jossey-Bass, 1978, p. 507). The work has eminent sponsorship: it was issued by the Carnegie Council on Policy Studies in Higher Education and its preparation was supported by the Sloan Foundation.

Also of similar significance and tenor is a publication of the American Council on Education, College Enrollment: Testing the Conventional Wisdom Against the Facts, by the Council's chief economist, Carol Frances, who is also chief of its Division of Policy Analysis and Research. Both Carol Frances and Howard Bowen suggest that there may well be increases in enrollment in higher education over the ensuing decade.

### III

#### THE INSTITUTIONS OF HIGHER EDUCATION IN THE EAST NORTH CENTRAL STATES

The single campus as an academic community is the crucial operating unit.

In this region of more than forty million people in 1981 there are sixty-odd state universities and four-year colleges; two hundred public two-year colleges; some sixteen private universities; and a large number of small four-year private colleges.

### III

#### THE INSTITUTIONS OF HIGHER EDUCATION IN THE EAST NORTH CENTRAL STATES

In the five-state region as a whole, and defining an institution of higher education as a campus community, without regard to whether it is a main campus, branch campus, or what not, there are about 265 state institutions in the five East North Central states. This includes some 63 state universities and colleges (of which all but a handful now bear the title of university and possess all or many, or at least some, of the characteristics of a real university in our time or at least of an "emerging university").

##### Five Categories of Public Universities and Colleges

Taking account of the size, support, repute, and other features of these 63 institutions, they are classified herein in four categories:

- (1) the flagship universities (of which there are seven);
- (2) other large state universities, mostly urban (ten);
- (3) multipurpose universities having normal school origins (25);
- (4) other state universities and colleges, generally smaller (23).

To each of these four categories a separate section of this report is devoted. (Sections IV, V, VI, and VII, pages 42-74). The four-fold classification seems realistic and relatively easy; though, as in all such discriminating tasks, there may be a few occasional difficulties near the boundaries separating the four types; and there may be some institutions

having characteristics so unique that they do not fit comfortably in any classification.

There is, then, a very important fifth category of institutions:

(5) two-year colleges and institutes, of which there is a total of nearly 200 in the five states. These are the subject of another section (Section VIII, pages 75-92).

This present section is intended only to be a broad-scale introduction to the five sections which follow it in succession.

Table 12. East North Central Regional Totals by the Four Categories of State Universities

Types of Institutions (1)	Enroll- ment (2)	Appropri- ations* (3)	Per student (4)
Flagship universities	275,025	922,719	\$3,355
Urban state universities	229,433	510,934	\$2,227
Former normal schools	326,519	635,140	\$1,945
Other state universities and colleges	142,055	270,595	\$1,905
Totals	973,032	2,339,388	
Weighted average per student			\$2,404

\*In thousands of dollars.

Source for appropriations data in this and other tables is:  
Chambers, M. M. Appropriations of State Tax Funds for  
Operating Expenses of Higher Education, 1979-1980. Wash, D.C.:  
National Association of State Universities of Land-Grant  
Colleges.

Table 13. Totals by States for the Four Categories of State Universities

State (1)	Enroll- ment (2)	Appropri- ations* (3)	Per Student (4)
Indiana	151,885	325,710	\$2,144
Illinois	182,833	528,768	\$2,893
Michigan	237,185	628,756	\$2,651
Ohio	260,804	511,354	\$1,961
Wisconsin	140,325	344,600	\$2,456
Totals	973,032	2,339,388	
Weighted average per student			\$2,404

\*In thousands of dollars.

#### Medical and Health Education

Colleges of medicine and of the numerous associated health professions and semi-professions occupy large parts in the financial scene, but do not receive separate or special attention in this story. Generally a medical college or medical center is a division of a large university, sometimes based on the main campus, but in some instances constituting a branch campus or a part of a branch campus located in a large city nearby or many miles away. In rare instances a state medical college stands apart and wholly unconnected with any university, as, for example, the Medical College of Ohio at Toledo.

Michigan State University at East Lansing has on its main campus a college of human medicine, a college of osteopathic medicine, a college

of veterinary medicine, a college of nursing, and other units for instruction and research in allied health fields.

In contrast, the University of Illinois has a large and comprehensive medical center constituting an important branch campus in Chicago, 125 miles from its main campus at Champaign-Urbana. Indiana University also has a large medical center at Indianapolis, 50 miles from its main campus at Bloomington, forming a part of the Indianapolis joint branch campuses known as Indiana University—Purdue University—Indianapolis (IUPUI) which is, in fact, a large urban university, though without separate legal identity.

For the sake of brevity, simplicity, and readability, this report does not exhaust all details such as the foregoing. Above all, this discourse aims to restrict itself to the high level of generality on which the focus is on states as units, with only a necessary minimum of descent into segments, systems, institutions, instructional levels and types. These cannot be ignored, and are given essential attention especially in the five sections following this present section.

Medical and health services education occupy collectively a larger element in the total of state tax support of higher education than any other single professional or academic domain; its organization and operation are fraught with many complexities, such as a great variety of arrangements with the indispensable teaching hospitals; developing decentralization of medical instruction and research in some states, involving use of some private or public colleges in the state for some of the instruction in biological sciences forming parts of the standard medical course; connecting the central medical college and hospital by two-way

television with other colleges and hospitals at other towns in the state, as in Indiana; and the planting of small "branch medical colleges" to offer major parts of the medical curriculum in other cities, as in Illinois.

To do any justice to the detailed medical education scene in the five East North Central states would require a special study much more difficult and extensive than the whole purview of this present brief traverse of state appropriations for higher education in the states as a whole. The same might be said, perhaps in somewhat lesser degree, of any separate or particular treatments of liberal arts or of its separate disciplines, or of legal education, engineering, business administration, or any of a score or more of other professions or semiprofessions in which university or college instruction is available. Such studies could result in a shelf of encyclopedic volumes, not within the scope of a short report aimed largely at general comparisons of states as units.

#### Private Universities and Colleges

Concerned as we are chiefly with state tax support of higher education, it is desirable to keep in mind that approximately 80 percent of all students are now in public universities, colleges, and community colleges (see Table 3, Section I, p. 6). But it has also been noticed that all five states operate one or more systems of state scholarships or similar tax-paid grants available to qualifying students in all reputable institutions, private and public; and that generally the bulk of the money appropriated goes to students in private colleges. This is "indirect" tax support of private colleges.

Then, too, in Illinois there is a system of direct grants to reputable private institutions, based on the numbers of undergraduates (lower and upper divisions) enrolled in each such college during the immediately preceding year. Illinois also makes small grants to selected colleges for approved consortial cooperative activities with other colleges.

There are many other reasons why the private institutions should not be omitted from this brief initial survey. Though they are not comparatively large, some of them enjoy deservedly great prestige and have long made superb contributions to education in the East North Central region. Each has its own character, such that it is difficult if not impossible to speak of them in any definite order of rank.

Among nine of the larger private universities are the renowned University of Chicago, heavily endowed and esteemed as a midwestern counterpart of the Ivy League universities of the Northeast; Northwestern University at Evanston, originally of Methodist origin, now ranking nationally with such others as Boston University and the University of Southern California. Then there is Case-Western Reserve University in Cleveland, formed recently by merging two esteemed private universities which had long been neighbors.

In Indiana there is the famed University of Notre Dame du Lac at South Bend, and in this group of nine are also five other Roman Catholic universities, all urban: Loyola University of Chicago; DePaul University in the same city; Marquette University in Milwaukee; the University of Detroit in Michigan; and the University of Dayton in Ohio.

In Table 14 the foregoing nine leading private universities are listed, for convenience, in descending order of the size of their headcount enrollments.

Table 14. Nine Private Universities in the East North Central States, with Headcount Enrollments

Institution (1)	Enrollment (2)
IL Northwestern U, Evanston	15,117
IL Loyola U of Chicago	13,394
IL DePaul U, Chicago	12,149
WI Marquette U, Milwaukee	11,044
OH U of Dayton	10,189
IL University of Chicago	9,112
IN U of Notre Dame, South Bend	8,802
MI U of Detroit	8,091
OH Case Western Reserve, Cleveland	7,844
Total	86,630

There is another echelon of private universities, slightly smaller, mostly in urban locations, and of enrollment counts approximately four thousand to seven thousand. Of these only one currently offers doctoral degrees. The majority offer some instruction above the master's degree but less than the doctorate. One provides only masters' programs and some professional degrees not above that level (Table 15).

Table 15. Another Echelon of Private Universities

Institution (1)	Enrollment (2)
IL Illinois Inst. of Tech, Chicago	7,041
IL Roosevelt U, Chicago <sup>†</sup>	6,808
OH Xavier U, Cincinnati <sup>††</sup>	6,558
IL Bradley U, Peoria <sup>†</sup>	5,239
IN U of Evansville <sup>††</sup>	4,817
IN Valpariso U <sup>††</sup>	4,377
IN Butler U, Indianapolis <sup>†</sup>	<u>3,852</u>
Total	38,692

<sup>†</sup>"Beyond master's but less than doctorate."

<sup>††</sup>Offers master's and some professional degrees.

Thus there seem to be sixteen private universities which may be said, as to their highest levels of instruction and as to their enrollment counts, to be of a type somewhat apart from the typical four-year small private liberal arts college which for approximately a century was often called "the backbone of American higher education."

Indiana and the four neighboring states each have considerable numbers of these colleges, which will not be enumerated and classified here because the information is easily available in widely circulated reference works and directories, and this particular segment of higher education in its entirety now constitutes only a small fraction of the panorama, whereas the focus here is on state tax supported institutions,

and in that focus the collectivity of small private liberal arts colleges is only marginal, though many of them are highly admirable in their own place and in their own way.

No one wants to see a reputable private college disappear, and almost all deplore the apparent temporary shift away from emphasis on instruction in the humanities, languages and literatures, arts and social science fields. There will always be small private liberal arts colleges because their clientele will be drawn to them by many influences such as religious leanings, group loyalties, and family traditions, among others. Long may they live and flourish!

#### IV

#### SEVEN FLAGSHIP UNIVERSITIES IN FIVE STATES

At the apex are the world-renowned state universities in each state: Wisconsin at Madison; in Michigan (two) at Ann Arbor and at East Lansing; Ohio State at Columbus, Illinois at Champaign-Urbana; Indiana (two) at Bloomington and at West Lafayette. All have large, long-established, and productive graduate schools and graduate-professional schools; many doctoral programs and doctoral and postdoctoral students.

#### IV

#### SEVEN FLAGSHIP UNIVERSITIES IN FIVE STATES

The term "flagship university" is aptly used to designate the principal or leading university in a statewide system. This is without regard to whether the system is under tightly consolidated governance, or large decentralized. Usually the oldest and best-established state university, having many programs leading to graduate and graduate-professional degrees, is the "flagship."

In two of our five states—Michigan and Indiana—the naval parlance is somewhat strained, because each has two such institutions, on account of having established shortly after the mid-nineteenth century a college located at a distance from the existing state university, to become eventually the land-grant university of the state. The result today is that these separate land-grant colleges, with the passage of a century, have developed into comprehensive universities in fact as well as in name.

Nevertheless, while the two state universities in the same state may each be large and comprehensive, yet there are differences in their respective emphasis on different lines of instruction and research and public service such that, to a considerable extent, each complements the other; and from the statewide point of view they may be considered roughly as halves of the whole of the state's topmost echelon of higher educational institutions. Thus, though no flotilla has two flagships,

we say Michigan and Indiana each has two state universities worthy of the "flagship" title.

In each of the other three states a different evolution took place. The existing state university became also the land-grant university, and there is no other institution approaching it in size, support, or repute. It is clearly the one flagship of the statewide system. Thus it is that we place seven flagship universities in the five states. Their respective headcount enrollments and state appropriations for annual operating expenses as of 1980 appear in Table 16.

Table 16. Seven Flagship Universities in Five States

State Universities (1)	Enrollment 1979 (2)	Appropriation 1980* (3)	Per headcount student (4)
IN Indiana U, Bloomington	31,640	75,905	\$2,399
Purdue U, W. Lafayette	31,990	89,141	2,787
Total, Indiana	63,630	165,046	\$2,594
IL U of Illinois at Urbana	34,376	157,460	\$4,581
MI UM at Ann Arbor	36,158	146,370	\$4,048
Mich St U at Lansing	47,350	146,103	3,086
Total, Michigan	83,508	292,473	\$3,502
OH Ohio State U at Columbus	53,278	161,773	\$3,036
WI U of Wisconsin, Madison	40,233	145,967	\$3,628
Total, 7 universities	275,025	922,719	
Weighted average crude per student appropriations			\$3,355

\*In thousands of dollars.

Overall Appropriations Per Headcount Student

"Appropriations per headcount student," derived simply by dividing the headcount enrollments reported for the institutions (here we mean only main campuses, stripped from all their branches and other outlying units) into the net total appropriation of state tax dollars for operating expenses in a given fiscal year, should not be taken too literally or overinterpreted. They are not based on minutely-detailed unit cost studies in each institution.

Many elusive factors may affect them and distort their meaning. Among these are the proportion of part-time students in an institution and differing methods of defining part-time students and deriving a fictitious figure for "full-time equivalents"; and also the distribution of students among the levels and types of instruction in each institution. A freshman in arts and sciences or business or education can be accommodated at an annual expense of less than half that of educating juniors or seniors in the same undergraduate college; and graduate and graduate-professional schools may find the expense of educating a student in his pre-doctoral years may be as much as ten times that for underclassmen in the undergraduate colleges. An illustration of the wide variation appears in Section IX of this report, pages 43-49.

In a large university, cost-per-student-per-year or per-semester or per-credit-hour, derived on a macro basis, conveys only an imprecise meaning, telling nothing about the broad variations in the types, levels, and quality of courses and programs.

Even such unit-cost records on a micro basis for each course and program also tell nothing about those matters; but this is not to deny

that they have some limited uses for management. As for cost-benefit ratios, there is no way in which to compute the dollar benefits to the state or to individuals from the operation of a university or college. They stretch over long periods of time and involve myriads of variables, pecuniary and non-pecuniary, measurable and imponderable. It may be that in the future some inconceivable electronic brain may be invented to encompass all these matters in a meaningful way; but in the meantime "cost-benefit ratios" are no more than fragmentary mechanical charades, more likely to mislead than to inform.

#### The Galaxy at the Top

The foregoing seven flagship universities are all members of the Association of American Universities, a long-standing self-selecting group of some fifty U.S. and Canadian institutions, about twenty-five private and twenty-five public, having full-fledged graduate schools offering doctoral degrees in arts and science fields and forming the spearhead of graduate education in North America.

These seven universities are also members of the National Association of State Universities and Land-Grant Colleges. The seven are also members of the famous "Big Ten," the other three being the University of Minnesota, the University of Iowa, and the private, nonprofit Northwestern University at Evanston, Illinois. They are a galaxy at the apex of the pyramid of public higher educational institutions in the United States and in the world.

These seven are also members of the Committee on Institutional Cooperation, which consists of the chief academic officers of each of

the Big Ten universities plus the University of Chicago (and is therefore sometimes informally called the Council of Eleven). This consortium was begun in 1958 chiefly for the purpose of achieving close liaison among the universities with regard to their offerings of rare and costly advanced specialties in their advanced graduate and graduate-professional programs; but its scope has gradually broadened to other types of inter-institutional liaison and cooperation.

The Committee presides over a consortium of what are the largest and most distinguished universities in any of the literally scores of consortiums that have come into existence. In a limited sense it may be said to be a surrogate for any formal regional interstate compact for higher education in the East North Central region, such as the New England Board of Higher Education, the Southern Regional Education Board at Atlanta, and the Western Interstate Commission for Higher Education at Boulder.

Our seven flagship universities are also members of the long-standing Association of Graduate Schools, an adjunct or partner society of the Association of American Universities; and also members of the more recently organized and much larger Council of Graduate Schools in the United States. In deference to the high significance of doctoral and postdoctoral education, this report includes a later section on "Advanced Graduate, Graduate-Professional, and Postdoctoral Learning." (Section IX, pages 94-103).

One of the foremost imperatives for the immediate and continuing future is that the topmost universities be supported to keep up their ongoing advancement of the uppermost reaches of instruction and research.

Output of Doctoral Graduates

One evidence of the pre-eminence of the flagship state universities of these five states is provided by the record of Ph.D. degrees conferred by all doctorate-granting graduate schools over the 54-year period, 1920-1974. (Table 17)

Table 17. Doctoral Degrees Granted by Seven Flagship Universities, 1920-1974.

State (1)	Institution (2)	Number Granted (3)	National ranking <sup>†</sup> (4)
IN	Indiana U, Bloomington	8,587	14
IN	Purdue U, W. Lafayette	8,345	15
IL	U of Illinois at Urbana	14,896	4
MI	UM at Ann Arbor	13,319	5
MI	Mich State U at Lansing	8,084	17
WI	U of Wisconsin, Madison	16,929	1
OH	Ohio State U, Columbus	12,167	7

<sup>†</sup>Among all graduate schools in the nation, 1920-1974.

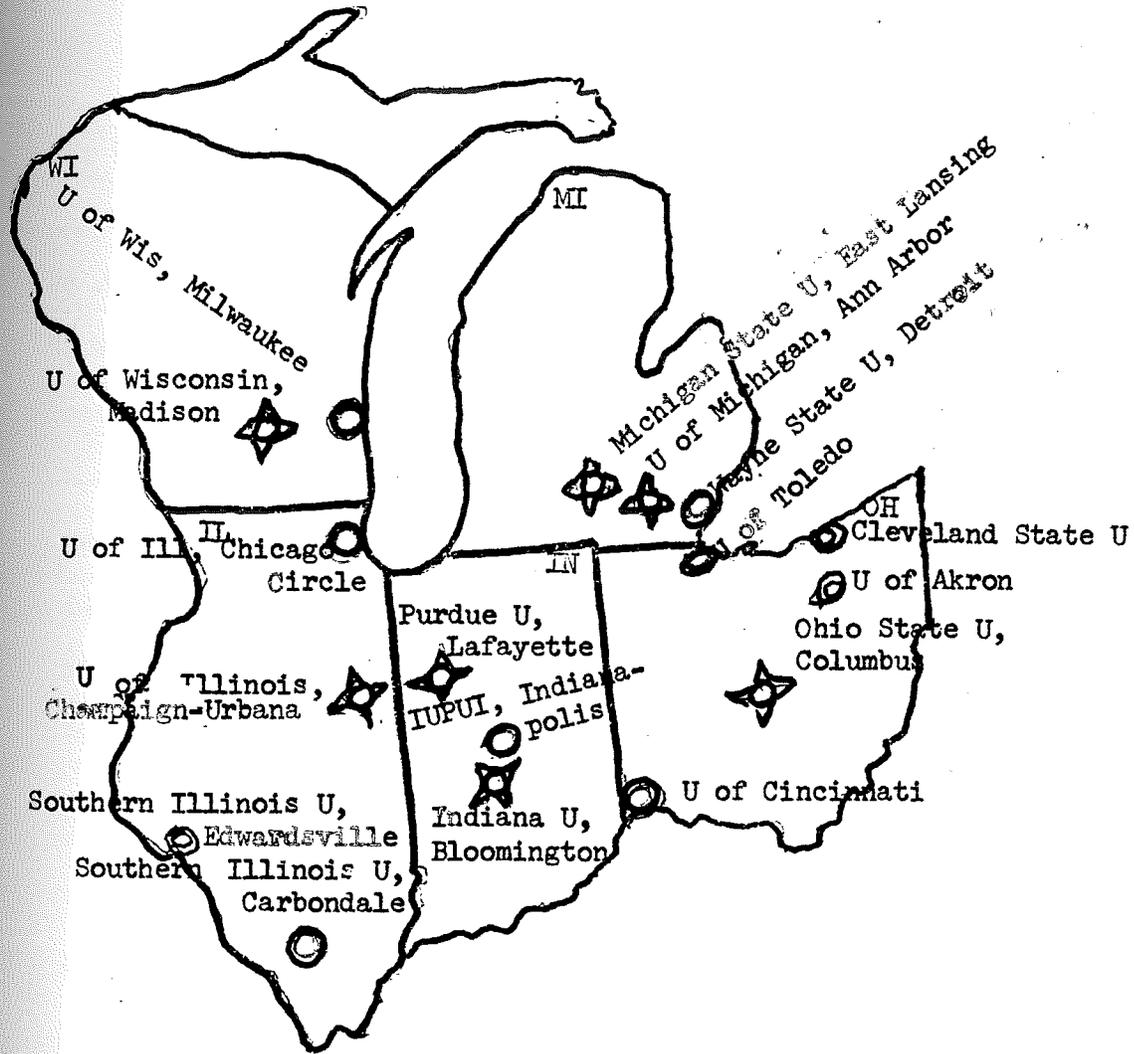
Source: National Research Council, Commission on Human Resources: A Century of Doctorates (Washington, D.C., 2101 Constitution Ave., N.W.).

The University of Wisconsin at Madison stood first, with 16,929 Ph.D. degrees granted; but if Indiana's two complementary flagship universities—Indiana University and Purdue—combine their achievements in this respect, then their total equals that of Wisconsin.

Further, if Michigan's two leading universities—University of Michigan at Ann Arbor and Michigan State University at East Lansing—combine their records, then the state of Michigan substantially exceeds the record of either the state of Indiana or of Wisconsin. Table 17 includes only state universities, and does not include the output of private university graduate schools.

Further data on the output of doctoral degrees by other state universities in the region is placed in another section of this report (Section IX, GRADUATE, ADVANCED PROFESSIONAL, AND POSTDOCTORAL LEARNING, pages 94-103).

SEVENTEEN LARGE STATE UNIVERSITIES



★ Seven "flagship" universities

⊙ Ten other large state universities, mostly urban

## TEN OTHER STATE UNIVERSITIES, LARGELY URBAN

Serving large cities in the five states are ten other state universities, mostly of more recent origin and expanding rapidly in recent years in response to the insistent demands of urban people. These universities are indispensable allies of the other state universities in the trend toward higher educational opportunities and choices for all Americans.

TEN OTHER LARGE STATE UNIVERSITIES, LARGELY URBAN  
AND NOT IN THE NORMAL SCHOOL TRADITION

Each of the five states has at least one urban state university. It is true that a century and more ago, when the flagship state universities were founded, almost all of them were placed in small cities, at a distance from any major urban area. This is said to have been partly due to the belief that the distractions of large city life were not compatible with college or university study—a view no longer given credence. Moreover, the great metropolitan areas have grown enormously (Chicago and the five adjacent counties hold approximately half of all the people of Illinois), and educators have embraced the idea that in order to make higher education accessible to as many people as possible, the guide should be "to put the college where the people are."

Municipal Universities Have Disappeared

In earlier decades the higher education needs of the burgeoning big city populations were met to a limited extent by urban private universities and colleges; and in part, during roughly the first half of the twentieth century, by municipal (city tax-supported) universities. Of this type there were at about 1925 as many as nine in existence in the United States, all of which have by now been "taken over" by the states in which they are located.

Ohio had three, at Cincinnati, Akron, and Toledo, all of which are now state universities. Wayne State University in Detroit passed

through stages as a private corporation, then a municipal university, and became a state university during the transition period from 1956 to 1959.

Chicago Teachers College, once a municipal institution having two campuses in the city, has now become two state institutions—Chicago State University and Northeastern Illinois State University. In Wisconsin, the private (Roman Catholic) Marquette University recently found itself unable financially to continue its medical college. The Wisconsin legislature solved the problem by forming a new public corporation styled the Medical College of Wisconsin, to assume the support and operation of the former medical college of Marquette University as a separate state-supported medical institution.

The City University of New York, long the nation's leading and best-known municipal university, retains its nominal status as an agency of the city, but state statutes have recently forced it to abandon the century-and-a-half-old policy of free tuition for regular full-time undergraduates, as well as its more recent (1970) policy of open admissions to all holders of high school diplomas. It is now mandated by state law to charge the same fees as the several state colleges, and is in the midst of a process of having the state assume the whole of its tax support, relieving the city. Its governing board (the Board of Higher Education of the City of New York) has been changed in composition to include a majority of appointees of the Governor and a minority of appointees of the Mayor.

Thus it may be said that the municipal university is a species that has disappeared from the American scene. City governments have given up the effort to support city universities. Urban private

institutions have neither the means nor the will to finance and operate facilities for universal higher education in their cities. The lack is being supplied by growing urban state universities and public community colleges. That is the rationale for considering together most of the ten state universities discussed in this section.

These are usually slightly smaller in enrollment and in the magnitude of state tax support. The only non-urban one (Southern Illinois University at Carbondale) belongs in this category because of its great enterprise over the recent half-century in providing public facilities for higher education in the forty-county area of the southern one-third of Illinois. It is also the only one in this group that originated as a normal school—teachers college.

Table 18. Ten Other Large State Universities, Mostly Urban

State Universities (1)	Enrollment 1979 (2)	Appropriations 1980* (3)	Per headcount Student (4)
IN IUPUI at Indianapolis	21,453	45,519	\$2,122
IL So ILL U, Carbondale	22,695	80,952	\$3,567
U ILL, Chicago Circle	20,285	48,791	2,405
So ILL U, Edwardsville	12,060	35,833	2,971
Total, Illinois	55,040	165,576	\$3,008
MI Wayne State U, Detroit	34,337	98,237	\$2,860
OH U of Cincinnati	34,321	64,733	\$1,886
U of Akron	23,931	33,527	1,401
Cleveland State U	17,776	27,502	1,547
U of Toledo	17,498	26,954	1,540
Total, Ohio	93,526	152,716	\$1,629
WI U of Wis., Milwaukee	25,077	48,886	\$1,949
Total, ten universities	229,433	510,934	\$2,227
Weighted average crude per student appropriations			

\*In thousands of dollars.

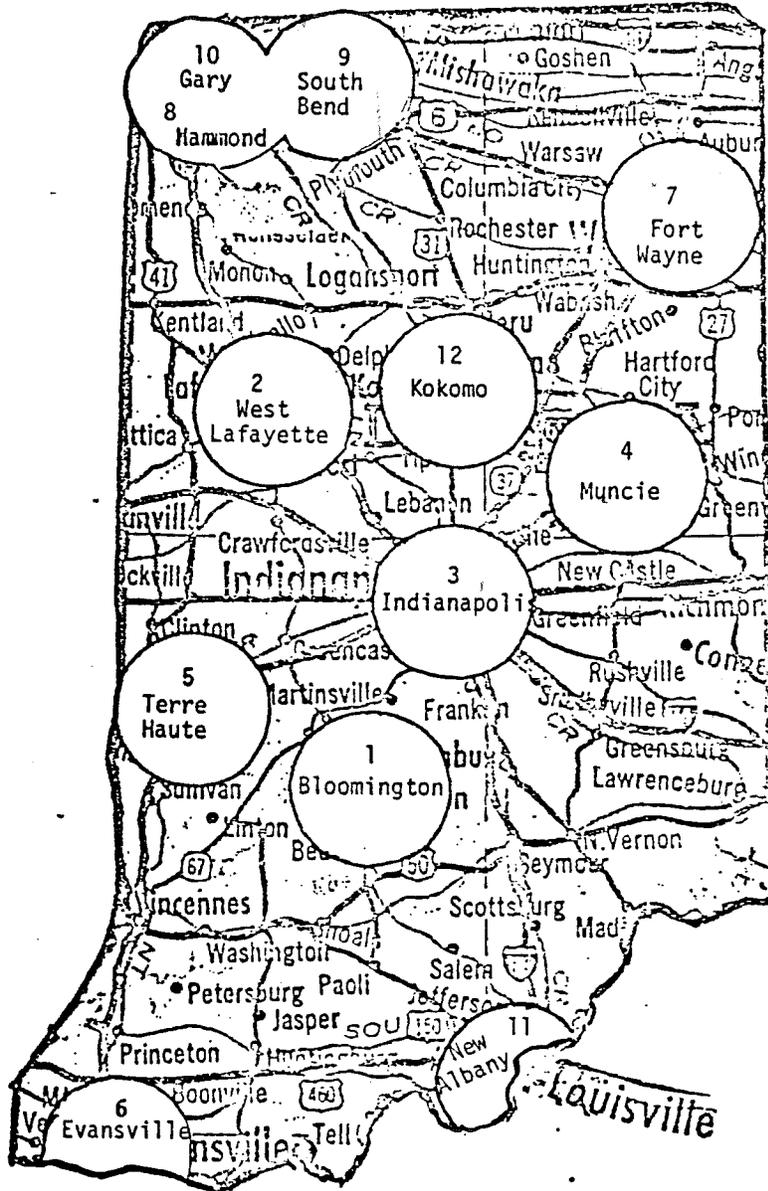
### Southern Illinois University is Different

The institutions named in Table 18 are all located in large urban centers, except Southern Illinois University at Carbondale and Edwardsville. Although the institution at Carbondale is clearly in the teachers college tradition with normal school antecedents, it is placed here because of its remarkable record of expansion since 1950, so that it has become a substantially more comprehensive multi-purpose university than any other of the numerous institutions in the region having similar backgrounds. Another peculiarity of SIU is that its Board of Trustees maintains a "sister campus" (Southern Illinois University at Edwardsville, 100 miles from Carbondale and near East St. Louis) which is not spoken of as a branch campus, but as the other unit of a "dual university." Being of much more recent origin, the institution at Edwardsville does not have normal school antecedents, but was intended to be a multipurpose university from the time of its founding. It now includes a college of dentistry located in the nearby small city of Alton.

### The Urban State University

#### In Indiana

At Indianapolis, capital and largest city, there has long been the large Medical Campus of Indiana University, and Indiana University's second Law School (which operates largely with a 4-year program accredited for afternoon-and-evening students, as distinguished from the standard 3-year law curriculum on Indiana University's main campus at Bloomington). Indiana University also conducts in Indianapolis other institutions including a school of art, a college of physical education and gymnastics,



- 1 Indiana University
- 2 Purdue University
- 3 Indiana University-Purdue University at Indianapolis
- 4 Ball State University
- 5 Indiana State University, Main Campus
- 6 Indiana State University, Evansville Campus
- 7 Indiana University-Purdue University at Fort Wayne
- 8 Purdue University, Calumet Campus
- 9 Indiana University at South Bend
- 10 Indiana University Northwest
- 11 Indiana University Southeast
- 12 Indiana University at Kokomo

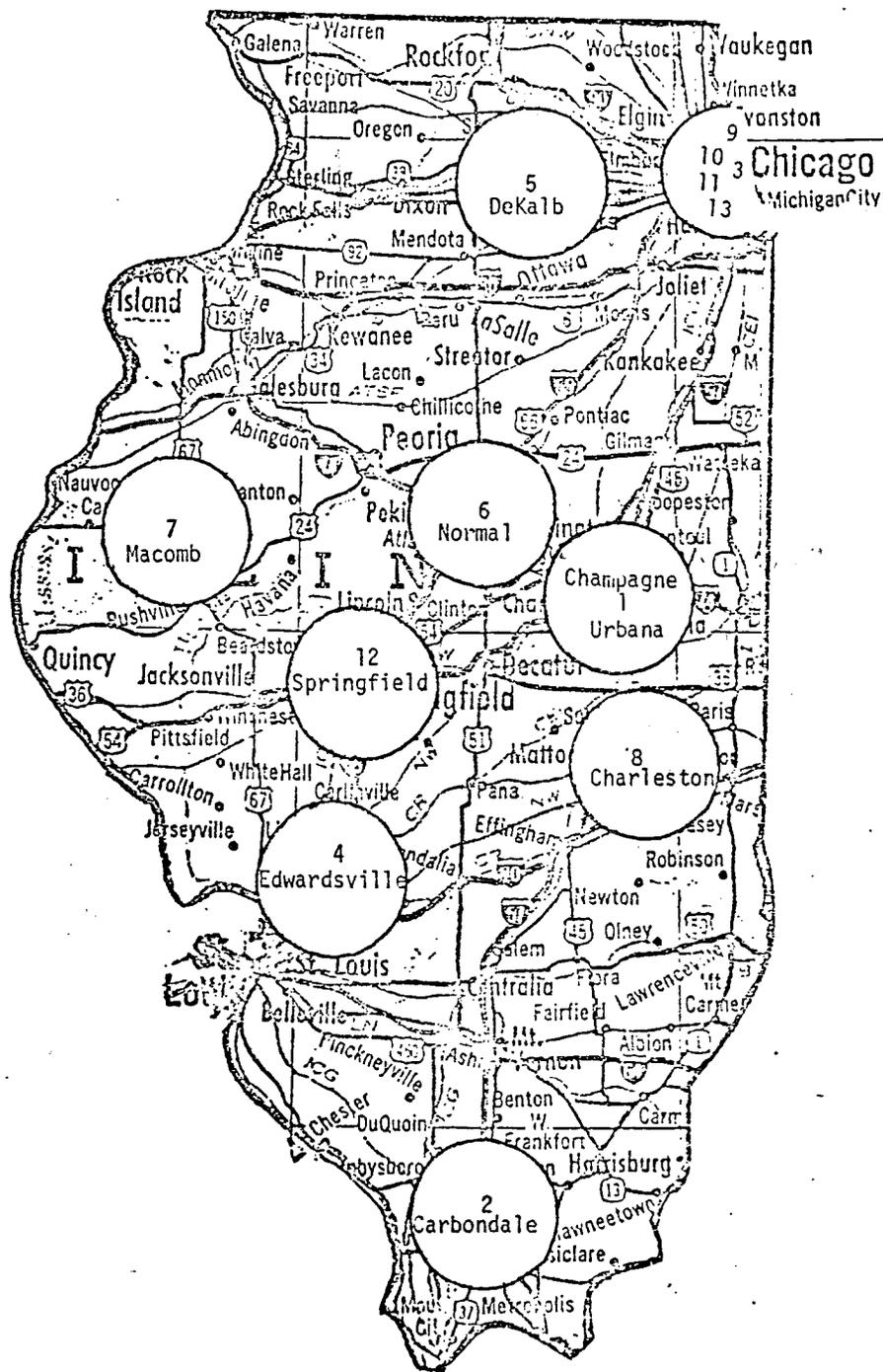
and its very large general university branch campus offering numerous four- and five-year curricula leading to degrees, and also standard doctoral degree programs in some departments.

Indiana University and Purdue each has an important branch at Fort Wayne. At first separately located and separately operated, a decade or more ago these were moved to a large new campus and operated practically as one, though each is governed by its respective "mother university" but under a flexible scheme of cooperation and alternation which is advantageous to the clientele of both and to the entire community.

Indiana State University at Terre Haute, one of the two smaller universities having evolved from the teachers' college tradition, now has one branch campus at Evansville, with programs leading to four- and five-year degrees.

Purdue University also operates a four-year branch in Indianapolis. In recent years the entire complex developed by the two state universities as branch campuses in that city have been given the clumsy appellation of Indiana University—Purdue University—Indianapolis (I.U.P.U.I.). This institution, already large and growing, undoubtedly has an expansive future, if for no other reason than it is in fact if not in name a state university, and the only public university in a metropolitan region of more than a million people.

Although it has experienced various stages of development over many years, this important urban institution as yet is not a legal corporate entity, and has no integral institutional identity apart from its status as branch campuses operated chiefly by Indiana University but also



- 1 University of Illinois, Main Campus
- 2 Southern Illinois University, Main Campus
- 3 University of Illinois, Chicago Circle
- 4 Southern Illinois University, Edwardsville Campus
- 5 Northern Illinois University
- 6 Illinois State University
- 7 Western Illinois University
- 8 Eastern Illinois University
- 9 Northeastern Illinois University
- 10 Chicago State University
- 11 Governors State University
- 12 Sangamon State University
- 13 University of Illinois Medical Center

in part by Purdue University. The entire complex has one executive and administrative staff.

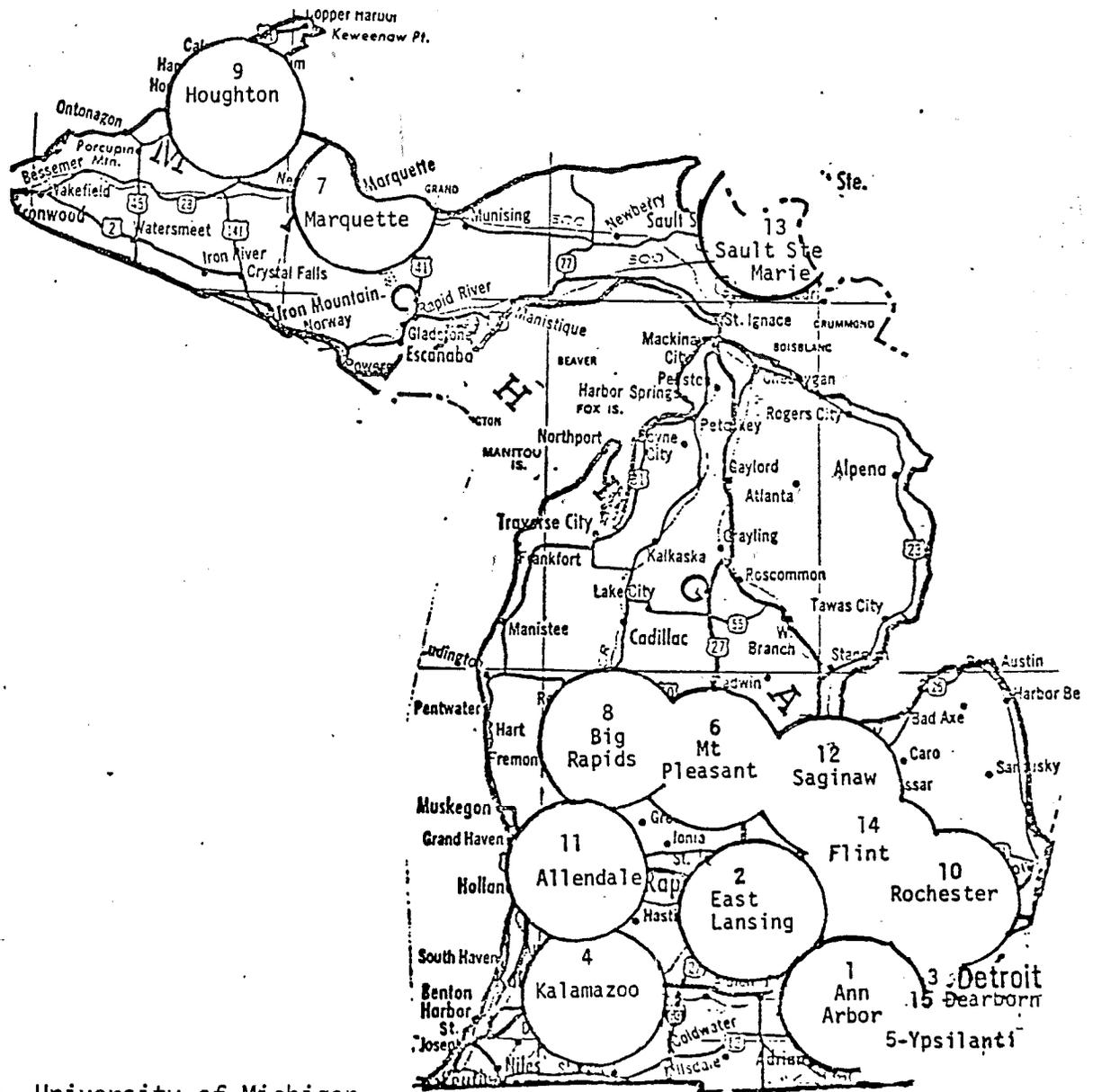
Because of its lack of statutory entity and identity, pedantic critics may question its being called an urban state university; but oddities of bureaucratic structure must not obscure that it is in fact serving that purpose on a large scale.

#### In Illinois

The University of Illinois at Chicago Circle is a lusty branch campus of the parent flagship university at Champaign-Urbana. Although scarcely as much as twenty years old, it has grown in enrollment and comprehensiveness, and affords another excellent example of a long-standing flagship university establishing a large outpost in the state's largest city, more than a hundred miles from its main campus. It is under the jurisdiction of the Trustees of the University of Illinois and the central office of the U of I System at Champaign-Urbana, but its very name, as well as its performance, gives it a certain institutional identity as an urban state university.

Southern Illinois University at Carbondale has a different story. It is not in a large urban concentration. Originally it was one of the five excellent institutions of their type in Illinois that originated as normal schools; but in 1949 it was taken out of the jurisdiction of the State Normal School Board and placed under its own Board of Trustees. Even before that time it had made substantial strides toward providing comprehensive higher educational services to the southernmost forty counties—about one-third of the entire state of Illinois, where it was the only public institution of higher education extant.

MICHIGAN. Fifteen Campuses of State Universities and Colleges.



- 1 University of Michigan
- 2 Michigan State University
- 3 Wayne State University
- 4 Western Michigan University
- 5 Eastern Michigan University
- 6 Central Michigan University
- 7 Northern Michigan University
- 8 Ferris State College
- 9 Michigan Technological University
- 10 Oakland University
- 11 Grand Valley State College
- 12 Saginaw Valley State College
- 13 Lake Superior State College
- 14 University of Michigan, Flint
- 15 University of Michigan, Dearborn

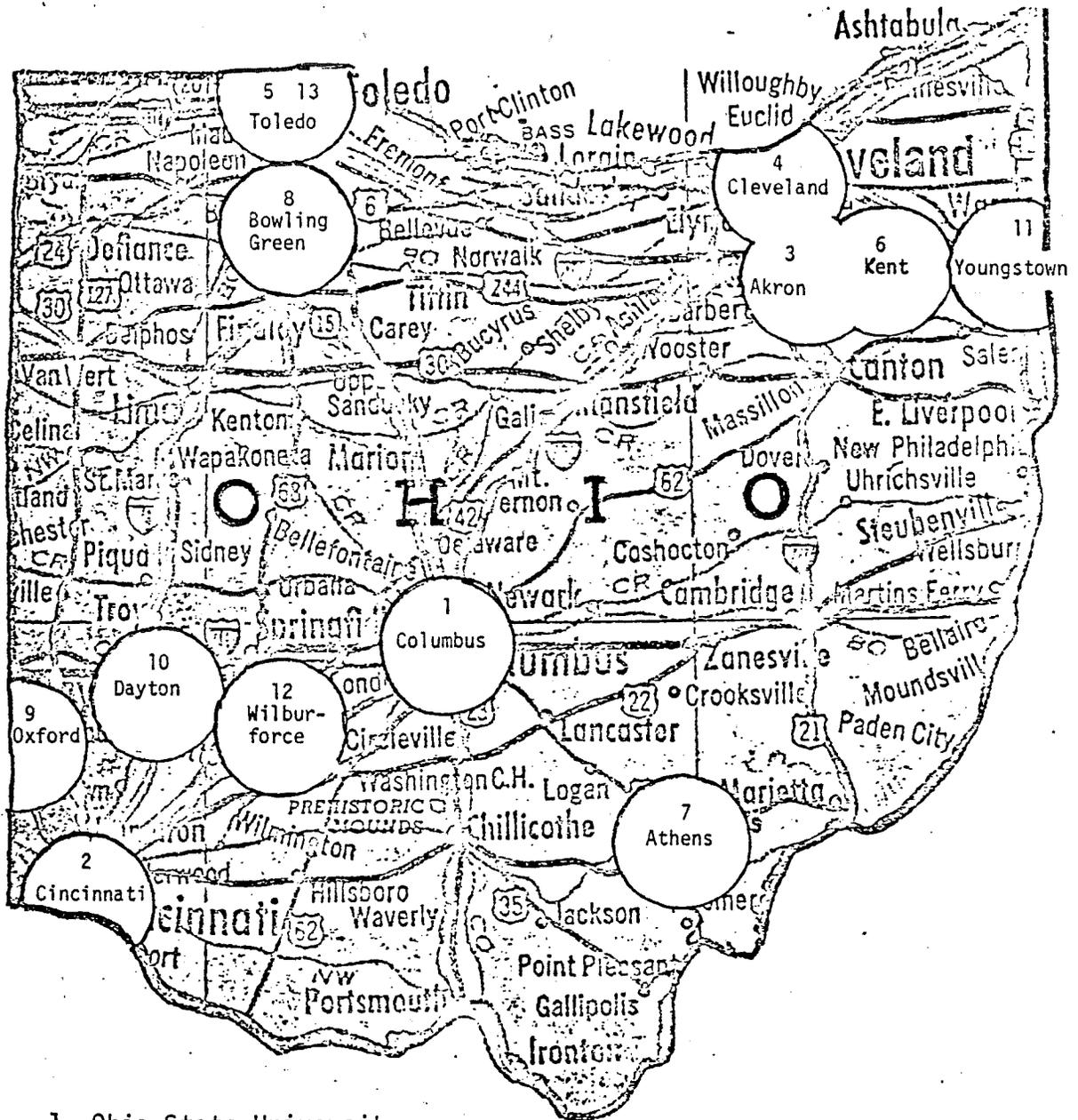
### In Michigan

Wayne State University in Detroit began long ago as a small private medical college, gradually acquired other missions as the city grew, and eventually became a municipal university supported by Detroit and Wayne County. In 1956 the Michigan legislature enacted a law providing that it be metamorphosed into a state university over a three-year transition period, 1956-59. Thus it became Michigan's third largest state university. The Constitution of 1963 gave it substantially the same large and definite measure of autonomy that had been possessed for a century by the University of Michigan at Ann Arbor, and for half a century by Michigan State University at East Lansing. The same Constitution of 1963 conferred autonomy on all other state universities and colleges then existing or that might be established in the future in Michigan.

### In Ohio

The University of Cincinnati began in the nineteenth century as a private institution and evolved into one of the nation's best-known municipal universities. The cities of Akron and Toledo also developed municipal universities, and for several decades during the first half of the twentieth century Ohio was the only state having as many as three municipal universities. Eventually state aid had to be provided in increasing proportions, and in the nineteen sixties all three became full-fledged state universities. Cincinnati's full change came last, only after a period of a few years as an "affiliated state university."

Cleveland State University was once a YMCA college, but was "taken over" by the state under an amicable agreement with its private



- 1 Ohio State University
- 2 University of Cincinnati
- 3 University of Akron
- 4 Cleveland State University
- 5 University of Toledo
- 6 Kent State University
- 7 Ohio University
- 8 Bowling Green State University
- 9 Miami University
- 10 Wright State University
- 11 Youngstown State University
- 12 Central State University
- 13 Medical College of Ohio

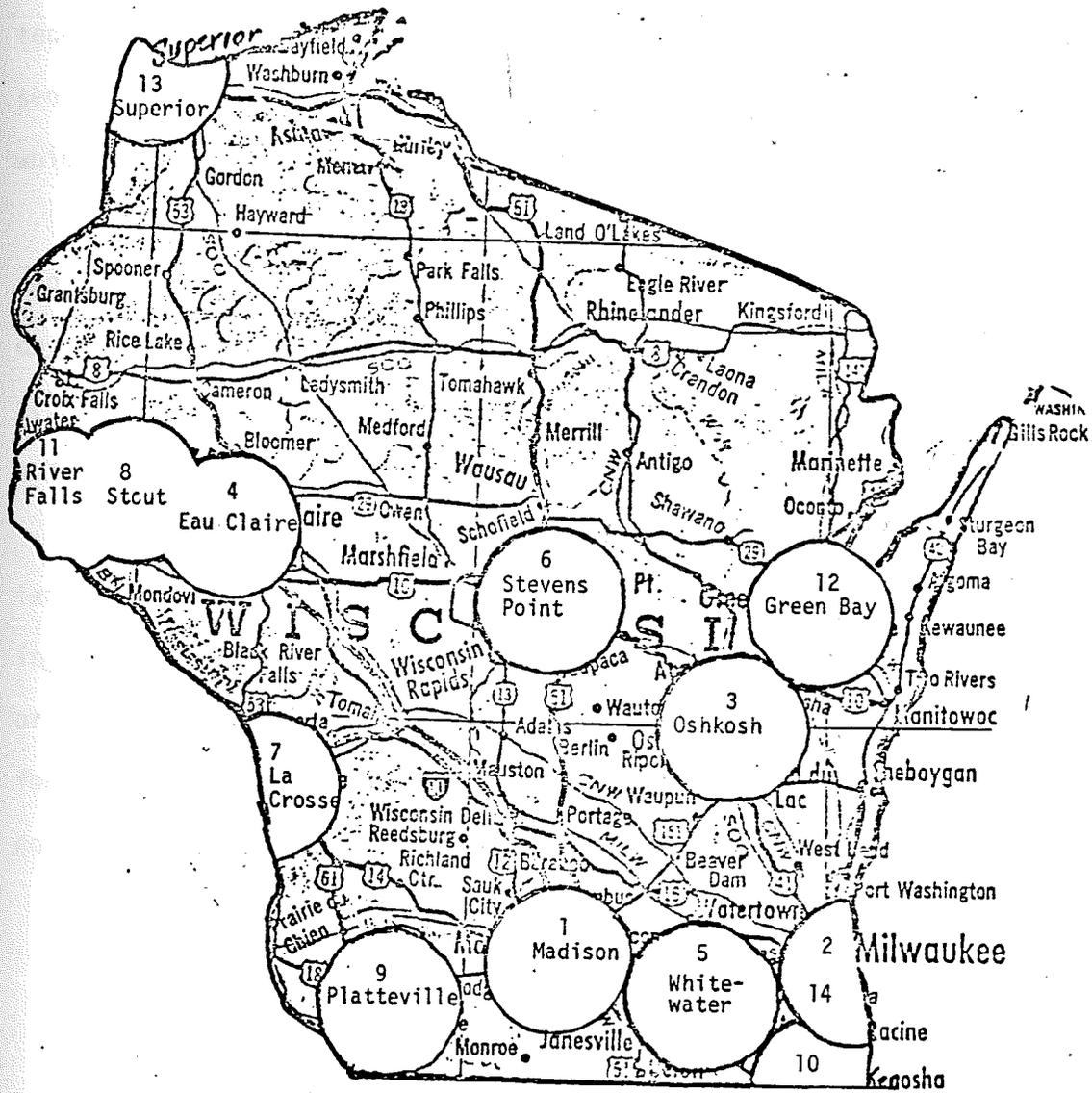
board of trustees in the late 1960s. With its location in Ohio's largest city, it can scarcely be less than a large state university and hardly avoid becoming larger.

#### In Wisconsin

For some years prior to 1950 the University of Wisconsin at Madison operated a small two-year extension campus in downtown Milwaukee. Milwaukee also had the Milwaukee State Teachers College, one of the largest and best of its type in the state. Demand for more varied public university facilities in the southeastern counties of Wisconsin led to the commissioning of a survey team which recommended that a large four- and five-year state college be provided in the environs of Milwaukee, not to have any administrative connection with either the University at Madison or the Milwaukee Teachers College. This was opposed by both those institutions; but several years subsequently the Madison branch in Milwaukee grew to become a full-fledged university, absorbed the former Milwaukee Teachers College, purchased the land and buildings of an adjacent private college, and under the reorganization of 1973 became the "University of Wisconsin—Milwaukee," now the second member of the "Doctoral Cluster" within the statewide University of Wisconsin System, alongside its much older and more distinguished parent "University of Wisconsin—Madison."

#### Serving the Cities

There are manifest similarities among the five foregoing sketches. To those who have eyes to see, they afford vistas of the growth of one or more vast cities in each populous state; of the increasing complexity of the economy and the society; of redoubled needs for advancing



- 1 University of Wisconsin, Madison
- 2 University of Wisconsin, Milwaukee
- 3 University of Wisconsin, Oshkosh
- 4 University of Wisconsin, Eau Claire
- 5 University of Wisconsin, Whitewater
- 6 University of Wisconsin, Stevens Point
- 7 University of Wisconsin, LaCrosse
- 8 University of Wisconsin, Stout
- 9 University of Wisconsin, Platteville
- 10 University of Wisconsin, Parkside
- 11 University of Wisconsin, River Falls
- 12 University of Wisconsin, Green Bay
- 13 University of Wisconsin, Superior
- 14 Medical College of Wisconsin

technological know-how, for skills in the social sciences, for growing sensitivity to ethics, for solicitude for personal integrity,—all of which are fostered on university campuses.

Along with these go practical and thoughtful learning in a score and more professions and semiprofessions that are indispensable in present-day communities, and the enlightening influence of learning in the liberal arts and sciences and the humanities which are the heritage of millennia and are at the base of all humane communities.

The ten state universities mentioned in this section have stepped into the breach in the advancing line of civilization. They are struggling, growing, achieving. As yet none of them can match the age, prestige, or justified renown of the seven flagship universities;—but they already form a phalanx of indispensable allies in the forward march toward higher educational opportunities and choices for all Americans.

## VI

### MULTIPURPOSE STATE UNIVERSITIES HAVING TEACHERS COLLEGE OR NORMAL-SCHOOL ORIGINS

The former normal schools and teachers colleges have become multipurpose state universities of middle size, with three to six undergraduate colleges and a graduate school, some of which provide limited but growing numbers of doctoral programs.

These institutions form a distinct segment of public higher education in this region, with much to commend them. Collectively they have more students than any of the other segments of public universities and four-year colleges in the region, as classified herein.

## VI

### THE MULTIPURPOSE STATE UNIVERSITIES OF NORMAL-SCHOOL AND TEACHERS COLLEGE ORIGIN

The five states all had an early practice of establishing normal schools for the education of teachers in the common elementary schools. A few of these, especially in Michigan, date from as early as the 1840s, but the bulk of them were started more recently, near the turn of the century, give or take a few years. During that period improved highways were few, school districts were tiny, and transportation was largely by horse-drawn vehicles. Even as late as the mid-twentieth century, Illinois had as many as 10,000 school districts. Thus it made sense to locate the normal schools in different regions within the state to make them accessible. Each of the five east north central states followed that practice; and each in 1980 has from two to nine multipurpose regional universities which have grown from the normal school tradition: Ohio 2, Indiana 2, Illinois 4, Wisconsin 9, and Michigan 4.

To these may be added a few other regional-within-state universities which are today in roughly similar developmental stages. Ohio University at Athens (founded in 1804) and Miami University at Oxford, Ohio, have been regional universities in the southeast and southwest parts of the state, respectively, for more than a century and a half. They are not strictly in the normal school tradition, though the legendary Professor McGuffey who contributed greatly to the quality of the elementary schools of the nineteenth and early twentieth centuries with

his famous series of "Readers" was associated with them.

There may be other instances in which an institution placed in this group of twenty-five does not feel at home with the designation of "former teachers college or normal school." For example, the University of Wisconsin at Parkside, at the city of Kenosha, did not develop from a normal school but from a two-year extension center of the University of Wisconsin at Madison, so also did the institution at Green Bay.

#### This Segment is Important

As indicated in Table 19, the twenty-four universities in five states received more than \$635 million in net state tax-fund appropriations by the states for fiscal year 1980, and their total enrollment apparently exceeds 325,000 students. Collectively they constitute an important and respected segment of the state university scene in the East North Central region.

Michigan and Illinois each has four of these universities, and the total enrollment for all four in each of these two states is almost exactly the same, at near 69,000; but for fiscal 1980, Illinois appropriated nearly \$149 million, as compared with Michigan's \$132 million. Ohio also has four such universities, with total enrollment about 17 percent higher than in either Michigan or Illinois; but Ohio's appropriation for fiscal 1980 is \$1 million less than Michigan's, and \$18 million less than that of Illinois.

Wisconsin's enrollment in eleven institutions is substantially less than Ohio's in only four; but Wisconsin's appropriation for 1980 is 11 percent more than Ohio's. These comparisons are of limited significance because they apply only to one of four segments of the state

Table 19. Twenty-five State Universities Having Normal School Antecedents

State Universities (1)	Enrollment 1977 (2)	Appropriations 1980* (3)	Per Headcount Student (4)
IN Ball State U	18,241	41,905	
Indiana State U	14,839	37,762	
Total for Indiana	33,080	79,667	\$2,408
IL Northern Illinois U	24,737	53,421	
Illinois State U	20,114	42,960	
Western Illinois U	13,875	31,260	
Eastern Illinois U	10,102	20,991	
Total for Illinois	68,818	148,632	\$2,160
MI Western Michigan U	22,496	46,729	
Eastern Michigan U	19,104	34,779	
Central Michigan U	17,973	29,531	
Northern Michigan U	9,306	20,849	
Total for Michigan	68,879	131,888	\$1,915
OH Kent State U	23,387	38,887	
Ohio University	17,870	32,586	
Bowling Green State U	18,784	31,559	
Miami University	18,309	27,463	
Total for Ohio	81,350	130,495	\$1,604
WI U of Wis—Oshkosh	9,694	20,177	
U of Wis—Eau Claire	10,344	18,628	
U of Wis—Whitewater	9,589	15,590	
U of Wis—Stevens Point	8,880	15,198	
U of Wis—LaCrosse	8,554	14,622	
U of Wis—Stout	6,463	12,759	
U of Wis—Platteville	4,607	10,294	
U of Wis—Parkside	5,182	10,022	
U of Wis—River Falls	5,019	10,009	
U of Wis—Green Bay	3,642	9,671	
U of Wis—Superior	2,418	7,488	
Total for Wisconsin	74,392	144,458	\$1,942
Total, 25 universities	326,519	635,140	
Weighted average crude per student appropriation			\$1,945

\*In thousands of dollars.

university scene. Half of the twenty-five universities in the five states may be said to be the leading state universities of their type, because of such factors as their size, comprehensiveness, and stage of progress toward multipurpose university characteristics. These are set out in Table 20. Twelve have been selected for brief notice (Table 20) because a few generalizations about them can be ventured.

Table 20. Twelve Leading East North Central Multipurpose State Universities of the Former Teachers College Type

Rank (1)	Universities (2)	Appropriation Fiscal 1980* (3)	Enrollment 1977 (4)
1	Northern Illinois U	53,421	24,737
2	Western Michigan U	46,728	22,496
3	Illinois State U	42,960	20,114
4	Ball State U (IN)	41,905	18,241
5	Kent State U (OH)	38,887	26,387
6	Indiana State U	37,762	14,839
7	Eastern Michigan U	34,779	19,104
8	Ohio University	32,586	17,870
9	Western Illinois U	31,760	13,865
10	Bowling Green SU (OH)	31,559	18,704
11	Central Michigan U	29,531	17,973
12	Miami University (OH)	27,463	18,309

\*In thousands of dollars.

No more than a quarter of a century ago each of these was a comparatively small four-year state teachers college (and before that a two-year normal school). In more than one instance a president of one of these was heard to say, "This is a teachers college, and as long as I am president it will be a teachers college, and nothing but a teachers college."

It is hardly appropriate here to dwell at length upon the salient qualities of those institutions that were less than admirable as viewed from the present day. Presidents especially, and often other administrators as well, often dealt with the faculty in an extremely authoritarian way. Faculty members were often likewise stiff-necked and authoritarian in their relationships with students. In turn, the whole institution had its curriculum prescribed by an officious state superintendent of public instruction and staff. In fact, in many states these institutions were no more than browbeaten step-children of the state public school bureaucracy, with their academic and fiscal policies and practices dictated from the state capital.

Small wonder that any pretensions they may have had toward popular recognition as colleges or universities were often ridiculed by their contemporary liberal arts colleges in their own states; and they were widely regarded with disdain by the prestigious private colleges and universities everywhere, but especially in the Northeast. Despite all this, the old normal schools and teachers colleges were not without their merits in their day and time. To deny or denigrate their large contribution to the advancement of education at all levels would be both unfair and erroneous. Some of them, such as Eastern Michigan University at Ypsilanti and Illinois State University at Bloomington-Normal had a hundred years of service behind them before the time arrived when the realization grew with pent-up force that teachers in elementary and secondary schools should have a university education; that they should not be confined to a small, narrowly-conceived, fragmentary single-purpose institution, obsessively concentrated on "teacher-training" in its less-inspiring senses.

Many teachers colleges were besieged by students who openly declared that they did not want or expect to become teachers, but wanted a college education in a convenient and competent institution. This was heresy to many teachers college administrators and faculty members who vigorously turned away such students, but eventually could not stem the tide.

One by one and state by state, teachers colleges became dual-purpose (liberal arts and education), then multipurpose (adding fine arts, applied science and technology, business, and a graduate school), and developing whatever other specialties sufficient numbers of their clientele requested. Within a few decades, enrollments jumped from a few hundred to the vicinity of 20,000. Typically there are now thirty-odd instructional departments wherein baccalaureate and masters' degrees can be earned, one or more research institutes or centers, with the whole organized in five to ten schools and colleges. Typically three to a dozen departments offer doctoral degree programs.

In these situations a university has come into being, and is already well past its start-up stage. Not a second Oxford or Paris or Heidelberg, or yet a Harvard or Berkeley or Ann Arbor, no; but eventually probably as valuable in its milieu of the early twenty-first century as any of these.

A decade is but a moment in the life of a university, but it can bring many changes in the society and the economy which the university serves, and in the institution itself. The leading former teachers colleges are now not only respectable universities, but universities "on the make." Year by year and decade by decade they emerge further from the

chrysalis of their restricted background and assume more and more of the characteristics of free and enthusiastic intellectual effort, comprehensiveness and cosmopolitanism, and rise further from the thrall of provincialism, obsolescent prejudices, and busy-work red-tape routine.

No generalized designation fits them exactly. Call them "regional state universities" if you will, but most of them have no fixed boundary lines drawn around their respective areas. Call them "emerging state universities," but all universities everywhere are always "emerging" in the sense that they are growing and plowing new ground and making new discoveries.

## VII

### TWENTY-THREE OTHER STATE UNIVERSITIES AND COLLEGES

Between 1960 and 1980 each of the East North Central States has seen a handful of new state universities and colleges come into being, either by evolving from earlier antecedents or by new establishment. Some are not many years beyond the startup stage, but all are permanent. Enrollments range generally from 2,000 to 11,000. These institutions form a species of "growing edge," serving new areas, new missions, or unique needs.

## VII

### TWENTY-THREE OTHER STATE UNIVERSITIES AND COLLEGES OF LESSER SIZE AND OFTEN OF MORE RECENT ORIGIN

These institutions are a miscellaneous grouping as to their respective origins and missions. In Indiana they consist of the "grown-up" four- and five-year branch campuses of Indiana University and Purdue University (eight in all), excluding the central and largest joint branch at Indianapolis, which is placed among ten large urban universities in the region, discussed in an earlier section (Section V, pages 51-59).

In Illinois the group includes the recently-established Sangamon State University in Springfield and Governors State University in Chicago, as well as Northeastern Illinois University and Chicago State University, both in the latter city. These latter two institutions, in a strained sense, could be said to have the teachers college tradition, because the two present universities are developing at their respective sites at what were once the North and South campuses of the Chicago Teachers College—a municipal institution now defunct.

In Michigan there is the long-established former School of Mines at Houghton on the Northern Peninsula now named Michigan Technological University and Ferris State College at Big Rapids—a unique species of college that began as a private vocational school half a century ago at the instigation of the U.S. Senator for whom it is named. Gradually it came to emphasize the teaching of pharmacy, and became for a time the largest school of pharmacy in the nation. It also has other

semi-professional and occupational programs, several of which require only two years of instruction beyond high school, and continues to have a large proportion of its students in those categories. The other four institutions named in Table 21 are all of more recent origin. Each has a history not to be recounted at this point.

In Ohio the oldest of the institutions of this category is the recently renamed Central State University, which developed over several decades alongside the small predominantly black private college known as Wilberforce University. For many years it was known as the Normal and Industrial Department of Wilberforce University, though it was fully state-supported and eventually came greatly to exceed in size the private college to which it was nominally attached. The long story of the interrelations between the two involve many legal niceties, not to say anomalies.

The other state universities (in Ohio) mentioned in Table 21, both date from the 1960s. At Youngstown the state took over a sinking private college; and Wright State University near Dayton is the outgrowth of what was once a branch campus of Ohio State University established at a U.S. Air Force Base to cooperate in providing technical and scientific instruction for Air Force personnel.

The Medical College of Ohio (at Toledo) was set up as a separate school having no connection with the University of Toledo. Here it must be noted there is another instance of this kind of development in Wisconsin, but it is something of a rarity in medical education. Most state medical colleges are units of state universities, whether located on the main campus or on a medical campus at a distance. This present report

Table 21. Twenty-three Other State Universities and Colleges

State Institutions (1)	Enroll- ment 1977 (2)	Appropri- ations 1980 <sup>†</sup> (3)	Per Headcount Student (4)
IN IUPUI at Fort Wayne	9,353	10,295	
Purdue at Calumet	6,977	7,568	
Indiana U at South Bend	6,167	6,043	
Indiana U Northwest	4,736	5,789	
Indiana U Southeast	4,008	3,468	
Indiana U Kokomo	2,481	2,315	
Total for Indiana	33,722	35,478	\$1,052
IL Northeastern Illinois U	10,148	17,738	
Chicago State U	7,025	15,664	
Governors State U	3,814	12,137	
Sangamon State U	3,612	11,761	
Total for Illinois	24,599	57,300	\$2,329
MI Ferris State College	9,964	21,846	
Michigan Technological U	6,807	20,929	
Oakland University	11,150	19,756	
Grand Valley State College	7,469	13,268	
U of Michigan, Dearborn	5,480	9,348	
U of Michigan, Flint	3,801	8,585	
Saginaw Valley State College	3,529	6,687	
Lake Superior State College	2,261	5,739	
Total for Michigan	50,461	106,158	\$2,104
OH Wright State U	14,364	23,102	
Youngstown State U	15,696	21,268	
Central State U	2,230	7,971	
Medical College of Ohio	360	14,029	
Total for Ohio	32,650	66,370	\$2,033
WI Medical College of Wisconsin	623	5,289	\$8,490
Total, 23 universities	142,055	270,595	\$1,905
Weighted average crude per student appropriation			\$1,905

<sup>†</sup>In thousands of dollars.

does not attempt to tell the full story or to analyze the comprehensive statistics of medical education in the East North Central states.

In Wisconsin the only institution listed in Table 21 is also a state medical college, legally separate from any university. A bit of its reason for being is mentioned herein in Section V, page 52.

Wisconsin's famous ten former teachers colleges (now designated as the Wisconsin State Universities) lost one of their number when the Milwaukee State Teachers College was merged into the University of Wisconsin—Milwaukee; but gained two neophytes when former University of Wisconsin centers at Green Bay and Kenosha evolved into four- and five-year institutions by 1965, and have now joined the "university cluster," raising its number of universities to eleven (nine former teachers colleges plus newer state universities at Green Bay and Kenosha). The latter is named University of Wisconsin—Parkside.

Michigan was prolific in founding three new four- and five-year state colleges since 1960: Saginaw Valley State college, Grand Valley State College (at Allendale), and Lake Superior State College at Sault Sainte Marie on the Northern Peninsula.

The story of the last-named is of especial interest. The campus at Sault Sainte Marie had been a U.S. military installation through World War Two, but was acquired in 1946 by Michigan Technological University and operated for some twenty years thereafter as a two-year branch campus, some 200 miles from its main campus at Houghton. Though the Northern Peninsula stretches more than 200 miles from west to east, it has no more than 300,000 people. In addition to the technological university at Houghton, there is also the long-standing Northern Michigan

University at Marquette, roughly sixty miles east of Houghton and 160 miles west of Sault Sainte Marie. The American town of Sault Sainte Marie has 25,000 people, and a Canadian town of the same name on the opposite side of the river has 50,000.

When in the early 1960s it was proposed that the two-year branch campus at the American town be expanded to become a four-year state college, an ad hoc advisory committee of Michigan citizens was appointed to advise the Michigan State Board of Education, which in turn advised the state legislature that the proposal should be enacted and funded; and this was done.

There was bitter opposition from conservatives who argued that the Northern Peninsula was an outlying province of sparse population, scarce resources, few developed industries, and altogether without the economic base to support a four-year college in addition to the two universities it already had.

The argument that prevailed, however, was that in wealthy and populous Michigan it was a duty of the state to provide fair opportunity for a college education for the young men and women born and brought up in the remote and economically depressed eastern half of the Peninsula, even if it would entail much greater unit costs than customary in other wealthier and more populous parts of the state.

Other favorable arguments related to benefits to the economy of the Northern Peninsula and educational benefit to the entire state. Thus Lake Superior State College was born. One committee-member remarked: "If a four-year state college is opened in Sault Sainte Marie next September, it will immediately have one thousand students from Detroit;"

and this in fact proved to be literally true, bringing with it considerable advantages both to the people of the Northern Peninsula and to the people of Detroit, and to the whole state, ultimately.

Table 22. Twelve Leading State Universities of the Generally Younger and Smaller Types, Not Having Teachers College Origins

State (1)	Rank (2)	Universities, (3)	Appropriation Fiscal 1980 (4)
OH	1	Wright State University	23,102
MI	2	Ferris State College	21,846
OH	3	Youngstown State University	21,268
MI	4	Michigan Technological U	20,929
MI	5	Oakland University	19,756
IL	6	Northeastern Illinois U	17,738
IL	7	Chicago State University	15,664
OH	8	Medical Col of OH (Toledo)	14,029
MI	9	Grand Valley State College	13,268
IL	10	Governors State U (Chicago)	12,137
IL	11	Sangamon State U (Springfield)	11,761
IN	12	I.U.P.U.I. at Fort Wayne	10,395

## VIII

### THE TWO-YEAR COLLEGES IN THE EAST NORTH CENTRAL STATES

The comprehensive community college is an "open door" college; admission restrictions are few, if any; tuition fees and other fees are lower than in any other type of college; part-time students and students of all ages above 18 are welcomed; the student can continue to live at home and avoid the expense of travel and separate maintenance at a distance; many of the students are persons who could not otherwise attend any college. All these are great gains.

## VIII

### THE TWO-YEAR INSTITUTIONS IN EACH OF THE FIVE STATES

The first two years of formal education above high school, once ridiculed as "glorified high school," have come to constitute a major segment of the nationwide scene in higher education. Currently they enroll nearly one-third of all students. In different places and in varying proportions, they offer in general three programs: (1) "college parallel" or liberal courses; (2) vocational-technical or occupational courses; and (3) adult programs for persons wishing to upgrade themselves either culturally or occupationally or both.

Nationwide there are some 1,200 such institutions, of which about 1,000 are public. Their spread was so rapid during the 1960s that some fifty new ones were established in a single year late in that decade—an average of one new two-year college each week.

Each of the five East North Central states has this segment as an important feature of its statewide higher educational picture, but in each state it varies as to size, organization, division of state and local support and leadership, and policies.

#### Community Colleges in Illinois

Illinois is often credited with having the first formalized junior college, originating early in this century at Joliet. Today the state has approximately fifty two-year college campuses, located in thirty-nine community college districts. Nine campuses, known collectively as Chicago

City Colleges, are in the community college district embracing the city of Chicago. Several others are single-campus districts covering the nearby suburbs.

Each community college district is a public corporation within which the voters elect a board of trustees and constitute a local taxing unit which provides roughly half of the tax support for the operating expenses of the district. The other half is from state tax funds appropriated annually by the legislature of Illinois. Other relatively small sources of operating income for the community colleges are tuition fees, federal grants, and occasional private gifts.

#### Two-Year Colleges in Indiana

In contrast with Illinois, the state of Indiana has not established a statewide system of comprehensive community colleges. Instead, the principal universities (Indiana and Purdue) each developed a system of branch campuses at sizeable cities at various points in the state. These started as two-year campuses but within a few decades gradually developed into full four-year institutions, retaining their connection with the "mother university" in each instance. Thus what was once a network of two-year campuses has evolved into a system of four- and five-year university branches—seven of Indiana University and four of Purdue University.

Under the aegis of a state-created central office named Indiana Vocational Technical College and waggishly known as "Ivy Tech," Indiana has established thirteen two-year occupational colleges at various towns and cities. The only comprehensive-community-college type of two-year institution now extant in the state is Vincennes University at the town

INDIANA. Vocational Technical College Regions



Source: Trustees of the Indiana Vocational Technical College, Trustees Handbook with Respect to Authority and Powers and Other Related Information, November 1978, page 45.

of that name. It has a unique history: beginning very early in the nineteenth century as a private college, it had many vicissitudes and periods of suspension, but survives as a public institution supported by county and state, but largely by the state.

### Two-Year Colleges in Michigan

A statewide network of local public state-aided comprehensive community colleges has grown up over approximately a half century in Michigan. The current number of community college districts is twenty-nine, with thirty-three campuses. In general the districts provide about 40 percent of annual operating expenses, while the state supplies about 50 percent.

Michigan and Illinois are markedly similar in that all their local public two-year institutions are comprehensive; that is, they include college-parallel and vocational-technical programs and both of these types are available to adults and other part-timers, in evening as well as day classes. In such comprehensive colleges the vocational-technical division is eligible for the federal aid to vocational education at this level through various special channels that have been developed over half a century. As yet this federal support is not great, amounting usually to no more than 10 percent of the annual operating expenses of the college.

It is important, however, that the vocational-technical division of the comprehensive community college fills the role of the separate vocational-technical institutes as they exist in other states. Michigan and Illinois do not maintain separate systems of vocational-technical colleges. All their public two-year colleges are comprehensive community

colleges. This is a desirable situation, contributing to the all-important accessibility of educational choices to all residents of the state.

#### Two-Year Colleges in Ohio

Traditionally Ohio has two-year university branches dependent upon each of the five older and larger state universities. At a recent time there were as many as thirty such branch campuses in the state. Currently their number is reported as twenty-four, appended not only to the long-established state universities, but also to such newer establishments as Cleveland State University, Youngstown State University, and Wright State University. These branches are said to be generally comprehensive in the sense that they are not strictly limited to college parallel courses, but to some extent provide technical and semi-professional instruction. Four of the twenty-four, however, are reported as exclusively college parallel. All twenty-four are carried in the budgets of the respective parent universities and are in that sense tax-supported wholly by the state.

Next in number are Ohio's sixteen two-year technical colleges, of which all but one are financed by the state and get no operating support from any local taxing districts. These colleges are much of the same nature as the vocational-technical institutes in Indiana and a majority of the technical, vocational and adult schools in Wisconsin; that is, confined to vocational instruction, and make no claim to be comprehensive two-year institutions.

Ohio also has eight comprehensive community colleges, five of which began a decade or more ago in large urban counties. This was under

a statute which authorized community college districts to be organized only in areas mustering 100,000 people or more—a very restrictive provision. These colleges get their operating expenses about 30 percent from their local taxing districts and about 50 percent from state appropriations. More recently three "general and technical" colleges (comprehensive community colleges) have been established in additional locations, without local tax support, and hence could be called state community colleges.

Thus Ohio's "network" of two-year colleges consists of three or four fragments of net thrown down on the map with some overlapping and some uncovered gaps. Considering the financing of annual operating expenses, Ohio comes much nearer to full support of two-year colleges with state tax funds than does any of the other four states of the East North Central region except Indiana; and while this trend in financing is inevitable, Indiana's seeming leadership is of small consequence because it has no network of comprehensive community colleges, and only a sparse network of vocational-technical colleges with a total of only 25,000 students, constituting only 11 percent of all higher education students in the state. The critical issue is accessibility (geographic) of two-year college facilities to all residents of the state.

#### Two-Year Colleges in Wisconsin

The situation in Wisconsin somewhat resembles Ohio's, but has a longer and different history. The University of Wisconsin at Madison long had a network of extension centers, in pursuance of its well-known slogan "the state is our campus." Since the reorganization of 1973,

these form a system of "university centers" of which there are fourteen, under the administration of a chancellor who reports to the president of the statewide University System of Wisconsin. The fourteen university centers are said to offer largely if not wholly liberal arts or college parallel instruction, and to be more in the nature of "university feeders," not merely to the university at Madison, but to the respective regional universities (former normal schools) in whose area of the state they are located. In this connection they are sometimes spoken of as satellites of the various universities, though that relationship could be overstressed. It is safe to say, however, that the University Centers are not comprehensive community colleges. As to annual operating support, they receive annual appropriations of state funds as a segment of the total legislative appropriations to the total statewide University System.

Another important element in the Wisconsin picture is the statewide system of Vocational, Technical, and Adult Schools, now based on seventeen local public districts covering the state, and under the oversight of the State Board of Vocational Education. These districts are taxing subdivisions of the state, electing their own governing boards and, generally speaking, operating one central vocational, technical and adult school of some size and importance, and an average of about one lesser center elsewhere in the same district, so that the current total number of campuses is about thirty-three.

Begun more than half a century ago, this statewide system of vocational schools was apparently originally wholly at the high school level and largely intended for high school dropouts who could not stomach the academic secondary school programs of that day. At one time there were

as many as sixty-eight of these local vocational school districts, in keeping with the general practice of that era of organizing local school districts of relatively small size as compared with present-day standards in the era of motor transportation and abundant highways.

Most important is that over the decades the clientele of these schools continually tended to include more and more persons who were high school graduates or equivalent, more competent working persons well above traditional high school age, and a generally higher level of maturity, so that they have come to be considered as institutions largely on the level of the two-year post-secondary college. This is not to say, by any means that they are comprehensive community colleges. Most of them are largely limited to vocational and technical instruction; but a few, especially of the older and larger ones, have for many years offered substantial programs of studies acceptable for transfer to the universities.

The very large Milwaukee Area Technical College is the leader in this respect. Among others are the Madison Area Technical College, the Gateway Technical Institute (with campuses at Racine and Kenosha), and the Nicolet College and Technical Institute at Rhinelander. This Wisconsin vocational system is not as totally narrowly vocational as the Indiana and Ohio vocational networks; but yet, the Wisconsin two-year college scene appears to shape up at present pretty much as a binary system, wherein never the twain shall coalesce. Wisconsin has nothing named a community college or junior college, let alone a comprehensive community college.

The Two-Year Colleges of the East North Central  
Region as a Whole

First, counting two-year colleges and their branch campuses, it appears that there are 198 two-year college campuses in the region. Let's say approximately 200. Among the states, they range from 14 in Indiana to 51 in Illinois, and 54 in Ohio. Michigan has 33; Wisconsin has 46 (Table 23).

Aggregate enrollment of 835,000 students is 41 percent of all college students at all levels in the entire region. This percentage of grand total enrollments in all higher education varies from 11 percent in Indiana to 53 in Illinois and 55 in Wisconsin. In Ohio it is 31 percent; in Michigan, 43 percent (Table 25).

These seemingly bland statistics are not a collection of useless information. They are of great consequence toward achieving accessibility to higher education for all worthy residents who want it. One of the very important and little recognized facts that has not yet been precisely quantified is that a large proportion of students in two-year colleges are persons who would not otherwise have gotten any formal education above high school at all.

The elements that generate this fact are, or ought to be, well-known: the two-year college is within commuting distance from the student's home; it is hospitable to part-time students; it welcomes students of all ages above eighteen; the student can continue to reside at home and avoid undergoing the expense of travel and separate maintenance in a college or university town at greater or lesser distance away; tuition fees and other fees are usually lower than in any other type of college;

admission restrictions are few or nonexistent—these colleges are "open-door" colleges.

Tables 23-27 are intended to provide a few numerical clues to the chaotic, or at least widely diverse, picture of the numbers and types of public two-year institutions in each of the five states.

Apparently the ratio of full-time to part-time students varies from 1 to 1.17 in Indiana to 1 to 2.74 in Illinois. Thus the five states bracket the ratio reported nationally for all fifty states, which is 1 to 1.79 (Table 24).

The percentage of all higher education students enrolled in two-year institutions ranges from 11.1 in Indiana to 55.5 in Wisconsin (Table 25).

Table 26 compares the total state appropriations for annual operating expenses of the two-year colleges for fiscal year 1980-81 with the total headcount enrollments reported for the preceding year. This produces a macro-statistic: appropriations per headcount student, which is of limited usefulness because it does not distinguish among the different types of institutions, nor among differing ratios of full-time students to part-time students, nor among differing proportions of their tax-paid operating income received by two-year institutions from state revenues and from local tax revenues. These latter may vary from as little as 30 percent from state funds to as much as 90 percent or more, depending on the state statute and the type of two-year college. Despite these limitations, the "appropriation per headcount student" has certain usefulness in comparing states as units.

Table 27 simply breaks down the data of Table 26 by types of two-year institutions in each of the five states.

Table 23. Two-Year Institutions: Number of  
Institutions and Campuses in  
Each of Five States

State (1)	Institutions (2)	Campuses (3)	Total Campuses (4)
IL	Institutions . . . . .	39	
	Campuses . . . . .	51	51
IN	Vocational-Tech Inst Vincennes U	13 1	14
MI	Institutions . . . . .	29	
	Campuses . . . . .	33	33
OH	Community Colleges Campuses . . . . .	7 9	
	Technical Colleges University Branches Campuses . . . . .	16 10 29	54
WI	University Centers Vocational/Tech/Adult Campuses . . . . .	14 16 32	46
	Total Campuses . . . . .		198

Table 24. Two-Year Institutions: Full-Time and  
Part-Time Enrollments as of October 1979

State (1)	Full-time (2)	Part-time (3)	Total (4)	Ratio Full-Part (5)
Illinois	82,074	224,717	329,791 <sup>†</sup>	1 to 2.74
Indiana	11,536	13,519	25,055	1 to 1.17
Michigan	59,151	146,982	206,133	1 to 2.48
Ohio	53,588	85,236	138,824 <sup>†</sup>	1 to 1.59
Wisconsin	56,340	78,934	135,274	1 to 1.40
50-st total	1,534,880	2,751,468	4,334,344 <sup>†</sup>	1 to 1.79

<sup>†</sup>Discrepancies in the totals occur when an institution reports total enrollment but does not show the full-time, part-time breakdown.

Table 25. Percentage of Students Enrolled in Two-Year Institutions

State (1)	Two-Year Enrollment (2)	Total Enrollment (3)	Per- cent (4)
WI	135,274	243,876	55.5
IL	329,791	616,209	53.5
MI	206,133	481,767	42.7
OH	138,824	452,754	30.6
IN	25,055	224,992	11.1
	835,077	2,019,598	41.3

Table 26. State Tax-Fund Appropriations for Annual Operating Expenses of Two-Year Colleges in Five States, 1980

State (1)	State Appropriations (2)	Headcount Enrollment (3)	Per Headcount Student (4)
Indiana	\$ 22,695,000	25,055	\$905.81
Ohio	93,790,000	138,824	675.60
Michigan	134,646,000	206,133	653.20
Illinois	135,251,000	329,791	410.11
Wisconsin	55,220,000	135,274	408.21
Totals	\$441,602,000	835,077	\$528.82

Source of enrollment data for the two-year colleges is: Gilbert, Fontelle (Ed.), 1980 Community, Junior and Technical College Directory. Washington, D.C.: American Association of Community and Junior Colleges.

Table 27. Two-Year Institutions in Five States

States (1)	Type of Institution (2)	Total Enroll- ment (3)	Appropri- ation 1980 (4)	Per Headcount Student (5)
IL	Community colleges	330,783	\$134,364	\$ 406.20
IN	Two-year colleges	25,055	22,695	905.81
MI	Community colleges	206,133	134,646	653.20
WI	Univ. Center System	8,708	13,853	1,590.84
WI	Vocational & Tech., & Adult Education	126,566	55,220	436.29
OH	Community colleges	55,446	40,331	727.39
OH	Technical colleges	37,402	33,416	893.43
OH	University branches	45,891	20,043	436.75

Table 28, which follows, sets forth the names, locations, and statistics of enrollment for 1979 of some 200 public two-year colleges of various types in Indiana, Illinois, Michigan, Ohio, and Wisconsin.

The enrollment figures are confined to three columns, showing full-time, part-time, and total.

The exhibit is adapted from 1980 Community, Junior, and Technical College Directory, edited by Fontelle Gilbert for the American Association of Community and Junior Colleges, One Dupont Circle, Washington, D.C. 20036.

The data may not in every instance be identical with similar data found in other documents bearing other dates and issuing from other sources.

Table 28. Two Hundred Two-Year Institutions in Five States

INDIANA

Institutions	Location	Enrollment, 1979		
		Full Time	Part Time	Total
Indiana Vocational Technical College	Indianapolis			
Central Indiana Region	Indianapolis	1,587	2,326	3,913
Columbus Region	Columbus	626	750	1,376
Eastcentral Region	Muncie	812	1,118	1,930
Kokomo Region	Kokomo	639	966	1,605
Lafayette Region	Lafayette	373	582	955
Northcentral Region	South Bend	696	1,254	1,950
Northeast Region	Fort Wayne	524	1,698	2,222
Northwest Region	Gary	781	966	1,747
Southcentral Region	Sellersburg	570	442	1,012
Southeast Region	Madison	151	247	398
Southwest Region	Evansville	522	836	1,358
Wabash Valley Region	Terre Haute	626	478	1,104
Whitewater Region	Richmond	368	481	849
Vincennes University	Vincennes	3,261	1,375	4,636

Institution	Location	Enrollment, 1979		Total
		Full Time	Part Time	
Belleville Area College	Belleville	2,391	5,851	8,242
Black Hawk College	Moline			
East campus	Kewanee	373	527	900
Quad Cities campus	Moline	1,887	4,672	6,559
Carl Sandburg College	Galesburg	1,011	2,541	3,552
City College of Chicago	Chicago			
Chicaco City-wide College	Chicago	1,228	5,992	7,220
Chicago Urban Skills Institute	Chicago	665	28,706	29,371
Kennedy-King College	Chicago	4,160	3,576	7,736
The Loop College	Chicago	1,696	5,707	7,403
Malcolm X College	Chicago	1,975	2,204	4,179
Olive Harvey College	Chicago	1,800	2,173	3,973
Richard J. Daley College	Chicago	1,572	5,131	6,703
Truman College	Chicago	1,910	3,117	5,027
Wilbur Wright College	Chicago	2,716	3,870	6,586
College of Dupage	Glenn Ellyn	4,839	12,899	17,738
College of Lake County	Grayslake	2,238	7,974	10,212
Danville Area Community College	Danville	1,340	2,169	3,509
Elgin Community College	Elgin	1,487	3,941	5,428
Highland Community College	Freeport	709	928	1,637
Illinois Central College	East Peoria	2,957	9,093	12,050
Illinois Eastern Community Colleges	Olney			
Frontier Community College	Fairfield	143	2,407	2,550
Lincoln Trail College	Robinson	609	975	1,584
Olney Central College	Olney	817	1,260	2,077
Wabash Valley College	Mt Carmel	1,105	2,130	3,235
Illinois Valley Community College	Oglesby	1,520	2,435	3,955
John A. Logan College	Cartersville	996	907	1,903
John Wood Community College	Quincy	1,003	1,688	2,691
Joliet Junior College	Joliet	2,578	6,685	9,263
Kankakee Community College	Kankakee	700	2,873	3,573
Kaskaskia College	Centralia	971	1,610	3,573
Kishwaukee College	Malta	947	2,150	3,097
Lake Land College	Mattoon	1,897	1,895	3,792
Lewis and Clark Community College	Godfrey	1,373	4,029	5,402
Lincoln Land Community College	Springfield	1,905	4,167	6,072
McHenry County College	Crystal Lake	711	2,524	3,235
Moraine Valley Community College	Palos Hills	2,972	7,001	9,973
Morton College	Cicero	935	2,451	3,386
Oakton Community College	Morton Grove	1,943	4,358	6,301
Parkland College	Champaign	2,667	4,137	6,804
Prairie State College	Chicago Heights	1,458	4,263	5,721
Rend Lake College	Ina	917	2,197	3,114
Richland Community College	Decatur	497	2,031	2,528
Rock Valley College	Rockford	1,657	4,392	6,049
Sauk Valley College	Dixon	880	2,194	3,074
Shawnee Community College	Ullin	518	1,779	2,297
Southeastern Illinois College	Harrisburg			23,000
Spoon River College	Canton	574	1,546	2,120
State Comm College of East St. Louis	East St Louis	876	1,008	1,884
Thornton Community College	South Holland	2,200	7,249	9,449
Triton College	River Grove	4,601	13,981	18,582
Waubonsee Community College	Sugar Grove	1,054	4,226	5,280
William Rainey Harper College	Palatine	4,096	13,098	17,194

MICHIGAN

Institution	Location	Enrollment, 1979		
		Full Time	Part Time	Total
<u>Community Colleges</u>				
Alpena Community College	Alpena	854	841	1,695
Bay De Noc Community College	Escanaba	845	406	1,251
Charles Stewart Mott Comm Coll	Flint	2,451	7,303	9,754
Delta College	University Center	3,608	5,416	9,024
Glen Oaks Community College	Centreville	617	690	1,307
Gogebic Community College	Ironwood	885	423	1,308
Grand Rapids Junior College	Grand Rapids	3,677	4,157	7,834
Henry Ford Community College	Dearborn	3,504	13,861	17,365
Highland Park Community College	Highland Park	1,519	804	2,323
Jackson Community College	Jackson	2,191	5,717	7,908
Kalamazoo Valley Community College	Kalamazoo	1,688	4,834	6,522
Kellogg Community College	Battle Creek	1,476	5,314	6,790
Kirtland Community College	Roscommon	507	568	1,075
Lake Michigan College	Benton Harbor	912	2,395	3,307
Lansing Community College	Lansing	4,642	20,129	24,771
Macomb County Community College	Warren			
Center campus	Mt Clemens	1,241	4,588	5,829
South campus	Warren	3,940	16,022	19,962
Mid Michigan Community College	Harrison	651	966	1,617
Monroe County Community College	Monroe	696	1,298	1,994
Montcalm Community College	Sidney	513	1,009	1,522
Muskegon Community College	Muskegon	1,501	3,674	5,175
North Central Michigan College	Petoskey	595	1,232	1,827
Northwestern Michigan College	Traverse City	1,760	1,211	2,971
Oakland Community College	Bloomfield Hills			
Auburn Hills campus	Auburn Heights	1,169	5,269	6,438
Highland Lakes Campus	Union Lake	495	2,703	3,198
Orchard Ridge campus	Farmington	1,929	5,204	7,133
Southeast campus	Oak Park	678	3,236	3,914
St Clair County Community College	Port Huron	1,709	1,641	3,350
Schoolcraft College	Livonia	2,094	5,810	7,904
Southwestern Michigan College	Dowagiac	1,115	1,179	2,294
Washtenaw Community College	Ann Arbor	1,383	6,356	7,739
Wayne County Community College	Detroit	7,783	12,318	20,101
West Shore Community College	Scottville	523	408	931

Institution	Location	Enrollment, 1979		
		Full Time	Part Time	Total
<u>Community Colleges</u>				
Cuyahoga Comm Coll District - Eastern Campus	Warrensville Twnshp	695	3,741	4,436
Metropolitan campus	Cleveland	2,866	6,889	9,755
Western campus	Parma	2,671	9,123	11,794
Edison State Comm Coll	Piqua	397	1,555	1,952
Lakeland Comm Coll	Mentor	1,746	5,399	7,145
Rio Grande Comm Coll	Rio Grande	570	297	867
Shawnee State Comm Coll	Portsmouth	1,131	799	1,910
Sinclair Comm Coll	Dayton	4,070	12,262	16,332
Southern State Comm Coll	Wilmington	412	843	1,255
<u>Technical Colleges</u>				
Belmont Tech Col	St. Clairsville	485	663	1,148
Central Ohio Tech Coll	Newark	514	594	1,108
Cincinnati Tech Coll	Cincinnati	1,716	1,941	3,657
Clark Tech Coll	Springfield	1,094	1,269	2,363
Columbus Tech Inst	Columbus	3,289	2,851	6,140
Hocking Tech Coll	Nelsonville	1,552	973	2,525
Jefferson Tech Col	Steubenville	626	970	1,596
Lima Tech Coll	Lima	1,983	4,068	6,051
Marion Tech Coll	Marion	460	674	1,134
Michael J. Owens Tech Coll	Toledo	1,632	1,584	3,216
Muskingum Area College	Zanesville	633	705	1,338
North Central Tech Coll	Mansfield	690	838	1,528
Northwest Tech Coll	Archbold	295	476	771
Stark Tech Coll	Canton	865	1,232	2,097
Terra Tech Coll	Fremont	755	1,208	1,963
Washington Tech Coll	Marietta	305	462	767
<u>University Branches</u>				
Bowling Green U - Firelands campus	Huron	506	663	1,139
Kent State U -Ashtabula campus	Ashtabula	418	698	1,116
Kent State U -East Liverpool Reg campus	East Liverpool	283	331	614
Kent State U -Geauga campus	Burton	55	248	303
Kent State U -Salem campus	Salem	170	374	544
Kent State U -Stark Reg campus	Canton	916	1,055	1,971
Kent State U -Trumbull campus	Warren	731	808	1,539
Kent State U -Tuscarawas campus	New Philadelphia			915
Miami U -Hamilton campus	Hamilton	456	1,316	1,500
Miami U -Middletown campus	Middletown	619	1,360	1,979
Ohio State U -Ag & Tech Inst	Wooster	689	31	720
Ohio State U -Lima campus	Lima	643	209	852
Ohio State U -Mansfield campus	Mansfield	855	288	1,143
Ohio State U -Marion campus	Marion	534	231	765
Ohio State U -Newark campus	Newark	676	236	912
Ohio U -Belmont campus	St Clairsville	269	695	964
Ohio U -Ironton campus	Ironton	550	480	1,030
Ohio U -Chillicothe campus	Chillicothe	442	655	1,097
Ohio U -Lancaster campus	Lancaster	445	1,036	1,481
Ohio U -Zanesville campus	Zanesville	444	565	1,009
U of Akron -Comm & Tech Coll	Akron	1,995	2,747	4,742
U of Akron -Wayne Gen & Tech Coll	Orrville	213	653	866
U of Cincinnati -Clermont Gen & Tech	Batavia	349	874	1,223
U of Cincinnati -Ohio Coll of App Sci	Cincinnati	769	1,173	1,942
U of Cincinnati -Raymond Walters Gen & Tech Col - Cincin.	Cincinnati	1,114	2,350	3,464
U of Cincinnati -University coll	Cincinnati	2,860	119	2,979
U of Toledo -Comm & Tech Col	Toledo	1,692	1,848	3,540
U of Toledo -Western branch	Celina	243	496	739
Wright State U -Coll of App Sci	Youngstown	2,882	1,921	4,803

## WISCONSIN

Institution	Location	Enrollment, 1979		
		Full Time	Part Time	Total
<u>University Center System</u>				
Baraboo-Sauk County campus	Baraboo	265	166	431
Barron County campus	Rice Lake	308	55	363
Fond Du Lac	Fond Du Lac	338	226	564
Fox Valley campus	Menaska	429	535	964
Manitowoc County campus	Manitowoc	257	134	391
Marathon County campus	Wausaw	678	309	987
Marinette County campus	Marinette	199	179	378
Marshfield-Wood campus	Marshfield	269	369	638
Medford campus	Medford	73	53	126
Richland campus	Richland Center	186	56	242
Rock County campus	Janesville	288	356	644
Sheboygan campus	Sheboygan	395	241	636
Washington County campus	West Bend	337	279	616
Waukesha County campus	Waukesha	893	835	1,728
<u>Vocational Technical &amp; Adult Education</u>				
Blackhawk Technical Inst	Janesville	1,377	509	1,886
District One Technical Institute	Eau Claire	2,060	871	2,931
Fox Valley Technical Institute	Appleton campus } Oakhosh campus }	2,680	1,947	4,627
Gateway Technical Institute	Elkhorn campus	158	369	527
	Kenosha campus	1,379	3,169	4,548
	Racine campus	645	1,647	2,292
Lakeshore Technical Institute	Cleveland	956	1,313	2,269
Madison Area Technical College	Madison	3,834	4,253	8,087
Mid-state Technical Institute	Marshfield campus	140	195	335
	Stevens Point campus	87	103	190
	Wisconsin Rapids	657	179	836
Milwaukee Area Technical College				
Central campus	Milwaukee	18,342	16,229	34,571
North campus	Mequon	2,440	9,653	12,093
South campus	Oak Creek	2,879	8,145	11,024
West campus	West Allis	2,649	10,735	13,384
Moraine Park Technical Institute	Fond Du Lac			
	Beaver Dam campus } West Bend campus }	1,033	7,631	8,664
Nicolet College & Technical Institute	Rhineland	450	473	923
North Central Technical Institute	Antigo campus	1,495	1,180	2,675
	Wausau campus			
Northeast Wisconsin Technical Inst	Green Bay campus			
	Marinette campus } Sturgeon Bay campus }	1,809	1,629	3,438
Southwest Wisconsin Technical Inst	Fennimore	731	461	1,192
Waukesha County Technical Inst	Pewaukee	1,706	2,736	4,442
Western Wisconsin Technical Inst	La Crosse	2,104	1,540	3,644
Wisconsin Indianhead VTAE District	Shell Lake			
Ashland campus	Ashland	292	52	344
New Richmond campus	New Richmond	285	46	331
Rice Lake Campus	Rice Lake	547	16	563
Superior campus	Superior	690	60	750

IX

GRADUATE, ADVANCED PROFESSIONAL, AND POSTDOCTORAL LEARNING

The markedly increased demand for graduate education expected in the next decade could be satisfied entirely by selective expansion of the programs of institutions already engaged in graduate education. However, each state and each metropolitan area with a population in excess of 500,000 should have graduate educational resources of high quality and of sufficient capacity to insure full contribution to cultural, social and economic development.

—From Toward a Public Policy for Graduate Education in the Sciences. Washington: National Science Foundation.

## IX

## GRADUATE, ADVANCED PROFESSIONAL, AND POSTDOCTORAL LEARNING

University study beyond the bachelor's degree is the spearhead of higher education. To use the military metaphor, as the columns of learners advance farther and farther into the unknown and sometimes hostile territory of ignorance, superstition, prejudice, and their numerous allies, they must put out far ahead strong "advance parties" to scout the terrain, "feel out" any obstacles encountered, and transmit frequent communications back to their main columns.

Ahead of the advance party goes the "point," a small patrol which goes forward with some caution and constantly reconnoiters. It will be the first to meet dangers or difficulties and relay intelligence to the advance party. Some distance ahead of the other scouts of the point patrol goes a "point soldier" who constantly advances into unknown territory farther than anyone else.

Graduate students, and doctoral and postdoctoral students, are the advance parties and point patrols in the advancement of learning.

Original Contributions to Knowledge

There are other apt metaphors. If the universe of human knowledge were one vast blackness in a limitless void, and a flashlight were focused at the center of a black vertical plane therein, the small spot of light would represent the present-day total of what mankind is thought to know. All around its circular boundary the light fades. On that foggy line is where graduate students and researchers in every field are working to push the frontier out.

Some have been described as "on their hands and knees with scalpels and microscopes, dissecting every blade of grass," while others may prefer to circle their terrain with a helicopter carrying cameras and field-glasses in an effort to see the forests without having their view obstructed by the trees. These, as well as many other strategies, all have their usefulness; and besides all that, many discoveries are made by serendipity, or by accidentally or inadvertently finding an important bit of knowledge that was not really being looked for at all. Such are the vagaries of science.

Graduate students and researchers have variously been accused of many faults, such as concentrating inanely on trivialities, using gobbledegook scientific or professional jargon that no one else can understand, and being so preoccupied with research that they do not communicate and do not teach, write, or speak well. But with all their alleged shortfalls, no knowledgeable person can fail to recognize that the advance of civilization and the upward progress of society depends very heavily on these people.

Graduate learning and research are ultimately the key to continual improvement in the theory and practice of more than a score of professions; in growing numbers of semiprofessions, subprofessions, and technical occupations. New discoveries reach into all walks of life: menial jobs are abolished (witness the hod-carrier, the elevator-operator, the push-cart street cleaner, and others that have disappeared); drudgery is reduced—the farmer is emancipated from the hoe and the scythe to the tractor and the harvester; the housekeeper is freed from the long hours of tedious handwork that gave rise to the saying "Woman's work is never

done." These connections can hardly be overemphasized.

An Example: Key to Improvement of  
Schooling at All Levels

Expansion of doctoral and postdoctoral studies in all academic and professional fields is the key to improvement of schooling at all levels from infancy onward, and to the advancement of humane civilization. The paramount factor in improving schools is the provision of many more teachers, educated beyond the stages hitherto acceptable.

The earned doctoral degree is not the ultimate union card for university or college professors. It will be supplanted, gradually over a generation, by a record of substantial postdoctoral studies, continuous or recurrent. Greatly increased numbers of doctoral degree holders (both of the conventional research-oriented types and from newer more flexible interdisciplinary programs) will infiltrate the faculties of community colleges and all lower schools. In a sense the opportunity is greatest at the level of preschools and day-care centers, where crucial advances can be made in education, nutrition, good health practices, and general physical and mental development.

Thus expansion and betterment of doctoral and postdoctoral studies is the leaven for the advancement of all education. There will be a growing stratum of postdoctors having some of the qualities of generalists able to counteract the excessive fragmentation of knowledge in university instruction. Benefits will also accrue to governments at all levels and to the whole of society from a better-educated citizenry, and from a large and growing pool of expertise to seek solutions of complex economic and social problems.

Doctoral Degrees Conferred by Seventeen East  
North Central State Universities, 1920 - 1974

It has been noticed in Section IV, Table 17, page 48, that the seven flagship state universities of the East North Central region ranked respectively first, fourth, fifth, seventh, fourteenth, fifteenth, and seventeenth among all the universities in the nation with respect to the numbers of Ph.D. degrees conferred over the 54-year period 1920-1974.

These are the comprehensive, cosmopolitan, large and long-established state universities of the region, each having been in existence for more than a century, and each known nationwide and worldwide.

Sections V, VI, and VII named and briefly characterized three other categories of East North Central state universities, nearly all of which are of much more recent origin (or at least younger in their current university embodiment). Seventeen of these were offering doctoral programs and conferring doctoral degrees, at least in small numbers, prior to 1974. Table 29 names each of these, together with the number of Ph.D. degrees reported as having been conferred up to that year.

Since then, three other state universities in the region are known to have inaugurated doctoral programs. They are Cleveland State University in Ohio; Southern Illinois University at Edwardsville; and Central Michigan University at Mount Pleasant.

Of these doctoral-granting state universities, Ohio appears to have eight; Illinois, five; Michigan, four; Indiana, two; and Wisconsin, one.

Table 29. Number of Ph.D. Degrees Granted by 17 State Universities  
in Five East North Central States, 1920-1974

(omitting the seven flagship universities, Section IV)

State (1)	Institutions (2)	Number Granted (3)
MI	Wayne State U, Detroit	2,584
OH	U of Cincinnati	1,994
IL	So. Ill. U, Carbondale	1,272
OH	Ohio University, Athens	775
OH	Kent State U	629
IN	Ball State U, Muncie	471
IL	Northern Ill. U, DeKalb	411
OH	Bowling Green State U	262
OH	U of Toledo	252
OH	U of Akron	245
MI	W. Michigan U, Kalamazoo	175
OH	Miami University, Oxford	162
IL	Illinois State U, Normal	139
WI	U of Wisconsin, Milwaukee	136
IL	U of Ill., Chicago Circle	103
IN	Indiana State U, Terre Haute	97
MI	Michigan Tech. U, Houghton	41

Source: National Research Council, Commission on Human Resources, A Century of Doctorates (Washington, D.C., 2101 Constitution Avenue, NW).

Graduate and Postdoctoral Students, 1980

Table 30 speaks not of doctoral degrees granted, but of aggregate headcount enrollments of post-baccalaureate students as of Fall 1980 in some twenty state universities of the region, and of the numbers of post-doctoral students.

This table is the result of a quick survey and does not purport to be all-inclusive, but only a partial representation for illustrative purposes. It includes a majority of the universities in each of the first two categories (Sections IV and V, pages 43-59) and samplings of the universities in the other two categories (Sections VI and VII, pages 60-74).

Reports of numbers of postdoctoral students are in nearly all cases approximations, because this level of study is not yet routinely recorded and credentialed or officially certificated. There is, and probably will not be, any necessity for formal degrees higher than the doctorate; but this does not detract from the increasing significance of postdoctoral study.

University governing boards and administrators could well take more official notice of their postdoctoral students and give them more recognition as a small but growing element of present and future importance. They tend to raise the level of maturity of the entire university community. They are generally exemplars of intellectual effort who lend inspiration to the student body and exhibit qualities of scholarly curiosity and integrity worthy of emulation.

Table 30. Graduate Student Enrollments and Postdoctoral Students, 1980, in 24 State Universities in the East North Central States

State (1)	Institution (2)	Head- count graduate students (3)	Percentage of university enrollment (4)	Approximate number post doctor- ates (5)
WI	U of Wis., Madison	13,600	33	550 <sup>a</sup>
MI	U of Mich, Ann Arbor	13,172	37	163
OH	Ohio State University	12,977	22	5
MI	Mich State U, Lansing	10,535	22	34
MI	Wayne State U	10,239	31	6
IL	U of Ill, Champaign/ Urbana	8,314	24	NR
IL	Northern Ill., DeKalb	7,820	30	10
IN	Indiana U	7,500	24	NR
IN	IUPUI, Indianapolis	6,717	29	10
IN	Purdue University	5,234	16	120
WI	U of Wis., Milwaukee	4,468		10
OH	U of Akron	4,055	23	0
IL	So. Ill. U, Carbondale	3,744	16	0
IN	Ball State U, Muncie	3,727	12	0
IL	U of Ill., Chicago Circle	3,462	17	10
MI	Western Michigan U	3,426	17	0
MI	Central Michigan U	2,971	16	0
OH	Bowling Green State U	2,638	13	18
MI	Oakland U	2,400	20	0
IL	Ill. State U, Normal	2,092	10	0
OH	Ohio U	2,000	10	20
IL	So. Ill. U, Edwardsville	1,986	20	0
IN	Indiana State U	1,754	14	1
OH	U of Cincinnati	1,551		2

<sup>a</sup>Includes postdoctoral trainees, fellows, and research associates; excludes long-term postdoctoral research staff.  
NR=Not reported

### Unit Costs of Graduate Instruction

The typical variance among unit costs of instruction at different academic levels and in different types of programs is illustrated in Table 31, "Unit Costs of Instruction in Illinois Public Universities for Selected Major Disciplines, 1977."

These data are shown in graphs on pages 28 and 29 of An Executive Summary: A Profile of Enrollments, Degrees, Faculty and Finances for Public and Private Higher Education Institutions in Illinois, published in June 1978 by the Illinois Board of Higher Education, 4 West OldCapitol Square, 500 Reisch Building, Springfield, IL 61701 (Pp. 43). In this section the data in Table 31 are adapted from the original graphs.

The fact that unit costs are much higher in advanced graduate instruction than at lower academic levels sometimes gives rise to questionable notions, such as that all students should be charged fees in proportion to the cost of the instruction they receive. This could become the practical equivalent of "a cash-register in every classroom" or "admission charges to every library or laboratory." The whole idea is foreign to the spirit of a university and is negated by the recognition that the public benefits derived from this stage of education greatly outweigh its cost.

### Away With Defeatism

There is afloat over public higher education a dense cloud of timidity and pessimism which can only be temporary. Counsel of surrender to an alleged "wave of extreme conservatism," sensational media

Table 31. Unit Costs of Instruction in Illinois Public Universities, for Selected Major Disciplines, 1977

Levels of Instruction (1)	Disciplines (2)	Dollars per Credit Hour (3)
Graduate II (Advanced Graduate, Doctoral)	Biological Sciences	255
	Business	145
	Education	158
	Engineering	240
	Fine and Applied Arts	190
	Health	220
	Letters	240
	Psychology	265
	Public Affairs	148
	Social Sciences	270
Graduate I (Masters' and some professional)	Biological Sciences	208
	Business	100
	Education	100
	Engineering	180
	Fine and Applied Arts	170
	Health	140
	Letters	150
	Psychology	120
	Public Affairs	120
	Social Sciences	160
Undergraduate II (Upper division, third and fourth years)	Biological Sciences	87
	Business	52
	Education	80
	Engineering	120
	Fine and Applied Arts	95
	Health	120
	Letters	70
	Psychology	60
	Public Affairs	60
	Social Sciences	70
Undergraduate I (Lower division, first and second years)	Biological Sciences	45
	Business	35
	Education	65
	Engineering	80
	Fine and Applied Arts	60
	Health	50
	Letters	50
	Psychology	30
	Public Affairs	30
	Social Sciences	40

stories magnified by uninformed and exaggerated gossip about a "tax-payers' revolt," and a flood of writing and of talk among faculty members, administrators, and board members to the general effect that institutions must be decapitated, faculties decimated, and the whole enterprise shrunk and shriveled to a specter of its healthy self, abound.

Universities are expected to study "the management of decline;" this is supposed to be "the new depression in higher education;" enrollments are supposed to drop drastically because there will be somewhat fewer 18-year olds in the total population during the ensuing few years; universities are adjured to forget quantity and to stress "quality" in lieu of growth and development; they are told they must "do more with less," and worry about a long siege of austerity, such as they experienced for a century until they emerged from it partially about thirty years ago. This is unwarranted panic. It does not comport with the eminent good sense of the American public. It is telling the bare-footed little black girl she must lift herself by her bootstraps.

An unprecedented cultural sea-change is under way, bringing into higher education more women, more blacks, more Chicanos and persons of other minority races and national origins; more persons of all ages twenty-five and above; more part-time students; more persons handicapped physically or financially. In the long movement toward universal higher education, the half-way mark has yet hardly been passed.

## STATEWIDE STRUCTURE OF GOVERNANCE

Michigan's Constitution provides autonomy for each of its state universities and colleges. There can be no statewide governing board or coordinating board with power of mandate over all. Wisconsin has a central statewide governing board with full powers of governance over all its state universities and university centers. Illinois, Indiana, and Ohio each has a statewide coordinating board with limited authority.

## STATEWIDE STRUCTURE OF GOVERNANCE

The five East North Central states present diversity in their structures of governance for the statewide systems of higher education. Deserving first mention is Michigan, known for more than a century as the "mother of constitutionally independent state universities." It was first stipulated in the Constitution of 1850 that the University of Michigan at Ann Arbor has "exclusive control of the expenditure of university funds," meaning that neither the governor of the state nor the legislature nor any other state authority could interfere with the prerogative of the regents of the university to control and manage the affairs of the university.

Constitutional Independence in Michigan

Since 1850 a series of decisions by the supreme court of Michigan has upheld this principle against various challenges, and it was written into the totally new Michigan Constitution of 1963, which also took pains to confer similar autonomy on each of the other state institutions of higher education in Michigan, "and such others as may be established" in the future.

Similar but not always identical degrees of autonomy have been bestowed on the institutional governing boards of their respective principal state universities by the constitutions of Minnesota, Idaho, California, Arizona, Colorado, Nevada, and half a dozen other states, and generally sustained by one or more decisions of the respective state supreme courts.

In Michigan in 1965 a Citizens' Committee on Higher Education appointed by Governor George Romney recommended voluntary institutional coordination (not coerced by statute) and said: "A second way is for the legislature to assign the institutions their respective roles by law. The Michigan Constitution has rejected this way, and this Committee would reject it.

"It is believed that the system used in Michigan should retain the flexibility that now exists and encourage diversity and initiative more than can be the case when institutional roles are fixed by law.

"A third way is to have an all-powerful state board of education whose coordinating orders have the effect of law. This is rejected by the Michigan Constitution, and it has never worked in any state whose educational system has become at all complex."

A university is an organism which grows and changes its form to meet the exigencies of its environment; and not a lifeless mechanism which has to have new mechanical attachments affixed to it by artisans from the outside. This concept belies the necessity, the effectiveness, and even the possibility of subjecting the development of state universities wholly to bureaucratic planning centralized in a statehouse agency. Under its decentralized statewide structure, Michigan has a flexible, adaptable system of higher education wherein initiative and intellectual effort and high morale are fostered to a degree not possible under centralized bureaucratic systems.

Central Governing Board In Wisconsin

Very different is the current situation in Wisconsin, where in 1973 some 28 state institutions of higher education were placed under the sole governance of a new Board of Regents of the University of Wisconsin System by a legislative act. Prior to that time the state had for about fifteen years a statutory Coordinating Board with little more than advisory duties, which made praiseworthy efforts to advance the cause of higher education in the legislature and among the public, but was given a generally rough ride by the growing factions demanding a "unified" system of governance, and was finally pushed aside and superseded.

Insights into some events of the three years immediately following July 1, 1973, the final effective date of Wisconsin's consolidation of governance of all public universities and their associated branch campuses, were provided in a 10,000-word paper by Donald E. Percy, senior vice president of the new system.

Entitled "Coping with Government in the Governance of Universities: The Impact of State-Level Policies," the paper was delivered at the 1976 annual meeting of the National Association of State Universities and Land-Grant Colleges. Not only did Wisconsin's state universities have to sustain the shock of drastic administrative reorganization at the statewide level; they also had to survive some immediate retrenchment imposed by a governor who had won his fight for statewide consolidation.

The governor determined to apply a two and one-half percent "productivity savings" to the budgets of all state agencies, including the state universities. This deprived the universities of more than \$21

million over a biennium, and necessitated some nonrenewals of probationary staff members, and some lay-offs of tenured staff members. A simultaneous complication was the state-mandated shifting of some funds from some campuses to others because of changes in enrollment. Fortunately, the state was persuaded to provide \$1 million in "transitional relief" to avoid violation of required prior notice in contracts of terminated staff members.

Such stresses, as is well known, wreaked heavy damage on the morale of all faculties; and the amount of loss in quality of teaching and research, as well as in the all-important general spirit of the universities, can never be quantified. It is also very difficult to estimate the degree of subsequent recovery. For the biennium 1975-77 the "productivity" cut was reduced to \$9 million. Nearly all the tenured faculty members laid off have been reinstated or relocated; and a wide effort at renewing and enhancing the education and effectiveness of faculty members is in progress.

The governor's questionable rationale for his "productivity savings" was alleged to have been based on an outdated U.S. Bureau of Labor Statistics report purporting to show that private industries (excluding service industries) had in recent years achieved annual "productivity gains" of two and one-half percent, while the service industries, private and public, were said to have zero "productivity gains." The fallacy is that while in fabricating or extractive industries actual output per man-hour has crucial meaning and can be calculated with precision, no such measurement of output is possible in higher education, where quality of output is the main consideration,

and must be nurtured by leadership which takes careful account of morale factors.

The governor subsequently confronted the University System with a demand for a plan for reduction of its total scope by eliminating some of the 27 institutions. Accordingly, a laborious President's Scope Study was made and reported in 1976, revealing, among other things, that any such dismantling of public higher education would have heavy negative impacts on the economy of the state, not only in the future, but immediately; and it turned out that no institutions were abolished, even though some of the governor's eager advisors had persuaded him to mark prematurely certain ones for immolation. (What could be a worse incubus on morale?)

Nevertheless, "enrollment target controls" were put into effect on all campuses, and Wisconsin, always hitherto a leading exemplar of expanded higher educational opportunity, was placed in the position of denying access to some of its own qualified citizens.

Vice President Percy's paper mentions other grueling demands made upon the University System in the years following the consolidation, but recognizes that some tension between state governments and state universities are inevitable in our day, and tends to agree with Stephen Bailey that some stresses are not only unavoidable, but, indeed, desirable, as compared with a condition of unalterable fixity.

Concluding his perceptive, wise and witty treatment of the subject, Percy said the remedy is continual good-humored efforts to cultivate the understanding of power-laden politicians and budget analysts about the nature and necessities of public higher education. The analysts, though they may be a swiftly-changing and slow-learning breed,

are improving; and never-ceasing efforts to educate their political superiors must constantly be made. Percy would use many meetings involving many faculty members as well as administrators, thus keeping the inevitable tensions benign and productive of light as well as heat, insofar as that is possible.

#### Statewide Coordinating Boards In Illinois, Indiana, and Ohio

These three states are "middle-road" between the ends of the spectrum discussed in the immediately preceding pages: Michigan with all its state institutions of higher education possessing autonomy by virtue of the state constitution; and Wisconsin with all its state universities and university centers governed by one central governing board—the Regents of the University of Wisconsin System. (This board does not control the statewide system of vocational, technical, and adult schools, which enroll 55 percent of all headcount students in higher education in the state.)

Illinois, Indiana, and Ohio have statewide coordinating boards. They are styled respectively the Illinois Board of Higher Education, the Indiana Commission for Higher Education, and the Ohio Board of Regents. They are superimposed above several institutional and system governing boards in their respective states.

Coordinating boards, especially during the first decade or so, usually have a difficult time. The hope of forcibly cutting back university expenditures generally plays a large part in the motivation of the board's creation; often the partisans of parsimony first advocated a single statewide governing board, but had to settle for a coordinating

board as a compromise, and hence find it hard to see anything good in the coordinating board or its performance. The board is variously expected to act as a Simon Legree overseer of the universities, or as a shield for the universities against budget-cutting lobbyists and uncomprehending or self-seeking politicians in the executive and legislative branches.

The people of the universities are likely at first to resent the presence of the board as an "absentee landlord" and to deplore its apparent failure to produce wonders by representing their interests to the governor, the legislators, and the public. Under such stresses as these, coordinating boards and their staffs are almost invariably prone to (1) reach out for more power than the statute gives them; and (2) fail to gain the respect of their constituency by neglecting the staff duty of research, dissemination, and public information.

In Illinois. The story of one example of (1) was well summarized by an editorial writer in the Chicago Tribune for September 8, 1973: Noting that the Illinois Board of Higher Education had issued directives regarding a new type of format for budget askings which it had devised or borrowed, and styled by the slogan-toned "Resource Allocation and Management Program (RAMP)" and now sought to impress upon thirteen state universities, the Tribune pointed out the futility of pretending to attain absolute uniformity in so large and complex a field, and said: "RAMP impinges on two different interests—both respectable, both necessary, but not easily reconciled."

On-campus executives are on the scene, said the editorial, and they bear responsibility for the institutional programs. They have

better knowledge of faculties and students than BHE personnel can have. Distance from all the campuses may lessen insight as well as discourage favoritism. University presidents, deans, and department heads prefer to make their own decisions on matters for which they are responsible. Said the editorial: "Insofar as RAMP tempts the BHE to do more than it should, by unnecessarily impairing the autonomy of the public universities, it could have adverse effects. The public interest will be best served if the BHE resists temptation to reach for new authority."

In Indiana. The Hoosier state has been known for a generation for amicable and efficient allocation of state tax resources among the several institutions of higher education, involving continuing careful collaboration by the executives and staffs of the four principal state universities (Indiana, Purdue, Ball State, and Indiana State). For years there was a spirit of cooperation and mutual understanding, and occasional rotation of personnel, between these four staffs on the one hand, and a small state budget commission on the other, which provided a shorter and less tortuous pathway to final decisions on the budget requests for higher education than is the case in many other states.

In 1971 the legislature, having rejected out of hand two years earlier a proposal for an all-powerful single governing board, established a mild type of statutory coordinating board, styled the Indiana Commission for Higher Education. The statute says: "The management, operation, and financing of state educational institutions shall remain exclusively vested in the trustees or other governing boards of these institutions." This is reminiscent of the fact that though the Indiana universities have no protection in the state constitution against

interference in their affairs by the legislature (such as exists in Michigan), nevertheless, the Indiana legislature has a long history of refraining from harassing them with unnecessary meddling. There are those who say this explains in part the development of the two flagship universities (Indiana and Purdue) to a high level of national renown and of usefulness to the state, even though Indiana has only half the population of either of the adjacent states to the east and west.

A legislative austerity year was 1973, bringing only minuscule increases in appropriations to Indiana's two flagship universities, and controversy over raising student fees and deciding by whom student fees should be controlled. An outspoken newsman, civic affairs editor of a Bloomington daily and columnist for a regional newspaper, criticized the relatively new Commission for Higher Education: "It has come up with no really creative plan to make the state-supported universities more accessible to more people," and "The Commission is supposed to be a coordinating body, but there's little doubt now that it is trying to horn in on the actual management of our public universities.

"We question the composition of the Commission because it is topheavy with names from the business world. Tax-supported schools should not be left in the hands of corporate executives. Public institutions depend on subsidies—not profits. Education is not an assembly-line operation. Knowledge imparted to people at all age-levels, in new, exciting, stimulative, creative ways, can mean the difference between dull, routine existence and meaningful living. We fail to see how the Indiana Higher Education Commission has thus far made any substantial

contribution to the furtherance of this concept of education."<sup>†</sup>

In Ohio. The Ohio Board of Regents was not without its harassments from the legislature and other sources during the 1970s. In 1972 the legislature directed this coordinating board to institute and pursue a comprehensive, all-inclusive, and minutely detailed program of management improvement in all the public universities.

Sensing the futility of this measure, president Harold L. Enarson of the Ohio State University said in 1973: "Has the managerial revolution made for the hiring of better teachers, for more inspired teaching, for more creative research, for better organized curriculum, for better career counseling, for a sharper sense of intellectual purpose? It has not. In my considered judgment, the managerial revolution creates the exact reverse of the goals that are sought. The impact of multiple sources of regulation on the University is to discourage flexibility, cripple initiative, dilute responsibility, and ultimately to destroy true accountability.

"The university is an intensely human enterprise. It is not so much managed as it is led. The work that we do defies measurements that matter. . . . It is an intellectual tradition that we transmit; it is professional competence that we demand; it is the sense of human possibility that we communicate; it is insistence on intellectual rigor, in art and in science, that we proclaim. If this is conceit, make the most

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<sup>†</sup>John Fancher, in Bloomington Herald-Telephone, August 7, 1973.

of it. For the university is not, cannot be, the prisoner of the new managers."<sup>†</sup>

Colleges and Universities Do Not Operate on  
Monthly and Yearly Dollar Profits

This fact limits the usefulness of such measures as dollar cost per student per academic year (full-time and part-time), dollar cost per semester credit hour, student-faculty ratio, and related efforts at quantification, because dollar figures may and do state the pecuniary cost of providing the higher educational services of different types and levels, but they do not purport to depict the value of the process or the long-term worth of the experience, either to the student or the family, or to society as a whole.

Colleges and universities are not expected to produce monthly, quarterly, or annual dollar profits. What they exist to produce is gain in a much more permanent sense—that of a profit to the individual, the family, the state, and the world, over decades, generations, and centuries. Many of these gains, obviously, cannot even be known in our time; and many of them, now and in the future, have not and perhaps can never be dealt with in pecuniary terms. The folk-saying has it "The best things in life cannot be bought." The priceless long-term results of higher education ought not to be forgotten or belittled in preoccupation with the day-to-day pecuniary income and outgo. Petty financial bookkeeping ought not to dominate academic planning and management of a

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<sup>†</sup>Harold L. Enarson, What's So Very Special About a University? Columbus: Ohio State University News Service. 14 pp. mimeo.

college or university or a state system of higher education, though broad financial limitations may temporarily present problems for solution by educational statesmanship with some aid from cost accounting.

This is not to say the financial affairs and records of institutions or systems need not be managed with the utmost skill and integrity; but only that financial administrators should not dominate the whole; that they ought not to insist exclusively on views and practices suitable only for private profit-seeking enterprises; and that they should be experienced and assiduous in the specialized profession of higher educational accounting and reporting.

#### Many Other Agencies of Statewide Control

Some of the foregoing sketches of statewide boards of higher education have afforded some inklings that state governors and legislatures sometimes intervene in a bull-in-the-china-shop manner. The full story of these happenings, even if confined to the five East North Central states, is far beyond the possibility of inclusion in this brief report.

Since early in the twentieth century a series of reorganizations in practically all the fifty state governments has taken place with a prominent aim of centralizing power over all state functions, particularly in the hands of governors and their cabinets. Especially an appointed officer usually titled state director of administration and finance almost invariably tries to dictate higher education finances by remote control.

There are hundreds of instances of costly, duplicative, inept, and unwarranted intervention and attempts at control of state university

and college affairs by state auditors, state architects, state engineers, departments of public works, state editors and printers, and other varieties of state administrative functionaries. The history is fascinating, but would fill several volumes.

This section has been only introductory to the statewide structures specifically for higher education. The next section sketches some additional aspects of the statewide boards of higher education and their staffs.

## THE STATEWIDE BOARDS AND THEIR STAFFS

The institution (campus) is the agency which carries on the instruction, research, and public service for its clientele. With great deference to the history, traditions, repute, and planning carried forward by each institution, the centralized agencies can confine themselves largely to studies, consultations, and dissemination of information bearing upon the whole systems, eventually looking forward to broad consensuses arrived at concerning long-term issues and aims.

## XI

## THE STATEWIDE BOARDS AND THEIR STAFFS

This section is concerned with, first, the staffs and the current annual operating expenses of the principal statewide boards of higher education discussed in Section X, immediately preceding; next with the governing boards of multicampus universities in the five states; and finally with any statewide boards for the oversight of systems of local public state-aided two-year colleges.

The Principal Statewide Boards

A generation ago, when the idea of a statewide coordinating board was in one of its periodic surges, it was widely thought that such a body should be composed partly of laymen or "public" members having no connection with any university or college, but more or less randomly representing various interests among the public such as banking, business and industry, the legal profession, organized labor, with perhaps a light seasoning of blacks and women; plus substantial representation of individual members or chairmen of university governing boards, as well as of presidents of universities within the coordinating jurisdiction, in order to have the advantage of the experience and expertise of these latter.

An opposite view is that members of governing boards and presidents of universities within the coordinating jurisdiction should be rigidly excluded from membership on the coordinating body, because they would always be special pleaders for their own institutions, and thus would constantly constitute a dividing and disruptive influence. That

view holds that all members of a coordinating body should be "public" members, and especially that university presidents should be excluded or at most allowed to be nonvoting members, and kept in a position of subordination.

Table 32. Statewide Boards of Higher Education  
In the East North Central States

MI	No board; only a small division of higher education in the State Department of Education, with no more than advisory and research duties; no power of mandate. (The State Board of Education is nominally a "coordinating body for education at all levels;" but court decisions make clear that it has no authority over higher education.)	Under the Michigan Constitution, each state university or college has autonomy with its own board.
IL	Illinois Board of Higher Education	Coordinating
IN	Indiana Commission for Higher Education	Coordinating
OH	Ohio Board of Regents	Coordinating
WI	Board of Regents of the University of Wisconsin System (This is a single statewide governing board for all state universities and university centers.)	<u>Governing</u>

NOTE: The boards named for Indiana, Illinois, and Ohio are coordinating boards having somewhat similar but varying scopes of responsibility, but not having the plenary powers of management that attach to the governing board of a state university or state university system, such as the board named for Wisconsin.

Table 33. Statewide Boards for Higher Education in Four States:  
Staff Members and Salaries

State (1)	Board (2)	Staff			Salary of Chief Execu- tive (6)	Number of Salaries over \$20,000 (7)
		Total (3)	Profes- sional (4)	Non- profes- sional (5)		
IN	Commission for Higher Education <sup>†</sup>	15	10	5	65,000	9
IL	Board of Higher Education <sup>†</sup>	45	30	15	63,000	22
OH	Board of Regents <sup>†</sup>	64	31	33	65,000	19
WI	Regents of U of Wisconsin System <sup>††</sup>	215	144	71	65,800	115

<sup>†</sup> A coordinating board, without plenary powers of governance.

<sup>††</sup> A governing board, with plenary powers to govern 27 state institutions.

Table 34. Statewide Boards for Higher Education in Four States:  
Total Budgets for Operating Expenses

State (1)	Board (2)	Total Budget (3)	Salaries (4)	Other Expenses (5)
IN	Commission for Higher Education <sup>†</sup>	787,700	429,200	358,500
IL	Board of Higher Education <sup>†</sup>	1,440,600	1,034,800	405,800
OH	Board of Regents <sup>†</sup>	2,404,000	1,514,180	889,820
WI	Regents of U of Wisconsin System <sup>††</sup>	6,634,252	6,282,606	351,646

<sup>†</sup> A coordinating board with limited authority; not plenary powers of governance.

<sup>††</sup> One board with full powers of governance over 27 state institutions of higher education.

### Multicampus University Governing Boards

The historic prototype of American university governance is the governing board having jurisdiction to manage and control the affairs of one institution. Before these plenary powers began to be eroded by state statutes directing or allowing some of them to be modified or taken away under various schemes of consolidation or coordination, or usurped by financial or administrative agencies under control of the governor, these plenary powers represented one of the nearest approaches to absolutism to be found in American jurisprudence.

Historically each such board was a "body politic and corporate" having, subject to the state constitutional provision or state statute creating it, practically complete quasi-legislative and executive power of management. It even had quasi-judicial power to hear and determine internal disputes, but only subject to recourse to the courts.

Such boards had their strengths and weaknesses, their virtues and their occasional shortcomings; but on balance their record is generally good.

Each one of the seven flagship state universities mentioned in Section III has its own governing board, except the University of Wisconsin at Madison. Its former board has been abolished and superseded by one board which governs 27 universities and university centers.

The present single boards of Indiana University, Purdue University, the University of Michigan, Ohio State University, and the University of Illinois now each also governs its own smaller multicampus flotilla. In each case the same board governs the main campus as always, plus its branch campuses. For the latter, it commonly has an

administrative office headed by a vice chancellor. The Board of Trustees of Michigan State University at East Lansing now governs the main campus as always. Recently for a few years it had responsibility for Oakland University, which has now become "free-standing" with its own governing board.

The multicampus type of governance also operates in Illinois in another instance, at Southern Illinois University at Carbondale; and also in another instance in Indiana, at Indiana State University at Terre Haute, which has a branch campus at Evansville.

In Ohio not only the flagship university (Ohio State at Columbus), but also some eight of the other state universities each have a handful of branch campuses—all of which, however, are two-year branches; and in each case it seems that the main campus and the outlying branches are governed as a unit by the same governing board that has governed the main campus for decades. Hence, for the sake of brevity and to avoid redundancy in this section, only the Ohio State University is listed here as the central illustration.

Illinois re-enters the scene with a variation: the Illinois Board of Regents, governing three universities, none of which is designated as "main campus" is not a multicampus university, but a "system within a system." The same is true of the Illinois Board of Governors of State Colleges and Universities, which governs five other mostly smaller or younger state institutions of higher education. Thus Illinois has four "university systems": the University of Illinois system, the Southern Illinois University system, the Regency system, and the Board of Governors system.

If the foregoing seems unconscionably complex and confusing, one has only to remember that it is largely the historic result of long-continued efforts to provide the people of the East North Central states with appropriate higher educational institutions and facilities.

Table 35 marshals nine governing boards, each of which governs more than one campus, and mentions eight others in Ohio whose branch campuses are all no more than two-year institutions. This is also the case with two of the branch campuses in Indiana. All the branch campuses in Michigan and Illinois, and most of them in Indiana, are four- or five-year, or graduate-professional, institutions. An approximate numerical summary would say: Of the 67 university campuses in the region, some 17 are large or medium-large with main campus and one or more branch campuses. Of the remaining 50, approximately half are branch campuses offering programs of four years or more; and the remaining half are single-campus, single board entities.

#### One Governing Board:One Campus

This is today's vestige of the traditional concept of the legal and social identity of a university or college. Without arguing for the preservation or destruction of that concept, hear an anecdote on a part of its meaning:

Perhaps the best definition of the function of university trustees was uttered half a century ago by Edward Charles Elliott, then president of Purdue University: "These are the men of common sense who guard the gates of the places of uncommon sense." He meant that the trustees work to maintain and increase financial support and public

Table 35. Governing Boards of Multicampus State Universities or "University Systems" Within the East North Central States

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- IN Board of Trustees of Indiana University: main campus at Bloomington and regional campuses at Fort Wayne, Gary, Kokomo, Indianapolis, New Albany, Richmond, and South Bend.  
 Board of Trustees of Purdue University: main campus at West Lafayette and regional campuses at Fort Wayne, Hammond, Indianapolis, and Westville.  
 Board of Trustees of Indiana State University (Terre Haute), and Indiana State University's branch campus at Evansville.
- IL Board of Trustees of University of Illinois: main campus at Champaign-Urbana and branch campuses at Chicago Circle (Chicago); professional campus (Chicago).  
 Board of Trustees of Southern Illinois University: main campus at Carbondale (medical school at Springfield), and second campus at Edwardsville (dental school at Alton).  
 Illinois Board of Regents: the Regency System: Illinois State University (Normal); Northern Illinois University (DeKalb); Sangamon State University (Springfield).  
 Illinois Board of Governors of State Colleges and Universities: Eastern Illinois University (Charleston); Western Illinois University (Macomb); Northeastern Illinois State University (Chicago); Chicago State University; Governors State University (Chicago).
- MI Board of Regents of University of Michigan: main campus at Ann Arbor and branch campuses at Flint and Dearborn.
- OH Board of Trustees of Ohio State University: main campus at Columbus and branch campuses at Lima, Mansfield, Marion, and Newark.  
 (Each other state university has its own separate governing board. Eight of these boards also govern a main campus, and a varying number of two-year branch campuses, with a total of 21 university branches in the state.)
- WI There is no formal university system in Wisconsin other than the entire collectivity of state universities and university centers governed by one central Board of Regents of the University of Wisconsin System.  
 (The statewide system of two-year vocational, technical, and adult schools is governed by 17 local district boards, under the oversight of the State Board for Vocational and Technical Education.)
-

esteem for universities; and that they work to damp down surges of popular hysteria that sometimes harass and threaten the best of professors and researchers.

A classic example of this latter service is the steadfast defense by Herman B Wells, during his presidency of Indiana University, of the innovative work of the Institute for Sex Research, which at first caused an unwarranted popular uproar against the University.

There will always be occasional transient tensions between universities and their clientele. These are inseparable from the nature of the university as an explorer of the frontiers of knowledge.

Two System Boards in Illinois That Are in Positions Different from Usual Multicampus University Boards

The customary image of a multicampus university is that of a main campus plus one or several outlying branch or regional campuses located elsewhere. Historically, the main campus is usually much older than the others of the group, and its official name often designates the whole as the "X University System;" and the original main campus governing board continues to govern the entire system, often using a separate central system executive and staff, as already observed. Illinois has two such systems; plus two others composed of three and five institutions, respectively, wherein there is no "main campus." These two boards are the Board of Regents of the Regency System, governing three universities; and the Board of Governors of State Colleges and Universities, governing five institutions. Facts about these two boards appear in Table 36.

Table 36. Two System Boards in Illinois

Board (1)	Staff			Salary Chief Execu- tive (5)	Number of Salaries Over \$20,000 (6)	Total Budget (7)	Salaries (8)	Other Expenses (9)
	Total Staff (2)	Pro- fes- sional (3)	Non pro- fes- sional (4)					
Regents	13	9	4	57,300	6	542,114	382,156	159,958
Governors	22	12	10	56,865	11	755,400	562,000	193,400

Table 37. Statewide Agencies for Oversight of Two-Year Colleges in the East North Central States

IN	Trustees of Indiana Vocational-Technical College Governing 13 institutions
	Trustees of Indiana University Governing Indiana U East, at Richmond
	Trustees of Purdue University Governing Purdue U North Central, at Westville
	Trustees of Vincennes University Governing Vincennes University at Vincennes
	Trustees of I V-T have liaison with State Board for Vocational Education
	All boards of trustees named have liaison with State Commis- sion for Higher Education, the statewide coordinating agency
IL	Illinois Community College Board Heads one "system" within purview of Illinois Board of Higher Education, the statewide coordinating agency. Two-year colleges are based on local districts having their own governing boards.
MI	No board: Only a coordinator in the office of the State Board of Education. Two-year colleges are based on local dis- tricts having their own governing boards.
OH	Ohio Board of Regents, the statewide coordinating agency, has a vice-chancellor for two-year campuses
WI	Wisconsin Board for Vocational-Technical and Adult Education heads a system of 17 local districts, each having its own governing board. The separate system of University Centers is governed by the Regents of the U of Wisconsin System, the statewide governing board, which has a vice-Chancellor for the Univ. Center System.

## XII

### STATE TAX SYSTEMS

The total of all taxes collected by all levels of government in the United States (federal, state, and local) in 1976 are reported by the Organization for Economic Cooperation and Development (OECD) to amount to a smaller percentage of the Gross National Product than were the comparable percentages in seventeen other developed countries of the western world.

## XII

## STATE TAX SYSTEMS

No state revenue system is perfect. If any state system were found to be perfect this year, it would certainly have some defects next year; for changes in the economic base of the states and the nation occur constantly. Changes in the political climate and in the prevailing philosophy regarding relations between the private and public sectors also take place frequently. A state's tax structure is in continual need of adaptation to the moving panorama of technological and cultural growth.

This, in a sense, runs counter to a belief held by some conservative lawyers and men of business who argue that the prime requisite of a good taxing system is stability, so that entrepreneurs and investors may feel confident that the revenue laws will not be so volatile as to engender unending confusion, uncertainty, and fear of what may come next. There is undoubtedly some merit in the argument for a reasonable stability; but in our time of swift economic developments, stability should not stand in the way of keeping state revenue systems abreast of the times.

State Taxes Per Capita

One of the elementary yardsticks for a state tax system is the aggregate of taxes collected per person (per capita). As shown in Table 38, in 1978, by that simple measure, our five states ranked in descending order: Wisconsin, one; Michigan, two; Illinois, three; Indiana, four; Ohio, five.

Table 38. Total State Taxes Per Capita

States (1)	Dollars per capita (2)	Rank among 5 states (3)	Rank among 50 states (4)		
WI	664.21	1	8	WI	8
MI	583.44	2	12	MI	12
IL	513.51	3	19	IL	19
IN	460.54	4	35		
OH	386.40	5	47		
US av.	523.00				

2	1
4	3
6	5
8	7
10	9
12	11
14	13
16	15
18	17
20	19
22	21
24	23
26	25
28	27
30	29
32	31
34	33
36	35
38	37
40	39
42	41
44	43
46	45
48	47
50	49

Source: Adapted from Table 153, page 190, Facts and Figures on Government Finance, 20th Biennial Edition, 1979. Washington: Tax Foundation, Inc. Pp. 288.

On the scale of all fifty states, Wisconsin and Michigan are above the 50-state average; Illinois, Indiana and Ohio are below that average, Ohio conspicuously so. Observe the parallels between Table 38 and Tables 1 and 2 in the early part of Section I of this report.

#### The Amounts and Sources of State Revenues

In 1978 the 50 states collected \$113 billion of state taxes. The principal sources were (1) general sales taxes, 31 percent; (2) selective sales taxes, 30 percent; and (3) personal and corporation

income taxes, 35 percent.

Without going into the details of several other types of taxes that are of relatively less consequence, it is possible to sketch quickly the status of these three principal sources in the East North Central states.

### General Sales Taxes

Let it be said by way of thumb-nail history that general sales taxes came into widespread use by the states during and soon after the Great Depression of the early 1930s, when some measure had to be found that would be a quick producer of large revenue, which was essential to keep the states from insolvency and to provide state assistance to some local services, especially public schools, to keep them from collapsing.

However, five small states have rejected general sales taxes to this day (the largest being Oregon, with about two million people). General sales taxes are unquestionably regressive; that is, they bear more heavily on low-income people than on the well-to-do, because those having small incomes cannot avoid spending large proportions of their incomes for consumer goods (meaning the necessities of life) which are subject to sales taxes.

This circumstance can be mitigated somewhat by exempting from the tax such items as food (not consumed on the premises where purchased), medicines, and childrens' clothing costing no more than a specified minimum. There are also differences among the states as to the coverage of the general sales tax—whether it includes utility bills, professional services, hotel room rentals, or a variety of other services.

In 1980 each of the five East North Central states was levying a state sales tax at the rate of 4 percent. There did not appear to be any large discrepancies among them as to the proportionate amounts of revenue derived from this source. Hence it seems better to select state income taxes for quick analysis to discover any appreciable variances among these states as to the proportionate productivity of their chief tax sources.

Individual Income Taxes Collected by the Five States

Table 39. Individual Income Taxes Collected, 1978,  
Compared with the Quindry Standard Collectible  
if Levied at Average Rates

(In thousands of dollars)

States (1)	Personal income taxes collected (2)	Amount collectible if levied at average rates (3)	Revenue lost below Column 3 (4)	Revenue gained above Column 3 (5)
IN	578,925	979,402	400,477	
IL	1,593,595	2,307,266	713,565	
MI	1,915,374	1,859,669		55,704
OH	1,401,494	2,013,284	611,590	
WI	1,324,679	637,491		487,187
50 states	33,102,622	40,207,927	7,105,305	

Source: Quindry, Kenneth E. and Niles Schoening. State and Local Tax Performance, 1978. Atlanta, GA: Southern Regional Education Board. Page 58.

Not surprisingly, the only two states in the East North Central region that were collecting more revenue from personal income taxes than would be indicated by the modest standard of "average rates" were Wisconsin and Michigan—the two states of the northern tier. (With a few exceptions, productive state income taxes are characteristic of the states of the Northern Tier, from Atlantic to Pacific.)

In 1978 Wisconsin's collections of personal income taxes alone were nearly half a billion dollars above the Quindry standard of "average rates." Michigan was only slightly above the mark, with \$56 million. Illinois was the biggest loser, being \$714 million below the mark; Ohio followed closely with \$612 million of unused potential. In Indiana the gap was \$400 million. In each of the last-named three states, the revenue "lost" for that reason was roughly equal to the total state appropriations for all higher education.

By somewhat similar coincidence, Wisconsin's excess of collections from personal income taxes (\$487,187,000) over what the total collections would have been if its personal income taxes had been "at average rates," was more than equal to its total appropriations for operating expenses of all higher education for the same year (\$399,410,000).

Another observation from Table 39 is that while Indiana and Wisconsin are roughly in the same class as to total population, Wisconsin was gaining nearly half a billion in personal income tax revenue above the modest standard of "average rates," and Indiana was at the same time losing \$400 million by reason of failing to levy such taxes to meet that standard of rates.

Corporation Income Taxes Collected

The position of the five states in relation to each other is very similar in Table 40, which depicts collections of corporation income taxes in 1978. After reviewing Tables 38, 39, and 40, one might be allowed to suppose tentatively that among these five states Wisconsin probably has the most productive and equitable revenue system; that Ohio's system is relatively least productive and perhaps least equitable; and that Michigan, Illinois, and Indiana range along the spectrum between.

Table 40. Corporate Income Taxes Collected, 1978, Compared With the Quindry Standard Collectible if Levied at Average Rates

(In thousands of dollars)

States (1)	Corporate Income taxes collected (2)	Amount collectible if levied at average rates (3)	Revenue lost below Column 3 (4)	Revenue gained above Column 3 (5)
IN	192,068	286,507	94,439	
IL	376,098	674,948	298,850	
MI	908,680	544,013		364,666
OH	461,393	588,950	127,557	
WI	284,979	244,993		39,985
50 states	10,805,896	11,762,108	956,212	

Source: Quindry, Kenneth E. and Niles Schoening. State and Local Tax Performance, 1978. Atlanta, GA: Southern Regional Education Board. Page 58.

It is now in order to examine, insofar as it is possible to do so briefly, the rates at which the types of income taxes are currently levied, and other provisions of the statutes under which they are administered. Table 41 shows what proportions of each state's total tax collections are derived from total income taxes. This is significant. Observe that both Wisconsin and Michigan get close to half of their total tax revenues from income taxes, while Indiana and Ohio get less than 30 percent from those sources. Are a majority of the five states making too little use of income taxes? It is often said with a good deal of cogency that in the present-day economy of the United States and of the western world, income is by far the best available measure of taxpaying ability or "tax capacity."

Should the states be relying relatively less heavily on sales taxes (admittedly regressive), and making relatively more use of income taxes, especially graduated or progressive income taxes? This raises instantly the argument of overlapping jurisdictions, and it will be urged that the federal income tax is already at high rates and steeply graduated; but the fact seems to be that the federal personal income tax structure has graduated rates starting at reasonably substantial levels, leaving a vacancy in the lower brackets into which state personal income taxes can be neatly fitted.

State personal income taxes, if levied at a flat rate regardless of the income-level of the taxpayer, are obviously regressive. Graduated income taxes are a different breed. There are important differences among the East North Central states in that respect.

Table 41. State Tax Collections, 1978

State (1)	Total State Tax Collections (in thousand \$) (2)	Per Capita State Tax Collections \$ (3)	Total from Individual Income (in thousands (4)	Total from Corporate Income of dollars) (5)	Percent from Income % (6)
IN	2,454,685	460.54	538,225	192,068	29.8
IL	5,774,368	513.51	1,593,695	376,098	34.1
MI	5,326,265	583.44	1,695,746	887,789	48.5
OH	4,134,869	386.40	775,494	461,393	29.9
WI	3,089,233	664.21	1,324,679	284,979	52.1
US	113,142,191	523.00	29,088,194	10,717,405	35.2

Source: Facts and Figures on Government Finance, Tax Foundation, Inc., 1979.

State income taxes are generally of more recent origin than sales taxes. Often, but not always, personal income taxes were enacted first, with corporation income taxes coming later. In 1978, forty-four states were levying personal income taxes, and forty-six were using corporation income taxes.

The six states not having personal income taxes were Florida, Nevada, South Dakota, Texas, Washington, and Wyoming. The four states not levying corporation income taxes were Nevada, Texas, Washington, and Wyoming.

Skeleton of the Present Income Tax Rates  
in the East North Central States

Tax systems seemingly inevitably become vastly complicated. To skeletonize their main features seems a more or less futile or frustrating exercise, but it can produce in lieu of an impenetrable swampy thicket of thorny detail, a well-marked sunny meadow of useful approximations.

That is the function of Table 42. Observe it here and now.

Table 42. Individual and Corporate Income Tax Rates

State (1)	Individual		Corporate
	Rate Range (2)	Income Brackets (3)	Tax Rate (4)
IN	1.9%	Flat rate	6.0%
IL	2.5%	Flat rate	6.85%
MI	4.6%	Flat rate	2.35% of the sum of federal taxable income and other items
OH	.5 to 3.5%	\$5,000 to 40,000	4% - \$0 to \$25,000 8% - over \$25,000
WI	3.4 to 10%	\$3,000 to 40,000	2.3% - \$0 to \$1,000 7.9% - over 6,000

Source: The Book of the States, 1980-81. Council of State Governments

The two states that have the lowest state tax collections per capita, Indiana and Ohio, have personal income tax rates at low levels (Indiana's is 1.9 percent flat rate; Ohio's is graduated to \$40,000, with the steps only from .5 to 3.5 percent). None of the other three

states of the region has personal income tax rates so low.

Illinois has a flat rate of 2.5 percent.

Michigan, too, has a flat rate, but at 4.6 percent—more than twice Indiana's rate and nearly twice that of Illinois.

Only Wisconsin has a graduated personal income tax with steps from 3.4 to 10 percent and gets 52.1 percent of its state revenue from personal and corporate income taxes.

Compare a moment with the scene among the fifty states: only five states in all now have flat rate personal income taxes—the three above named plus Massachusetts and Pennsylvania.

The graduated steps provided for in other states go as high as 16 percent in Minnesota, 14.5 in Alaska, 14 in New York, 11.5 in California, Hawaii and Montana, 11 in Delaware, and 10 in Maine.

It is also noteworthy that several states have simply fixed their personal income tax rates as a specified percentage of the taxpayer's obligation to the federal government under the federal internal revenue code. For example, in Nebraska, the specified figure is 17 percent; in Rhode Island, 19 percent; in Vermont, 25 percent, with provision for certain exceptions. This device cuts down useless duplicative administrative expense for the state, to say nothing of decreasing annoyance for the taxpayer by having to make out only one complicated form instead of two. It also automatically graduates the tax on the same scale on the same specifications as the steeply-graduated federal tax.

On the state corporation income tax side, Indiana and Illinois levy corporation income taxes at the flat rate of 6 percent and 6.5 percent, respectively. Michigan charges 2.35 percent of several specified

items of business expense, including federal taxable net income. Ohio charges 4 percent on income up to \$25,000; 8 percent on income above \$25,000. Wisconsin levies 7.9 percent on income above \$6,000.

The pertinent comment at this point is that graduated corporation income taxes in several states other than in the East North Central are as high as 10 percent or more in their top brackets: Minnesota, 12 percent; Arizona and Pennsylvania, 10.5; New York, Connecticut, Iowa, 10; California, 9.6; Massachusetts, 9.5. This does not include the special added rates for banks and financial corporations, which are found in many states and often run about 2 percent higher than those for other business corporations.

State and Local Taxes Per Capita As  
Percentage of Personal Income

Adverting to a broader and more general view of state and local revenues, one can observe the ratio of per capita total state and local taxes collected to total personal income. Recent data from the United States Department of Commerce, Bureau of the Census, reported at page 8 in U.S. News and World Report for November 3, 1980, indicate that among the fifty states this ratio varies from 23.4 percent in Alaska and 16.6 in New York, to 9.8 percent in both Indiana and Ohio. The average among the fifty states is 12 percent.

Among the five East North Central states, Wisconsin, with 13.7 percent, ranks ninth among the fifty and first among the five; Michigan, at 12.4, is eighteenth among the fifty and second among the five; Illinois, at 11.2, is thirty-third and third; while Indiana and Ohio, both at 9.8 percent, are forty-ninth and fiftieth among the fifty and fourth

and fifth among the five.

The five East North Central states arrange themselves in the same order of rankings on this scale as that most frequently disclosed by several other tests applied in this section and in earlier sections of this report; but it is a bit of an additional revelation to find both Indiana and Ohio flat on the bottom of the list of fifty states. The various relationships just discussed above are exhibited in Table 43, which follows.

Table 43. State and Local Taxes Per Capita as Percentage of Personal Income

States (1)	Dollars collected per capita (2)	% of Personal income (3)	Rank among five (4)	Rank among fifty (5)
WI	1,021	13.7	1	9
MI	1,050	12.4	2	18
IL	998	11.2	3	33
IN	749	9.8	4	49
OH	768	9.8	5	50

Source: U.S. Department of Commerce, Bureau of the Census, as reported on page 9 of U.S. News and World Report, November 3, 1980.

2	1
4	3
6	5
8	7
10	9
12	11
14	13
16	15
18	17
20	19
22	21
24	23
26	25
28	27
30	29
32	31
34	33
36	35
38	37
40	39
42	41
44	43
46	45
48	47
50	49

State Tax Systems Need Constant Detailed Attention

This short section on "State Revenue Systems" is largely concentrated on state income taxes, because that segment seemed most appropriate for significant comparisons. In addition to sales and income taxes, which produce about 80 to 85 percent of most states' revenues, there are numerous other types of taxes and fees which are worthy of being monitored: succession taxes (on transfers of estates and inheritances); license fees (motor vehicles, liquor, hunting, fishing); severance taxes, on extraction of irreplaceable natural resources such as oil and gas, coal, ferrous and nonferrous metals, clays, gravel, stone, and sometimes timber; and others.

A complete treatment of any state's revenue system thus includes many types of taxes and fees, and a great deal of detailed administrative interpretation.

State legislative committees on ways and means and on finance and appropriations have continuing responsibilities; state governors and their directors of administration and finance are heavily involved; state tax commissions are in the scene.

Schools, colleges, and universities have responsibilities to find and disseminate information about state revenue systems. The press, radio and television can help much if they do their jobs well. One of the first duties of every citizen is to keep informed about what services the state is performing and how well, and form an opinion about what services should be performed and how the state ought to get the revenue with which to pay for them and keep itself solvent while providing good and sufficient services for its people.

Taxes by All Levels of Government in the United States  
Compared with Other Nations of the Western World

Since the Roman legions over-ran the whole known world and exacted tribute from all the subject tribes, taxes have aroused bitter complaints. There seems to be some disposition today to regard any and all taxes as wicked inventions of the Devil, and to refuse to look upon any tax with equanimity. Orthodox economists always speak of them as "burdens" and "impositions." No political cartoon was ever more popular than the caricature of the downtrodden taxpayer clad only in a barrel. We are slowly outgrowing the belief that somehow we can have good roads, schools, sanitation, good housing, and all the appurtenances of an increasing standard of living and an improving civilization without paying more taxes.

For decades down to 1981, national presidential candidates have often promised to cut federal taxes, increase federal spending for national defense or for domestic social programs or both, and at one and the same time erase the ever-present federal budget deficit. No one has ever explained the legerdemain by which all these things could be accomplished at once.

So unpopular are taxes that there is a tendency toward a wholly unwarranted belief that taxes in our country are higher than in other developed countries of the world. This is not the case. The Organization for Economic Cooperation and Development (OECD), an agency of the United Nations, maintains a periodic reporting of the ratios borne by total taxes to Gross National Product in many nations.

Table 44, appertaining to calendar year 1976, exhibits these ratios (as percentages of Gross National Product in each case).

Table 44. Taxes by All Levels of Government in the United States Compared with 18 Other Developed Nations of the Western World, 1976

Countries (1)	Total Taxes	
	Percentage of Gross National Product (2)	Per Capita in U.S. Dollars (3)
Sweden	50.89	4,595
Luxembourg	50.45	3,175
Norway	46.18	3,590
Netherlands	46.16	3,001
Denmark	44.70	3,395
Finland	42.19	2,520
Belgium	41.87	2,876
France	39.45	2,605
Austria	38.91	2,104
Ireland	36.81	924
Germany, Federal Rep.	36.70	2,660
United Kingdom	36.70	1,437
Italy	35.82	1,089
Canada	32.89	2,859
New Zealand	31.83	1,340
Switzerland	31.59	2,802
Australia	29.98	2,165
United States	29.29	2,199

Source: Organization for Economic Cooperation and Development (OECD), adapted from p. 35 of Facts and Figures on Government Finance: 20th Biennial Edition, 1979. Washington, D.C.: Tax Foundation, Inc. Pp. 288.

### XIII

#### THE EAST NORTH CENTRAL STATES ARE LOSING THEIR NATIONWIDE PRE-EMINENCE IN STATE TAX SUPPORT OF HIGHER EDUCATION

Comparing the two decades 1960-70 and 1970-80, with focus on the rankings of the fifty states as to percentages of ten-year gain in state appropriations for higher education over each decade: Ohio dropped from 12th place among the fifty states in 1960-70 to 37th in 1970-80. Illinois dropped from 21st to 49th. Wisconsin dropped from 23rd to 34th. Indiana dropped from 33rd to 39th. Michigan dropped from 37th to 40th. Average of the composite rankings of the five states dropped from 25th to 40th—from the median to the fourth quartile.

## XIII

THE EAST NORTH CENTRAL STATES ARE LOSING THEIR NATIONWIDE  
PRE-EMINENCE IN STATE TAX SUPPORT OF HIGHER EDUCATION

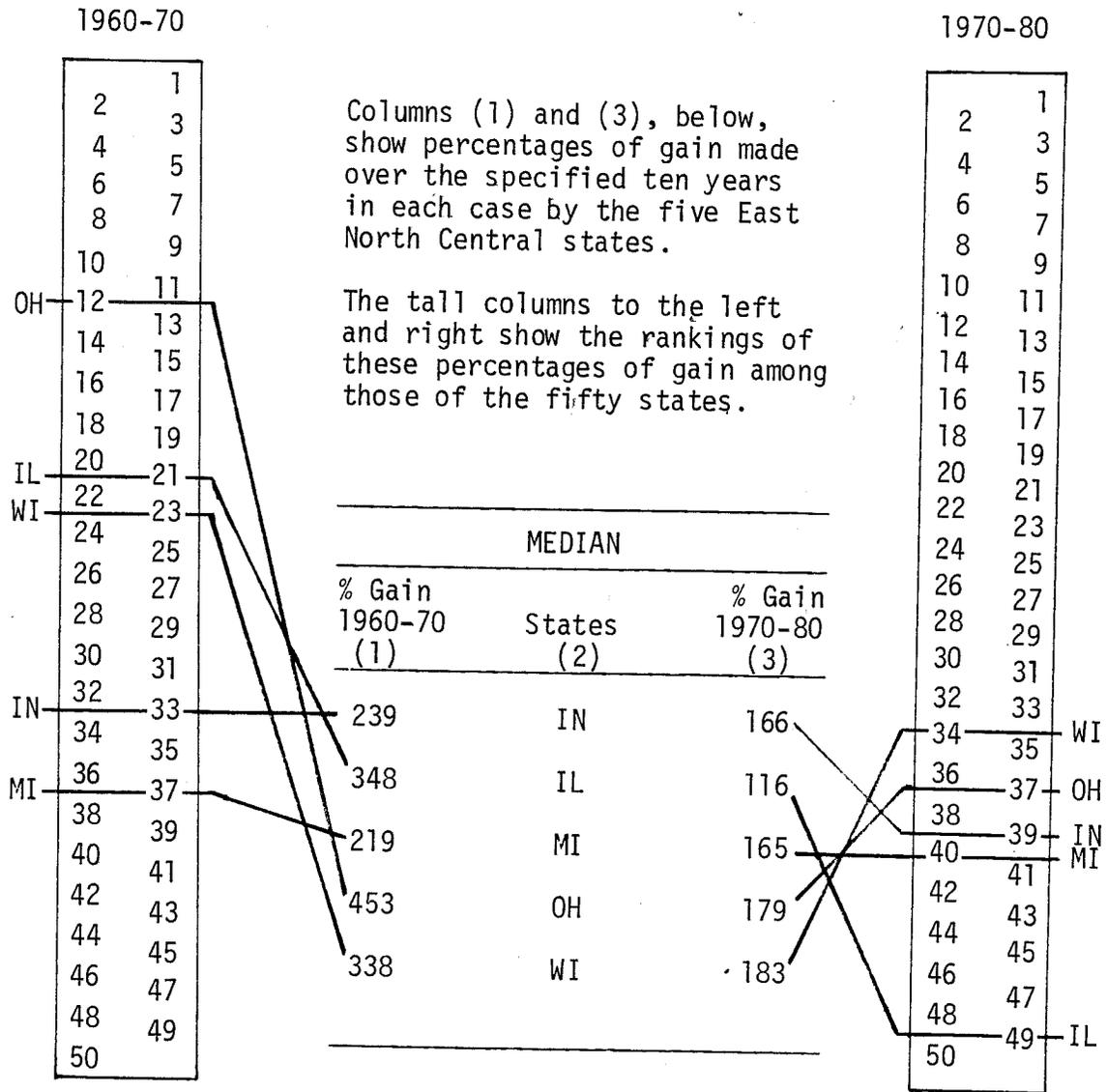
There is a record of appropriations of state tax funds for annual operating expenses of higher education in each of the fifty states, summarized in a 30-page publication of the National Association of State Universities and Land-Grant Colleges, issued each autumn for twenty-two consecutive years. From this series, Table 45 is derived.

It is designed to show not the magnitude of the appropriations, but the percentages of gain made in each state over each of the two decades, 1960-70 and 1970-80, and the rankings of the five East North Central states among the fifty states with respect to those percentages of gain. Thus Ohio was in 12th place as to rate of gain for 1960 to 1970, but this says nothing about its ranking as to the actual magnitude of its appropriations.

The main point of Table 45 is that over the decade 1960-70, three of the five states were above the 50-state median, and the lowest of the five was in 37th place; while over the decade 1970-80, all five were below the median, showing markedly slowed-down rates of gain in comparison with those of the other forty-five states.

During the 1970s there tended to be something of a tilt in population and industry to the south and west. Population grew a little more slowly than before. The fact sought to be made plain here is that the East North Central states were distinctly outpaced and surpassed in rates of gain in tax support of higher education by other states that had previously ranked below them in momentum.

Table 45. Percentages of Ten-Year Gains, 1960-70 and 1970-80, in State Tax Appropriations for Annual Operating Expenses of Higher Education



Source: National Association of State Universities and Land-Grant Colleges, Appropriations of State Tax Funds for Operating Expenses of Higher Education, 1970-1980; and earlier edition of the same title for 1970-1971.

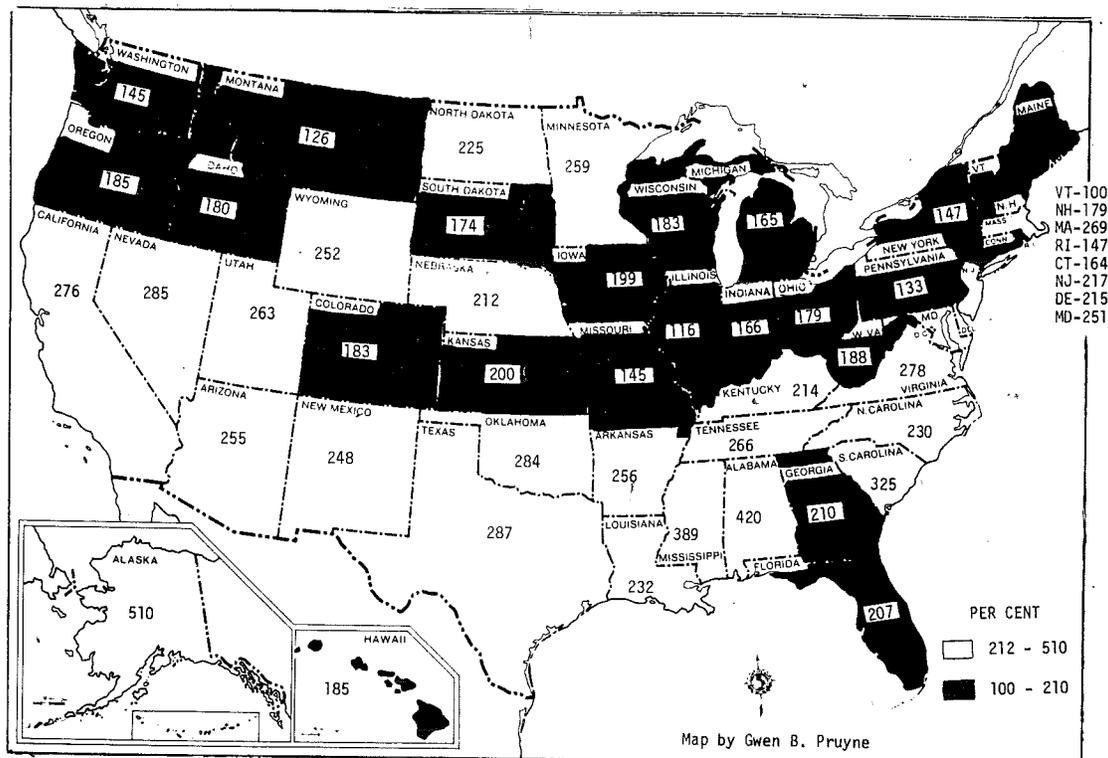
The Ten-Year Gains of the Fifty States

The tempo of gains in the fifty states over the decade 1970-80 is exhibited more graphically on a map of the United States showing in black the states that made ten-year gains below the median 211 percent and showing in white the states that made ten-year gains above the median. Such an exhibit is on the final page of this section.

The fact that leaps out is that almost the whole of the northern half of the nation is in black; while nearly the entire southern half is in white. Each group has an unbroken contiguous stretch from sea to sea. A close approach to the recently oft-mentioned "Sun Belt" and "Frost Belt" is evident.

In prior decades the states of the northern tier were generally ahead in state support of public higher education, and thus some of them attained very high rankings as to the magnitude of their appropriations as much as thirty or more years ago. Their state universities achieved nationwide and world renown. Their people should be aware that there is a recent tendency for their position of leadership to be comparatively lessened, and they should consider the losses that entails.

That most of the southern states, formerly low on the scale of state tax support of higher education and relatively low in the reputed prestige of their institutions, are now showing strong signs of catching up with the procession, is altogether a matter of congratulation; but it would be foolhardy and costly in the long run for one region to allow itself to fall back because another is forging ahead. The fifty states all advancing together is the ideal.



*States above and below the median in percentages of ten-year gains 1970-1980*

### THE TEN-YEAR GAINS IN FIFTY STATES

Statewide increases in appropriations of state tax funds for annual operating expenses of higher education, 1970-80, range from 100 percent to 510 percent, with a median of 211 percent.

All five East North Central states are black (that is, making ten-year gains below the median of 211 percent, as already observed in Table 45). The slowing of momentum in these five states is a signal that in these five states a renewed determination to maintain leadership in state tax support of public higher education is in order.

## XIV

### RECOMMENDATIONS

To accelerate the long movement toward universal higher education, a first essential is recovery from the transient period of uncertainty in the economic realm, projections of decline, self-proclaimed crisis, cynicism, weakened confidence and depressed morale that characterized the whole of the 1970s. "Crisis mentality" will be partially supplanted or at least supplemented by level-headed contemplation of the middle future measured by decades. State systems of public higher education, proud products of more than a century, will not be allowed to retrogress.

#### XIV RECOMMENDATIONS

These recommendations are intended to be a call for thought and deliberation; not a bugle for instant action.

There will be a recovery from the transient period of uncertainty in the economic realm, self-proclaimed crisis, projections of decline, cynicism, and weakening of confidence that characterized the whole of the 1970s.

When that recovery becomes robust, whether it be soon or late, there can be no doubt that the mood will no longer be dominated by despair, and no longer overcrowded with thoughts of how higher education in these states can be cut back, reduced, its expansionary movement reversed, its potentialities ignored, its momentum decelerated, its morale depressed.

Instead there will be a speed-up of the long movement toward universal higher education which has never come to a halt but which has made unprecedented forward strides within the three and a half decades just past. More than half of the road is still ahead.

Hence this report pleads for long thoughts on the future measured in decades, as well as feverish preoccupation with the feared "crisis" of next year or next month. Total obsession with today's worries can detract from the quality of deliberations on the reasonable future, and contribute to mindless drifting from crisis to crisis while the vision of the middle-future major aim is lost.

Regarding the Place of Higher Education  
as a Function of the State

In lieu of the widespread but not universal custom of considering the state's role in public higher education as properly one among a score or more of other major functions organized into the executive branch of state government, reflect on the theory of constitutional autonomy prevailing in Michigan for 130 years and repeatedly reaffirmed by the Michigan supreme court down to the present. "The Regents are a fourth arm of state government, coordinate with the legislative, executive, and judicial branches." This theory also prevails in varying degrees in a dozen other states, notably Minnesota, California, Idaho, Nevada, Arizona, and Colorado.

When supporters of higher education plead that it is a unique function, meriting separate and special consideration apart from the host of other executive functions of the state, some governors, legislators, and fiscal functionaries sometimes contemptuously respond: "Ah, that's what they all say!" The state constitutions and the courts of Michigan and a dozen other states vitiate such a response.

Legal doctrine is not the only support of constitutional independence for higher education, and high priority for its fiscal support. Social and economic theory are equally cogent: Higher education is the key function of the state because better schools and colleges for all children and all persons of all ages depend on more and better teachers educated in the universities. In all the sciences, professions, semi-professions, businesses and other occupations, the discoverers, the innovators, more and more are in the universities or have spent years there as students, researchers, or instructors.

Consider the universities not as routine consumers of public funds; but as highly productive "investments in people"—the seedbeds of future industries, of discoveries that lead to better ways of life for all. Moreover, not only from the standpoint of the states, but also from that of national and international problems and policies, nothing could be more essential than rapidly increasing the supply of better-educated citizens, capable of pathfinding leadership in the sciences and technologies, in law and justice, and indeed in every discipline and in every field of human endeavor. (See also Section II, pages 27-34.)

#### Regarding the Present Complement of State Universities

Value the seven flagship universities as national and world leaders. Consider what the region and the nation have gained from the century and more of contributions to the whole culture—to industry, to the professions, to every aspect of everyday life of all people—made by these great centers of learning.

Reflect upon the costly retardation of progress that would ensue if they were to shrink their scope, reduce their operations, and lose their momentum. Cutting down a university is a long and expensive process. Building it up again is likewise. The utmost that these universities can produce is needed now; the need will be redoubled as years go by, and will be accompanied by insatiable popular demand.

Apply the same reasoning to the ten newer large state universities, mainly urban. Reflect upon how cost-effective it is, from every standpoint, to "put new universities where the people are."

Contemplate the fifty other generally smaller state universities in the region as the middle of the pyramid. Recognize that each of these institutions can be expected to accomplish reasonable expansion and improvement over ensuing years and decades, to bring gradually nearer the achievement of higher education for all, stimulating a general quality of culture and well-being never before attained on this planet.

Enjoy the histories, traditions, and classifications of these half a hundred medium and smaller state universities. Half of them were originally of normal school origins, and have long constituted collectively a unique cultural resource. They have the advantage of long experience in their respective areas, and the confidence and support of many alumni and other people within and without those areas. They have long records which translate into very significant service to the whole East North Central region, partly through the teachers of millions of K-12 public school pupils over generations, and partly through many other channels.

(A writer, heavily biased in favor of private higher education and against public universities, wrote of these universities in a journal of national circulation in 1980: "Some of these schools have been labeled 'universities'." Ignorant he was, or contemptuous, of the fact that every one of them in the East North Central states is now a university, in fact as well as in name.)

The next echelon of medium-and-smaller state universities in the region are of more diverse origins. Some "sprang full-grown from the brow of Zeus" as did the University of Michigan campuses at Flint

and Dearborn. Others gradually "grew up" from two-year colleges, as did the Indiana University regional campuses at Fort Wayne, South Bend, Gary, New Albany, and Kokomo; and the Purdue University regional campus at Hammond.

Every one is an asset to its state and a resource for the future. That is the main point to contemplate. The point to study is How can the service of this institution best grow and be improved? Is its present state tax support sufficient to underwrite the best possible results under next year's conditions of time and place?

Regarding Advanced Graduate, Professional, Doctoral,  
and Post-doctoral Studies

The most academically advanced, mature and persistent persons who continuously or intermittently spend substantial amounts of time and energy in graduate school laboratories, shops, clinics, studios, libraries, seminars, colloquia, or classrooms in advanced courses of instruction form the advance parties and the point patrols of the intellectual forces invading the unknown and hostile terrain of ignorance, prejudice, superstition, myth, and anti-intellectualism. Value them highly.

Thomas Edison and Henry Ford may not have attended college; but their time is long past. Requiescat in pacem. The scientific breakthroughs, the humanistic insights, the advances in every field now being achieved and to be achieved in the future will not be made by uneducated zealots, but by men and women who are now studying in university graduate schools or who have had long apprenticeships there, and who, like Edison, do not give up the quest, but return again and

again to the laboratory, library, and lecture room as long as they live.

Every university should recognize them, record their presence and achievements, and proclaim their merits. University governing boards should provide reasonable assistance and support for their work in such forms as clerical and technical assistance, use of space and equipment, fellowships, junior or part-time faculty positions, or extraordinary professorships where appropriate. All this is done in many places. It is eminently in the public interest.

#### Regarding the Two-Year Colleges

The two-year college, at the broad base of the higher education pyramid, should be a comprehensive school. That is, it should not be exclusively a liberal arts college or a college of general education, nor exclusively a vocational-technical school or "trade school"; nor should it be restricted to eighteen and nineteen-year-olds.

Being the outpost of higher education literally physically closest to the people in every locality, it should be an "open-door" school without restrictive admission barriers, open to all residents above the age of eighteen who are able to benefit from the instruction offered. Not only should it have three divisions: (1) arts and sciences, (2) vocational-technical, and (3) a wing with special emphasis on welcoming and accommodating adult students; but also it should be simultaneously two colleges: a day school for students able and wishing to attend day classes, and an evening school for those who cannot attend at other times. (A possible variation is a "week-end school" in which students attend six hours per day for two days each week, and progress at approximately the rate of full-time students.)

It is essential that the two-year college be comprehensive to escape the implication of class divisiveness that seems impossible to avoid when students of liberal arts and general education must attend one college located at a distance from another college which accommodates only students of vocational programs exclusively. Both such colleges are fragmentary; neither can provide as desirable a learning environment for all students as could exist if they were combined in a diversified learning community.

Establishing and operating comprehensive community colleges is not without obstacles. There are millions of low-income and unemployed young people who in their time of stress can perceive no benefit in any education other than a quickie "crash" training that will equip them with a manual skill that will enable them within the shortest possible time to sell their services for wages. This personal crisis can be understood, and these persons' desires can be accommodated.

But there are also many people, mostly somewhat older, who have so little faith in human potential that they believe a majority of the entire population should never have any formal education other than "trade schooling." These are harder to appreciate, but some of them are influential.

The comprehensive college offers internal problems—some real, some imaginary. Professors of literature, arts, and humanities may be pedantic and intellectually snobbish, looking with ill-concealed contempt on teachers of vocational-technical subjects. Students and teachers of trades may be anti-intellectual and jeer at general education. Timid administrators and faculty members may say a harmonious

faculty cannot be built of such incompatible materials. The problem calls for good will and initiative on the part of many. It will be possible to have philosophers and plumbers who respect each other and work together in the same college. That is Utopia. That is "the people's college," flourishing in a thousand places and a thousand forms (eventually two thousand places and two thousand forms) in the Great Republic.

As observed in Section VIII, the five East North Central states exhibit sharp contrasts in the size, character, organization, and support of their respective public two-year college systems. Indiana has one public community college with a unique history; two university regional campuses that have not developed to the baccalaureate stage and twelve vocational-technical institutes. Ohio has nearly 50 two-year public colleges of four diverse types. Wisconsin's system consists of its historic vocational-technical and adult schools, plus a clutch of two-year "university centers" for college-parallel studies. Illinois and Michigan have large networks of local public state-aided comprehensive community colleges.

Recommendations for each state follow:

For Indiana

Indiana has never espoused the concept of a statewide network of comprehensive community colleges. The state should consider a reasonably long-term phase-in toward a statewide network of local public state-aided comprehensive community colleges, located as nearly as practicable within twenty miles or less from the place of residence of every citizen of the state.

The existing state vocational-technical colleges should continue to perform their present functions in their present locations, and be supported in their efforts to expand and improve their work. They should be regarded as permanent institutions.

Each vocational technical institute should aim to become, over a period of three to ten years, the vocational-technical division of a comprehensive community college phased into its present site or on a new site nearby, including a division of arts and sciences commonly known as "college parallel" and offering two-year degrees of Associate in Arts and Associate in Science or equivalents.

The legislature should enact a comprehensive community college act providing for the foregoing, allowing each vocational-technical institute to receive tax support and statewide oversight as at present, and providing for the eventual transition to comprehensive community college status, and providing for the establishing of local community college district lines, taking into account population, minimum amount of taxable property, and legal steps necessary to effect the transition with the assent of a majority of the electorate of local territories involved.

Statewide monitoring and encouragement of these transitions should come from a state office of community colleges, consisting of a small professional and support staff forming a division of the staff of the present Indiana Commission for Higher Education.

The acts should also provide for similar establishment of new local public state-aided comprehensive community college districts, with the ultimate aim of blanketing the entire state with such districts,

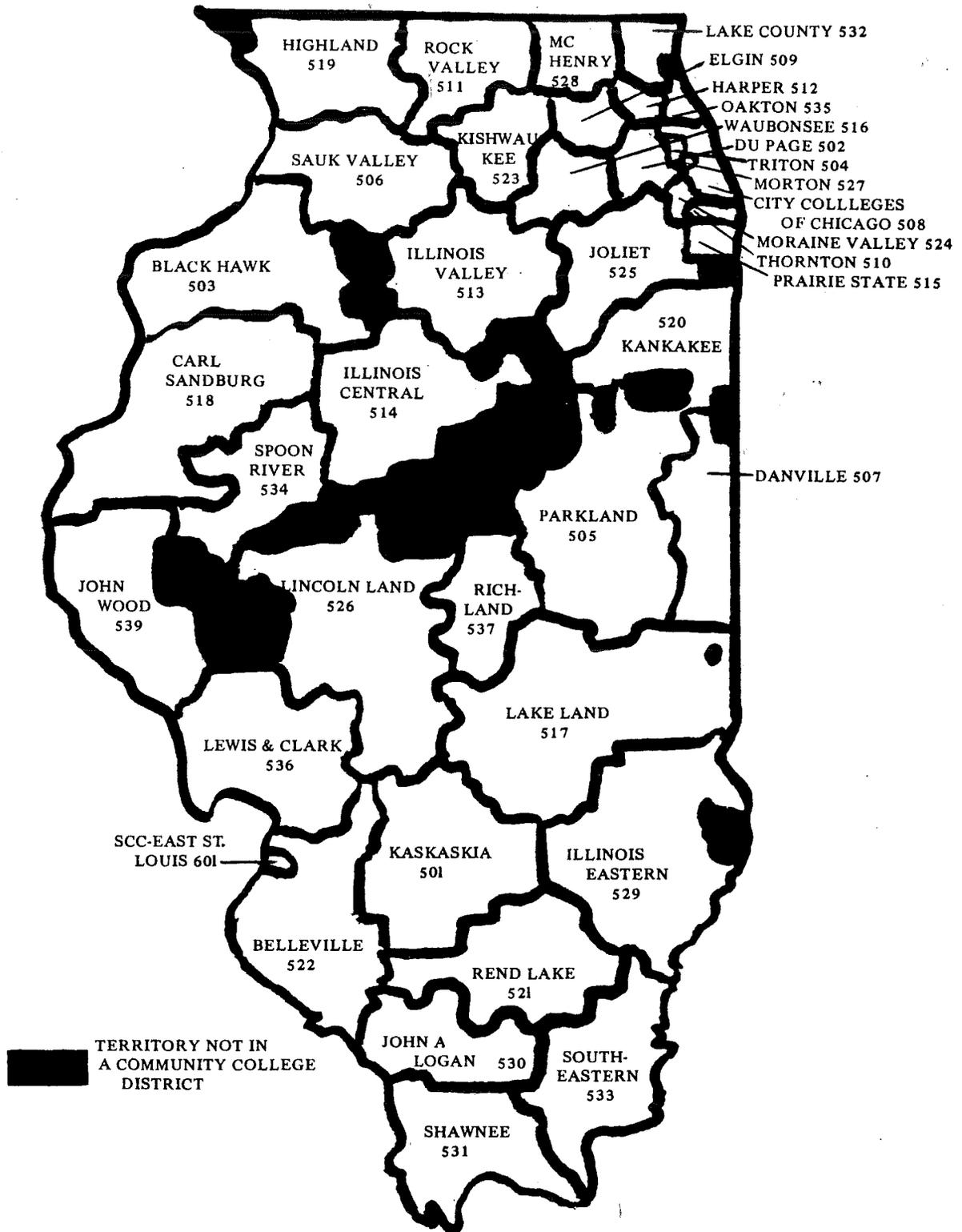
each embracing appropriate population and area for partial tax support and local governance of a local public community college. Such districts should be of such size, wherever reasonably practicable, as to place a community college within twenty miles from the place of residence of every citizen; many of the districts being of such areas as to include roughly about three counties or equivalent area, depending on variations and distribution of local population.

Every community college district should be a taxing subdivision of the state; but under present conditions, at least 80 percent of the annual operating funds of each community college should be appropriated by the state legislature. There is a long-term trend, nationwide, toward larger state tax support of such colleges and proportionately less local tax support; but there are many reasons why local tax support should be present on a minor fractional basis.

#### For Illinois

The Illinois Community College Act of 1965 mandates that recognized "community colleges of the first class" shall be comprehensive. It is now nearly a statewide fait accompli. There are 51 colleges in 39 local community college districts. The districts nearly blanket the state, except for a large salamander-shaped central hole that includes all of McLean County (the most populous and wealthy agricultural county in the state) and large parts of some neighboring counties. There are also a few uncovered smaller spots in the state.

The salamander exists for no good reason, and in defiance of the public policy of the state as declared a decade and a half ago. Illinois State University and Illinois Wesleyan University are within



Source: Illinois Community College Bulletin, A publication of the Illinois Community College Board, 3085 Stevenson Drive, Springfield, Illinois 62703

a mile from each other in the population center (twin cities, Normal-Bloomington), but neither makes any pretense of performing the functions of a community college. Consequently there are unknown thousands of persons who have no access to a community college, with the special advantages of living at home, low fees, open admissions, choice of occupational training or liberal arts education, welcome to part-time study, and all the others that make up the bundle of community college characteristics. A large community college—Illinois Central College—flourishes at Peoria, about 35 miles away. Thousands of people in the salamander area cannot afford the time and money to commute that distance. The area is failing and refusing to provide community college facilities for its people who would benefit, but who cannot otherwise attend any college anywhere. Illinois State University is the only one among Illinois' thirteen state universities that is not within a community college district or does not have a community college nearby.

Within the population center of the salamander area there is a well-built and well-maintained educational plant owned by the state, now vacant and apparently in danger of becoming a liability to the state, which was used by the Soldiers' and Sailors' Children's School, recently abolished. This plant could be converted for use as a community college plant relatively easily. The possibility and desirability should be presented to the governor, legislative leaders, and the appropriate state-wide boards, including the Board of Higher Education and the Community College Board, as well as the administrative departments concerned. The Board of Regents (on behalf of Illinois State University) and public school and civic authorities of Normal-Bloomington might well join in

the effort to clarify the matter, present it to the public, and surmount the procedural prerequisites that could lead to the opening of a community college in this large unserved area. Will anyone speak in behalf of the people who cannot otherwise attend any college anywhere?

Both Illinois and Michigan are well advanced toward reasonable accessibility of community college opportunities statewide, but there is yet work to be done. The job is not complete.

#### For Michigan

Michigan has, to a greater extent than any other of the five states of this region (possibly barring Wisconsin) the problem of very large areas of sparse population, harsh climate, apparently scant resources, and more or less chronically depressed economic conditions. In varying degrees, this description applies to the large Northern Peninsula and, in general, the upper half of Lower Michigan; while the southern portion of the state is populous, productive agriculturally, industrialized, urbanized, and relatively wealthy.

The state as a whole ranks among the fifty states as seventh most populous, ninth in aggregate of personal incomes, and twelfth in per capita state and local taxes collected. The issue is: To what extent and in what ways should the state as a whole provide community college facilities to the people of its sparsely populated areas, even though this involves some contribution to that purpose by the taxpayers of more populous and wealthy localities? In other words, Is it worth the cost to the whole state to provide educational equity to the people in economically less able areas, both for the sake of justice and for the sake of the long-term payoff from this investment in people, even if it

involves establishing and maintaining an occasional smaller community college at necessarily higher unit costs than are general in the more economically able areas?

This report cannot make local surveys of feasibility. It can refer to the sketch of the founding of Lake Superior State College, in Section VII. Nor can it prescribe formulas for equalization that might or might not be appropriate. It merely recommends that the powers that be should arrange for frequent studies of selected parts of the large deprived areas, and maintain watchfulness, in the spirit of the advisory committee and the State Board of Education and the legislatures of the middle 1960s, to the end that no opportunity be lost to improve higher educational opportunities for the people of the "colonial territories," both to advance individual educational justice and in the ultimate best interests of the whole state and all its people. This is a continuing problem for Michigan.

#### For Wisconsin

With awareness that the Wisconsin system of Vocational-Technical and Adult Schools has been widely popular in that state for at least half a century, and recognizing that it has had substantial success in achieving its aims, and at least considerable success in changing its aims to fit changing conditions and needs, one must have confidence that it should be permanently continued and supported.

Probably this system should not be disturbed by any sudden or sweeping reorganization or change of governance, but this report recommends strongly that steps be taken, preferably with a high-level ad hoc study commission, for full consideration of practicable ways in which the

system may move further than it already has moved toward adding general, liberal, or college-parallel instruction, thus gradually approaching, in fact if not in name, the characteristics of a system of comprehensive community colleges.

Such an ad hoc commission should be large, and widely representative of all political, economic, civic, and educational interests. One half of its voting members should be women. The Commission should include approximately proportional representation of organized labor, ethnic minorities among the state's residents, and the farm population, and members of the "ruling class" of corporation executives, influential politicians, and other members of "the establishment."

The Commission should have an initial life of five years, and should be directed to produce its report and recommendations in four annual phases, thus affording time for deliberation, public information, and opportunity to take note of currently changing economic and social conditions. It should have a professional staff of individuals from within and without the state, including a few from states known for large and excellent community college networks, such as California, Illinois, or Michigan.

This general direction of study and progression is recommended for the purpose of gradually removing any vestiges of the outmoded notion that higher education in Wisconsin is "blue collar" on one hand and "white collar" on the other; or "working class" versus "ruling class;" or vocational versus academic, or manual versus intellectual, or any other such division. Put positively, it is to forward the idea that all two-year college students will have, to the greatest practicable

extent, an available institution comprehensive enough to offer choices and individual combinations of studies that will not in all cases entail any rigid and inexorable parting of the ways between vocational and general education.

#### For Ohio

Instead of approximately 50 two-year public colleges of at least four types in a polyglot patchwork, Ohio would be in a better position to remedy its markedly low position as to number of students in higher education in proportion to total population, if it made possible a state-wide network of comprehensive community colleges, after the fashion of Illinois or Michigan.

The recommendation is not, however, for the shock of any drastic or sweeping reorganization. It should be possible to revive and liberalize the absurdly restrictive junior college act of the early 1960s, under which some half dozen permanent comprehensive community colleges were established, first in Cuyahoga County (Cleveland) and Elyria, in the populous northeastern part of the state. It should be possible gradually to develop the 17 vocational-technical institutes by incorporating into each at least a start-up division of general or liberal arts instruction. The political and administrative ramifications and complexities can be surmounted if it is determined that hundreds of thousands of Ohio's people shall be freed from the thralldom of having available no more than fragments of strictly utilitarian instruction in a school that is itself only a fragment of a two-year college.

The five older state universities have long records of reaching out to the respective clienteles by operating numerous two-year

university branch campuses. This practice need not be abandoned or discouraged. It is needed to accelerate Ohio's progress toward getting off the floor in comparison with the other East North Central states in the matter of providing tax-supported higher education for its people.

The state universities might well be persuaded to allow and encourage their branch campuses to assume gradually more of the characteristic functions and ways of comprehensive community colleges: introducing vocational instruction where wanted and feasible; redoubling efforts to accommodate the reasonable convenience of part-time students of both sexes, including those who are employed full-time for wages and those who are not; and generally disseminating the idea that college education is not only for a fortunate elite, but is for all.

This report stresses the general principle, and does not prescribe detailed solutions for the administrative problems involved—some real, some imaginary. These will, of course, necessarily be forged in Ohio, if at all. The overshadowing recommendation is that both the principle and the problems be kept in active consideration, with a view toward improving Ohio's service of public higher education to its people.

#### Regarding Statewide Governance Structures

Statewide structures for governance or coordination of higher education are not of as overweening importance as often supposed. The five East North Central states differ markedly in this respect (as observed in Sections X and XI, pages 104-127). There is no necessity for any immediate drastic or sweeping reorganization in any of them.

Whatever the present structure, it is strongly recommended that the highest authorities keep constantly on mind that the institution is

the agency that provides the instruction and research and public service to its clientele; and centralized agencies should abstain from intervening in the detailed decision-making as far as possible. With great deference to the history, repute, traditions, and planning carried forward by each institution, centralized agencies can confine themselves to studies, consultations, and dissemination of information bearing upon the whole system, eventually looking toward broad consensus arrived at concerning long-term issues and aims.

Especially is it recommended that state executive agencies not directly concerned with higher education as their main function should not be authorized to dictate university policies and practices from a multiplicity of angles; and that the governing boards should have exclusive custody and control of their endowment funds, if any (through an accessory private charitable corporation for that purpose, if desired), and of their operating funds from all sources other than appropriations of state tax funds, without the duplications, delays, and frictions, entailed in dealing with a state bureaucracy.

#### Regarding State Tax Systems

These recommendations appertain only to state-levied personal income taxes.

Indiana, Illinois, and Michigan have personal income taxes only at flat rates. These regressive forms should be supplanted by graduated income taxes, preferably with administration and collection simplified by fixing rates as specified percentages of each taxpayer's obligation under the federal income tax. (Three states practiced this in 1980, with the specified percentages varying from 17 percent to 25 percent.)

If Indiana retains the flat rate, the rate of 1.9 percent should be doubled. It would continue substantially lower than Michigan's 4.6.

The Illinois flat rate of 2.5 should be increased by half.

Ohio's graduated rates of .5 to 3.5 are minuscule, and should be tripled.

Wisconsin's graduated rates of 3.4 to 10, producing a healthy part of the state's revenue, seem fairly well suited to conditions of the day.

All states should face down the paper tiger of "tax revolt," which would cripple the public services, depress the standard of living and turn the clock backward.

All the numerous elements in each state revenue system should be monitored and annually reported upon for productivity, equity, and other consequences in the light of changing conditions.

#### Broad-scale Major Considerations

- Emerge from defeatism, both as to growth and as to financial support.
- Emphasize that the mainspring of the enterprise is esprit-de-corps. Morale, self-esteem, confidence and enthusiasm are essential to maximum success in learning.
- Recognize that higher education to the optimum stage from which each individual can derive gains for himself or herself and for the whole society must become readily available by reducing existing barriers: distance from home; narrowly restricted choice of studies; tuition fees; arbitrary academic requirements; academic snobbery; lack

of resources for financial self-maintenance; prejudice against sex, race, national origin, low income, physical handicap, or other prohibitive disadvantage.

- Examine experimentally the practice, now prevalent in some countries, of encouraging ambitious and competent working people of good record up to the age of 35 or thereabouts, to the extent of some 10 percent of college student bodies, to be admitted to colleges without prior secondary education.

- Question critically the assertion that some forthcoming reduction in the numbers of persons aged 18 through 24 must necessarily mean decrease in higher education enrollments (in the face of the fact that as yet less than half of that age group has ever entered any formal education above the high school).

- Question the notion that college education is not really necessary for most jobs, and when not required for the entry-level of employment, is a loss of time and money and a waste of resources; this in the light of the upgrading of all jobs and the expansion of the service occupations, semi-professions, and professions.

- Confront the bogey that "tax revolts" will hamstring governmental support of higher education. Reject the panicky proposition that higher education is "over the hill" and must now drift backward and downward, shrinking and shriveling, losing ground that would require decades to regain. The current period of temporary economic uncertainty is not the twilight of the economic system of the western world. It is the darkness before the dawn of already visible moderate modifications and improvements in the economic and political order that are bringing new waves of

social justice, confidence, and vigor.

• Investigate whether institutions and programs of higher education have tended to become more of cut-throat competitive rat-races—"screening devices" for creating individual failures and to restrict closely entry into the prestigious professions—rather than benign and morale-building places of learning by association and joint efforts as well as by healthy competition that does not threaten integrity.

### The Student as Service Worker

Consider higher education as a service industry, which it is, not only in the work of administrators, faculty members, and supporting non-academic staff, but also in the essence of the work of all students. Persons spending their time, money, and effort in pursuing learning are unquestionably engaged in a service occupation, in several senses similar to that of members of the armed services or of the various branches of federal, state, or local civil service. Should college students be reasonably compensated for the service of learning, instead of being charged fees for the instruction they receive?

There are nations in the world today where all college students are paid at least a meager "living wage" for doing the work of a student, with moderate increases as they go up the academic ladder. No student in higher education is charged any tuition fee. Even in Britain, tuition fees to the universities are paid by the public authorities on behalf of most students, and nearly all students receive grants for subsistence inversely proportionate to their family incomes.

A change in the image of student life may be far advanced: From a country-club-like interlude for the affluent and middle-class (or a

grueling ordeal for a few of the poor who possess the unusual good health, stamina, ambition and luck to earn their subsistence while a full-time student); To one or more periods, at appropriate times, of moderately compensated public service as full-time or part-time student refreshing and extending the individual's knowledge and skills in the interest of the whole public.

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