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Higher Education in Vermont

Frank Smallwood

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September 24, 1971

Mr. John H. Downs Chairman Board of Trustees Vermont State Colleges Burlington, Vermont 05401

Dear John:

At a meeting held on August 5, 1971, the VSC Board of Trustees authorized me to direct the collection of information to assist the board evaluate its "past, present and future role in Vermont higher education."

Tam pleased to present the following background report in response to this request. As you know, following our August 5th meeting I was designated to serve as chairman of a Joint (VSC-UVM) Committee on Higher Education Planning. Since this new committee has just begun its study, I have attempted to keep this background report as objective as possible. However, I must confess that one subjective bias has resulted from my work on this report; namely, the State of Vermont needs to develop a more comprehensive capability to plan and coordinate its postsecondary educational programs and any new organizational modifications which are designed to achieve more effective planning and coordination in the future should be designed to encourage cooperation between the public and the private sectors of Vermont's higher education community.

I am most grateful to many individuals who provided assistance in the preparation of this report, especially Paul Andrews of the VSC staff; Wayne Patterson and the Office of Institutional Studies at UVM; Raymond Mewitt of the New England Board of Higher Education; and the Presidents of Vermont's public and private colleges and universities who provided background data for the report. I would also like to thank Miss Lucille Flanders of the Dartmouth Public Affairs Center who did all the secretarial work on the report.

Sincerely,

Frank Smallwood Vice Chairman

rank Smallwood

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HIGHER EDUCATION IN VERMONT:

PAST, PRESENT AND FUTURE

Frank Smallwood September, 1971

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SUMMARY HIGHLIGHTS

Section I - Historical Background

Historically, private colleges and universities played a very important role in guiding the development of higher education in Vermont. The University of Vermont was chartered as a private institution in 1791 and it retained its essentially independent identity until the mid-1950's despite the fact that a land-grant "State Agricultural College" was added to UVM in 1865. The State of Vermont made a major commitment to increase its level of support for higher education when the legislature approved its first "tuition reduction" grant for the University of Vermont in 1955. From this point forward, UVM was regarded as an instrumentality of the state. The legislature further increased its support of higher education when it created the Vermont State Colleges system and the Vermont Student Assistance Corporation in the 1960's.

As a result, total state expenditures for higher education rose from \$2,116,000 in 1955 to \$14,399,000 in 1970. In spite of this increased commitment, the State of Vermont has never developed a comprehensive master plan for higher education.

Section II - The Public Sector

During the past decade, total enrollments at the University of Vermont and the four Vermont State Colleges have risen very rapidly from 4,430 students in 1960 to 10,438 students in 1970, an increase of 6,008 students (+135%). The number of Vermont students enrolled at these five institutions has jumped from 2,830 in 1962-63 to 7,186 in 1970-71, an increase of 4,356 in-state students (+154%). Over 70% of the students enrolled at the Vermont State Colleges received some form of financial assistance in 1970-71 and 28% of the full-time students at these institutions were commuters.

Future enrollment projections indicate the number of students graduating from Vermont's high schools will increase each year until 1980 (when it is expected to peak) and the percentage of Vermont high school graduates continuing their postsecondary education will also increase. Vermont's public colleges and universities will not be able to handle the flood of new students expected during the 1970's unless very substantial increases in state assistance are forthcoming.

The Vermont State Colleges will be under very heavy enrollment pressures. If present policies are continued, total enrollments at the four state colleges could double from 3,143 students in 1970 to 6,089 students in 1980. Unless alternative plans are developed to accommodate these enrollment increases, this will require major capital investment in new academic facilities (see Table 2.6 in Section II), plus very sizable increases in annual operating budgets (see Table 2.8 in Section II) at the state colleges.

Section III - The Private Sector

There are sixteen private colleges and universities in Vermont. Many of these institutions enroll very large numbers of out-of-state students and they may be able to handle more Vermont students in the future. However, most of Vermont's independent colleges are facing difficult financial problems.

Since Vermont's private colleges make a very strong cultural and economic contribution to the state, careful consideration should be given to the kind of state assistance which might be given to these institutions, especially if they enroll more Vermont students and relieve some of the pressure on public institutions within the state.

Section IV - Strategies for the Future

Vermont is one of three states which does not have any formal organization to plan and coordinate its higher education programs. Vermont needs to establish a comprehensive planning mechanism for higher education which will possess the authority to coordinate the future development of its public postsecondary educational programs and encourage cooperation between the state's public and private colleges and universities.

Any such coordinating mechanism should consider a variety of programmatic strategies designed to make fuller use of existing resources (e.g. curricular and calendar reforms) and to supplement existing programs (e.g. 13th and 14th year regional vocational programs, educational television, the new community college movement) to enhance the capacity, quality and diversity of postsecondary educational programs available to the people of Vermont.

I - HISTORICAL BACKGROUND

I - HISTORICAL BACKGROUND

"There seems to be in Vermont a very general misapprehension...with regard to the relative importance of the different grades of literary institutions. While some look upon our universities and colleges, and others on our academies and high schools as more particularly deserving the patronage of government, the great mass of people seem to have persuaded themselves that the elementary schools are the only institutions for which the legislature is bound to make any provision at all. The indulgence of such partial views has had a tendency to produce an array of hostility among institutions which are designed to form one harmonious whole, and which are absolutely necessary for the prosperity and perfection of each other.

Thompson's Vermont, Part Second Civil History of Vermont, 1842

A high degree of public interest in the field of education has characterized the State of Vermont throughout its history. As a result of this long-standing commitment, Vermont is credited with a number of pioneering educational innovations:

- -- In 1777, Vermont adopted the first

 Constitution in America which made

 provision for a complete state system

 of education at the town, county and

 state university levels;
- -- In 1791, the University of Vermont was the second institution in the United States chartered by state legislative action to offer instruction at the university level;

- In 1823, the first school in the United

 States for training teachers was established
 in the Northeast Kingdom community of

 Concord Corners, Vermont;
- -- In 1827, Vermont became the first state to create a State Board of Commissioners of Common Schools;
- In 1862, Justin Smith Morrill, the distinguished Vermont Congressman and Senator, sponsored the federal legislation bearing his name that led to the creation of the monumental American land-grant college system that was destined to revolutionize public higher education in the United States.

paradoxically, despite this deep-seated historic commitment to education at all levels, the State of Vermont did not become heavily involved in financing its own public system of higher education until relatively recent times. The basic, and very significant, reason for this is that like the other New England states, Vermont looked to the private sector from its very earliest years to serve its historic higher education needs. The early situation in Vermont was particularly confused by a temporary union with sixteen New Hampshire towns from 1778 to 1781 and the

modifications which grew out of the adoption of a second Vermont Constitution in 1786.

The union with the sixteen Connecticut River towns occurred in 1778 when these communities voted to secede from New Hampshire and join the Republic of Vermont. One of the sixteen towns was Hanover, New Hampshire. As a result of the union, Dartmouth (Founded in 1769) became Vermont's first college and the Vermont General Assembly voted to take that institution under its patronage. In 1785, after the temporary union had been dissolved, Ira Allen persuaded the Vermont legislature to grant 43,000 acres of land in the Town of Wheelock, Vermont, to Dartmouth in a unique gesture of recognition of "the importance of these institutions to the world at large". Thus, Vermont's first effort to provide a public subsidy for an institution of higher education was directed to a college which was not actually located in Vermont!

An equally confusing situation arose with respect to the Vermont constitutional mandate for higher education. Section 40 of the 1777 Vermont Constitution, which was modeled almost entirely on the 1776 Pennsylvania Constitution, * specified that:

^{*} Pennsylvania's Constitution referred to schools at the county and university level only. Since Vermont's Constitution referred to towns, as well as county schools and a state university, the claim is made that Vermont was the first to specify a complete system of public education at all levels.

"A school or schools shall be established in each town, by the Legislature, for the convenient instruction of youth...at low prices. One grammar school in each county, and one university in this state, ought to be established by direction of the General Assembly."

Following the legislature's ratification of the 1777 Constitution, Vermont first began to plan a system of public education at the town and county levels. In 1779, the Vermont legislature passed an act which specified that:

"lands were to be in towns six miles square, each including 70 rights of domain, five of which were reserved - one each for support of a (state) college, a county grammar school, an English school, the support of preaching and the first settled minister."

In 1781, Vermont's legislature further empowered towns to levy taxes (in addition to the land incomes noted above) to support the erection of school houses. Although the early development of town schools was slow, some progress was made at the county level. The first secondary school in Vermont (Clio Hall) was located in Bennington in 1780 and the first county grammar school (for Windsor County) appeared in Norwich in 1785.

The following year Vermont's second constitution was drafted and signed in July, 1786. One of the key changes in this second constitution involved a modification in the original Section 40 on education which had appeared in the 1777 constitution. As John C. Huden has explained, "research has failed to reveal the reasons for this change or the names of the persons responsible for telescoping sections 40 and 41 of the 1777 constitution into section 38 of the 1786 document, which follows:

Section 38 - 1786 Vermont Constitution

'Laws for the encouragement of virtue, and prevention of vice and immorality, ought constantly to be kept in force and duly executed: and a competent number of schools ought to be maintained in each town, for the convenient instruction of youth; and one or more grammar schools be incorporated, and properly supported in each county in this state.'

"In short, the Constitution of 1786 omitted any mention of the state's original plan to foster a university; it put the responsibility for grammar schools on the counties; it transferred responsibility for establishing elementary schools from the legislature to the several towns. By these actions Vermont disclaimed its original plan for a complete educational ladder from the elementary grades through the university. In so doing, Vermont probably delayed the development of education as a state responsibility."

The fleeting affair with Dartmouth College in the 1780's highlighted the fact that Vermont still did not have its own state university. Despite the fact that the 1786 Constitution eliminated mention of such an institution, a number of prominent Vermont citizens began to agitate for such a university. In 1789, Ira Allen offered to help subsidize a new university if it were located in Burlington.

In 1791, shortly after Vermont was admitted to the Union as the 14th state, the General Assembly voted to charter the University of Vermont as a private institution, and authorized that it be located in Burlington (89 votes) rather than Rutland

(24 votes) or any of five other smaller communities that received a scattering of legislative support. Thus, the University of Vermont became the fifth private institution of higher education to be established in New England (following Harvard 1636, Yale 1701, Brown 1764 and Dartmouth 1769). In accordance with tradition, the State of Vermont adopted the colonial English pattern of endowing the new university with a parcel of land and then permitted this institution to work out its own future destiny with only minimal state financial support.

Following the establishment of the University of Vermont in 1791, a number of new private institutions of higher education were chartered in Vermont during the early part of the 19th Century, including Middlebury College (1800), Norwich University (1819), Vermont College in Montpelier (originally organized in 1834 as the Newbury Theological Seminary of the Methodist Church) and Green Mountain College (originally organized in 1834 as the Troy Conference Academy of the Methodist Church). During this same period, efforts were made to improve medical education offerings in the state. The first medical lectures at the University of Vermont were offered in 1804, the Castleton Medical Academy was chartered by the Vermont General Assembly in 1818, and the Clinical School of Medicine was chartered in Woodstock in 1827. As noted earlier, these efforts were the result of private initiative and the

^{*} The Vermont General Assembly set aside 29,000 acres of land for the university, scattered throughout its 120 towns and gores, with the intent that the university should use rents received from these lands as a form of endowment support.

new institutions were supported almost exclusively by private funds. It was not until the U.S. Congress passed the Morrill Act in 1862 that the State of Vermont began a modest program of direct financial support for programs of higher education.

The key move came in 1864-65. The Morrill Act of 1862 provided for the establishment of a system of colleges in each state, and authorized federal funds for each state that would set aside lands to subsidize the new colleges (hence the name "land-grant" college system). In response to this federal initiative, the great majority of states, including a number in New England, established separate new land-grant state colleges such as the University of Massachusetts at Amherst (chartered in 1863) and the University of Maine at Orono (chartered in 1865).*

Vermont legislature chartered a new land-grant institution - the Vermont College of Agriculture - and waited to receive local bids that would determine the location of this new college. In 1865, after no satisfactory bids had been received, the legislature linked the new land-grant college with the private University of Vermont in Burlington. In this manner, the legal title of the newly amalgamated Burlington institution became "The University of Vermont and State Agricultural

^{*} The states of New Hampshire, Connecticut and Rhode Island did not establish their land-grant universities until later. The University of New Hampshire began in 1866 as the "New Hampshire College of Agriculture and The Mechanic Arts" in Hanover, and was part of Dartmouth College until moved to its present site in Durham in 1893. The University of Connecticut grew out of the Storrs Agricultural School (1881) and was redesignated as a land-grant institute in 1890. The University of Rhode Island was chartered as a land-grant college in Kingston in 1892.

College". In effect this new educational complex consisted of two separate components - a publicly supported land-grant State

Agricultural College and a privately financed University of

Vermont which retained its own Board of Trustees.

Many Vermonters criticized the amalgamation of the two institutions, and a long and bitter struggle took place over the next quarter century to detach the land-grant college from the university. According to a study by Professor Barle D. Ross, "the feeling of Vermont farmers seemed to be unanimous for the change". The controversy reached a peak in 1890 when a proposal was made to relocate the land-grant college in Senator Morrill's home town, Strafford, as a lasting monument to the Senator. However, Morrill, who had long served as an active Trustee of the Burlington institution, was unalterably committed to the preservation of the university connection. Without his support, the effort to detach the college from the university collapsed.

A second major legislative action which took place during this same period was destined to have a profound influence on the subsequent development of the Vermont State Colleges System which finally emerged almost a century later. In 1866, the Vermont General Assembly passed a bill (Public Act No. 1) which authorized the establishment of three normal schools for the training of teachers in the then-existent three Congressional districts of the state. These three normal schools were subsequently developed out of the Rutland County Grammar School which had been established at Castleton in 1787, the Orange County Grammar School originally

established at Randolph Center in 1801, and the Lamoille County
Grammar School initially established at Johnson in 1834. Thus,
three of the four institutions which constitute the present-day
Vermont State Colleges system were first introduced into the arena
of teacher training and higher education by the 1866 legislation.

During the remainder of the 19th Century, the situation in the field of higher education remained relatively unchanged in Vermont. With only a few subsequent modifications, the basic structure of the state-supported system of Vermont higher education that exists today had already been outlined in the actions the General Assembly took during the 1864-66 period. Major structural changes in the present century included the transfer of the properties of the Orange County School in Randolph Center to the State School of Agriculture in 1910 (in 1957 a second transfer was enacted to establish the Vermont Agricultural and Technical Institute in Randolph which became Vermont Technical College in 1962). In 1911. several state-supported normal training courses were established at Lyndon Institute (which led to the subsequent creation of Lyndon Teachers College in 1949 and Lyndon State College in 1962). In 1947, the normal schools at Castleton and Johnson were redesignated as teachers colleges and, in turn, both of these institutions were established as state colleges in 1962. the 1940's the State of Vermont was involved in the direct financial support of the State Agricultural College at Burlington, an agricultural school at Randolph, and three state teachers colleges

at Castleton, Johnson and Lyndon, each of which was administered by the Vermont Department of Education.

While the degree of state support for elementary and secondary education was significant during this period, the portion of the state General Fund allocated to the above institutions was extremely minimal compared to the present-day commitment. The 1940-41 General Fund appropriation for education at all levels was \$1.22 million, slightly under 25% of the total General Fund budget of \$4.95 million. During this same 1940-41 fiscal year, General Fund revenues allocated to higher education consisted of \$143,000 for the College of Medicine at UVM; \$40,000 appropriated for the State Agricultural College in Burlington; approximately \$25,000 in scholarship funds for Vermont students at Middlebury and Norwich University; and a modest appropriation within the Department of Education budget which was used to support the agricultural school at Randolph and teaching training programs at Castleton, Johnson and Lyndon. Thus, although Vermont was contributing approximately one quarter of its total General Fund to all levels of education in 1940, only a relatively small portion of this amount was allocated to higher education.

This situation began to change very dramatically in the mid1950's, specifically in 1955 when the General Assembly began to
develop a totally new commitment to the financial support of higher
education in Vermont. This shift resulted from an executive budget
recommendation by Governor Joseph B. Johnson that the General

Assembly should limit tuition charges at the University of Vermont to \$425 for all Vermont students. In order to do this, the Governor urged the state to make a direct "tuition reduction" appropriation to the university. Following widespread public debate, the legislature approved this new appropriation. As a result, total General Fund expenditures for higher education jumped from \$2.1 million in fiscal year 1955 to \$2.57 million in fiscal year 1956. The state appropriation for UVM increased from \$1.2 million in 1955 to \$1.7 million in 1956. With the approval of the UVM "tuition reduction" appropriation in 1955, the state adopted a fundamentally new commitment to higher education. Three new "public" Trustees (appointed by the Governor) were added to the UVM Board and from this point forward the University of Vermont was regarded as an instrumentality of the state.

State support for higher education has increased on a rapidly ascending scale since 1955. The state's direct involvement in higher education was further extended in 1962 when the Vermont State Colleges system was created and in 1965 when Governor Hoff recommended the first large-scale appropriations for the Vermont Student Assistance Corporation. As a result of these combined actions, coupled with rapidly increasing pressures in enrollments, total General Fund expenditures for the support of higher education rose from \$2.1 million in 1955 to \$14.4 million in 1970.

Despite the public debate which took place in 1955, it is not clear that the legislature was fully aware of all the long-range implications of its actions when it made its first "tuition reduction" grant to the University of Vermont. It is obvious, however, that this action represented a general response to a number of key trends

that were influencing the development of higher education policy throughout the United States during the period following World War II. Among these trends were:

- 1. The recognition that complex technological and managerial advances in our society required increased public support of postsecondary education beyond the high school level if young people were to realize their potential as productive members of society.
- 2. A significant rise in education aspirations and expectations among young people initially stimulated by the "G.I. Bill of Rights" emphasis on equality of access to higher education.
- 3. A growing awareness that public support of higher education constituted a wise investment by helping to increase the earning power and social contributions of future generations (which are subsequently returned to society) and to limit the potential future burdens placed on society by its undereducated and underproductive citizens. As Governor Johnson explained to the legislature in presenting his 1955 "tuition reduction" plan for UVM, this plan represented "an investment in the future and a testament to our faith in the young people of Vermont".

While few citizens or legislators would be inclined to argue with any of the above generalized trends or objectives, increasing numbers began to express concern when the total state appropriations for higher education programs mounted at a steady pace during the past decade. This concern highlights the fact that

while Vermont has made tremendous progress in the field of higher education since 1955, each achievement has been realized without the guidance of any overall state plan for higher education. As a brief review of past history indicates, Vermont has never developed any comprehensive state policy for higher education which has attempted to delineate its overall goals, competing priorities, alternative strategies and future projections. Instead, despite the fact that it has sponsored some highly significant educational innovations, the State of Vermont has tended to respond to higher educational needs in a piecemeal fashion.

Vermont cannot afford to continue on this course. An analysis of recent trends and future projections, in both the public and the private sectors of higher education in Vermont, indicates quite clearly that it is essential to develop a more comprehensive state planning capability for higher education as soon as possible if we are to meet the many complex and difficult challenges Vermont will be called upon to face in the 1970's and beyond.

II - THE PUBLIC SECTOR

II - RECENT TRENDS AND FUTURE PROJECTIONS: THE PUBLIC SECTOR

"The children of the poor enjoy the same privileges as the children of the rich; and these privileges have hitherto been so well improved, that a native of Vermont of mature age, who could not read or write, would be looked on as a prodigy of stupidity."

Thompson's Vermont, Part Second Civil History of Vermont, 1842

The Vermont General Assembly's approval of the University of Vermont "tuition reduction" appropriation for in-state students in 1955 marked the beginning of a major shift in the state's commitment to provide equality of opportunity in higher education for all qualified Vermont students.

prior to 1955, Vermont's involvement in higher education had been modest as the state relied upon private institutions to carry the major burden. During the decade of the 1960's, the state legislature voted increasingly larger appropriations to support the University of Vermont; to build four virtually new Vermont State College campuses and programs at Castleton, Johnson, Lyndon and Randolph; and to expand the Vermont Student Assistance Corporation which was established in 1965.

These appropriations increases were designed to strengthen the quality of higher education in the state and to provide postsecondary educational opportunities to larger numbers of students who graduated from Vermont high schools each year. The result has been a dramatic increase in enrollments at the University of Vermont and the four Vermont State Colleges.

Table 2.1

ENROLLMENT TRENDS: THE PUBLIC SECTOR 1960-1970

								4						11-2
	1970-71		5,861	1,434	7,295	(4,706)		1,075	800	710	50 50 8	3,143	(2,480)	10,438
() () ()	1969-70		5,466	1,279	6,745	(3,966)		1,091	672	6 8 8	525	2,926	(2,293)	9,671
	1908-09		4,698	1,001	5,789.	(3,585)		1,025	622	584	441	2,672	(1,962)	8,461
	ı		4,451	904	5,355	(3,326)		921	550	576	4 6 7	2,422	(1,765)	7,965
; ; ;	1966-67 1967-68		4,190	814	5,004	(2,997)		846	482	449	348	2,125	(1,498)	6,914
	1965-66		3,824	639	4,2463	(2,610)		747	766	374	302	1,889	(1,353)	6,210
	1964-65		3,632	544	4,176	(2,218)		626	378	305	267	1,576	(1,147)	5,752
	1963-64		3,468	549	4,017	(1,994)		560	307	252	2 13	1,370	(1,025)	5,387
	- 1		3,280	522	3,802	(1,863)		523	980	241	년 건 2	1,237	(296)	5,039
: :	1961-62		3,213	459	3,672	(1,745) (1,820) (1,863)		462	22 12	279	187	1,143)ata	4,815
	1960-61 1961-62 1962-63		2,992	429	3,427	(1,745)		375	187	88 9	758	1,009	No Data	4,430
	Institution	UNIVERSITY OF VERMONT	Undergraduate	Graduate and Other	TOIAL (UVM)	(Vermont students at UVM)	VERWONT STATE COLLEGES	Castleton State College	Johnson State College	Lyndon State College	Vermont Technical College	TOTAL (VSC)	(Vermont students at VSC)	<u>TOTAL</u> ; All Public Institutions

1) Enrollment Trends and Projections (1960-1980)

As the statistics in Table 2.1 indicate, enrollments at UVM and the Vermont State Colleges grew very rapidly during the past decade.

Total enrollments at these five institutions jumped from 4,430 students in 1960 to 10,438 in 1970, an increase of 135 percent. The percentages of Vermont student enrollments grew even more rapidly. In the 1962-63 academic year 2,830 Vermont students attended UVM or one of the four state colleges. By the 1970-71 academic year 7,186 Vermont students were enrolled at these five institutions, an in-state enrollment gain of 4,356 students (plus 154 percent) in a period of only eight years.

These expanding in-state enrollments resulted from an absolute increase in the number of students graduating from Vermont high schools each year, plus a parallel increase in the percentage of Vermont high school graduates who elected to continue their education beyond high school:

HIGH SCHOOL TRENDS (1960 and 1970)

Year	Total Vt. High School Graduates	No. Continuing at Education	In-state Public Institutions
1960	4,450	2,026 (45.5%)	593 (29,3%)
1970	7,156	3,568 (49.9%)	1,638 (45,9%)

By 1970, a reasonably consistent pattern characterized the postsecondary enrollment patterns of Vermont high school graduates. Approximately half of these students (49.9%) continued into some form of higher education program, and slightly less than half of those who continued their postsecondary education enrolled at public institutions (UVM or VSC) within the State of Vermont.

Since the University of Vermont and the Vermont State Colleges expanded their facilities very rapidly during the 1960's, they were able to keep pace with the steadily mounting numbers of qualified Vermont high school graduates who decided to continue their postsecondary education at public institutions within the state. However, there are a number of danger signs with respect to future in-state enrollment projections:

- 1. The absolute number of students graduating from Vermont's high schools will continue to increase throughout the 1970's until this number begins to peak around 1980;
- 2. Although 49.9% of Vermont's high school graduates continued into higher education in 1970, this meant that 50.1% did not decide to seek some form of postsecondary education beyond high school. Hence, half of Vermont's high school graduates were not benefitting from any form of postsecondary education in 1970. Hopefully more qualified Vermont students will enroll in postsecondary educational programs in the future;
- 3. Of the 7,156 students who graduated from Vermont's high schools in 1970, only 1,638 continued their postsecondary education at public institutions within Vermont. As the costs of education increase in the years ahead, the number of Vermont students electing to attend in-state public institutions will undoubtedly increase.

Each of the above factors indicates that increased enrollment pressures will hit the University of Vermont and the Vermont State Colleges in the future. The Office of Institutional Studies at the University of Vermont has indicated the extent of the surge of new students that can be expected during the 1970's in Table 2.2:

paul Andrews of the VSC staff has prepared the following estimates of total VSC enrollment projections through 1980 to demonstrate the impact the enrollment patterns in Table 2.2 could have on the Vermont State Colleges system if present admissions policies are followed in future years:

TOTAL ENROLLMENT PROJECTIONS

VERMONT STATE COLLEGES

Year	Vermont High School Grads.	No. Entering VSC System	Total VSC Enrollment Projections
1970 (Actual)	7,156	637	3,143
1971 (Est.)	7,128	735	3,440
1972 (Est.)	7,529	791	3,840
1973 (Est.)	7,936	849	4,081
1974 (Est.)	7,984	894	4,237
1975 (Est.)	8,216	969	4,460
1976 (Est.)	7,922	934	4,488
1977 (Est.)	8,640	1,072	4,861
1978 (Est.)	9,044	1,166	5,439
1979 (Est.)	9,172	1,238	5,777
1980 (Est.)	9,676	1,307	6,089

Since each of the four-year campuses was expanded in the 1960's to accommodate approximately 900 students, the above projections indicate the seriousness of the situation which is developing in the enrollment area. The most difficult problems are destined to hit the four-year colleges at Castleton, Johnson and Lyndon since Andrews' projections indicate that Vermont Technical College will probably be able to accommodate the increasing enrollment pressures as follows:

increasingly used by Lyndon and Castleton. (c) Attrition will remain approximately the same. (d) The number of part-time student equivalents will gradually increase from 123 in 1970 to 200 in 1980.

^{*} Andrews' total enrollment projections are based on the assumption that:

(a) Out-of-state enrollments will revert to, and remain at, 25% of total enrollment. (b) The new plateau in 1971 of Vermont freshmen achieved through Project Access will be maintained and

Year	Projected Total Enrollment VTC	Projected Total Enrollment at 4 yr. Colleges	Average Per 4 yr. College
1970 (Actual)	558	2,585	862
1971 (Est.)	540	2,900	967
1972 (Est.)	540	3,300	1,100
1973 (Est.)	598	3,483	1,161
1974 (Est.)	627	3,610	1,203
1975 (Est.)	658	3,802	1,267
1976 (Est.)	670	3,818	1,273
1977 (Est.)	717	4,144	1,381
1978 (Est.)	772	4,667	1,556
1979 (Est.)	810	4,967	1,656
1980 (Est.)	858	5,231	1,744

The Vermont State Colleges projections of heavily rising enrollments are not unique. As Table 2.2 indicates the University of Vermont will also be under severe pressure to accommodate increasing numbers of Vermont students. Unless some alternative policies are developed to handle these enrollment increases, much larger revenues will be needed in future years at both the Vermont State Colleges and the University of Vermont.

2) Financial Trends (1960-71)

As was noted in Section I of this report, the Vermont General Fund appropriation for education at all levels in the 1940-41 Fiscal Year was \$1.22 million (approximately 25% of the total General Fund budget for that year). As Table 2.3 on the next page indicates, by 1960 state support for all educational programs had risen to \$10.9 million (36.5% of the General Fund budget).

The 1960's saw a continuous expansion in state appropriations for all levels of education. The total direct state expenditures (including debt service) for elementary and secondary education soared from \$7.78 million in 1960 (25.9% of the General Fund) to \$36.2 million in 1970 (34.9% of the General Fund). In a similar fashion, the total direct state expenditures (including debt service) for higher education jumped from \$3.19 million in 1960 (10.6%) of the General Fund) to \$14.4 million in 1970 (13.9% of the General Fund).

Within the field of higher education, General Fund appropriations for the University of Vermont rose from \$2.5 million in 1960 to \$8.3 million in 1970; the VSC appropriation increased from \$500,000 in 1960 to \$3.4 million in 1970; debt service on capital construction jumped from a modest \$9,000 in 1960 to \$2.1 million in 1970; the amount the legislature appropriated for scholarships and financial aid rose from \$135,000 in 1960 to over \$1.2 million in 1970.

These rising appropriations for education at all levels created a serious budget crisis for the state, which peaked in 1968-69. By 1968, educational expenditures were consuming 53.6% of the total General Fund budget. By 1969 this rose to 55.5%. The state was unable to generate sufficient revenues to meet these expenditures. After running a \$1.5 million cash deficit in fiscal year 1968, the state accumulated a General Fund cash deficit of over \$7 million on June 30, 1969. The newly elected administration of Governor Deane C. Davis faced a major decision which boiled down to two difficult alternatives, either slash back drastically on expenditures or create new sources of revenue. To his great credit, Governor Davis chose the latter course and the legislature enacted a new 3% sales tax to finance needed state services. Yet, while educational budgets were not brutally slashed, the administration made it clear that it would not support major increases in higher education appropriations.

The result has been a policy of "level funding" at the University of Vermont and Vermont State Colleges during recent years, with major increases in appropriations going only to the Vermont Student Assistance Corporation to help offset rising tuition costs:

General Fund Expenditures (in Thousands)

Agency or Program	1970	1971	1972	1973 (Gov's Rec.)
Univ. of Vt.	\$8,333	\$8,957	\$8,962	\$9,350
Vt. State Colleges	3,454	3,883	3,834	4,055
Vt. Student Asst. Corp.	1,135	1,326	2,396	2,695
Senatorial Scholarships	90	90	90	o

This "level funding" policy, coupled with rising student enrollments, has resulted in a cut-back in state appropriations available per student to a point where the Vermont State Colleges are now in a worse position relatively, than in 1967-68:

State Appropriations Available Per VSC Student

Year	VSC Enrollment	VSC Appropriation	Amount Per Student
1967-68	2,422	\$2,665,000	\$1,100
1968-69	2,672	2,935,000	1,098
1969-70	2,926	3,454,000	1,180
1970-71	3,143	3,833,000	1,220
1971-72	3,440*	3,834,000	1,115
1972-73	3 , 773 [*]	4,055,000 #	1,077

* Projected # Based on Governor's Recommendation, August, 1971.

Faced with increasing enrollments and a "level funding" appropriations policy, both the Vermont State Colleges and the University of Vermont have attempted to tap external sources of income in an effort to meet escalating expenses. As Table 2.4 (on the following page) indicates, the University of Vermont has been quite successful in increasing its federal grants and other sources of income during the past decade:

Despite the fact that major efforts have been made to increase income from federal and other sources, these new revenues have not been sufficient to meet rising costs. As a result, the University of Vermont and the Vermont State Colleges have been forced to raise tuitions.

Table 2,4

TOTAL INCOME BY SOURCE UNIVERSITY OF VERMONT FY 1960-71

Fiscal Year	Total State Appropriation	Total Federal Appropriation	Total Tuition Income	Total All Other Income	Total Income	
1960	\$2,539,918	\$1,485,164	\$2,418,416	\$1,964,605	\$ 8,408,103	
1961	2,702,820	1,912,357	2,570,990	2,166,536	9,352,703	
1962	2,980,509	2,270,527	2,832,134	2,606,789	10,689,959	
1963	3,025,814	2,740,801	3,222,096	3,065,741	12,054,452	
1964	3,900,314	3,664,092	3,390,022	3,067,853	14,022,281	
1965	4,358,421	3,972,504	4,074,084	3,218,841	15,623,850	•
1966	4,657,173	4,564,871	4,099,703	4,054,678	17,376,425	
1967	5,008,000	5,364,056	4,567,149	6,032,632	20,971,837	•
1968	6,636,904	6,234,794	5,549,136	6,314,482	24,735,316	
1969	7,690,964	7,302,473	6,031,565	7,376,521	28,401,523	
1970	8,281,344	8,371,359	7,779,020	618,918,6	34,248,542	
1971	8,948,915	10,500,000	9,327,000	10,141,445	38,917,360	

* Estimated - subject to final audit Prepared by Office of Institutional Studies, University of Vermont, 9/10/71.

The problem here, as Table 2.5 (on the following page) indicates, is that tuitions for both in-state and out-of-state students at the University of Vermont and the Vermont State Colleges are now considerably higher than those of nearby states. In effect, Vermont may be pricing itself out of the educational marketplace at the very time that increasing numbers of students are indicating a heightened interest in obtaining a postsecondary education.

When the financial trends from 1960-72 are viewed against the student enrollment trends projected for 1972-80, it becomes obvious that Vermont must make some very careful strategic decisions as to how the state can finance postsecondary educational programs most effectively in the years ahead.

3) Financial Projections (1972-1980)

The preceding analysis has indicated that Vermont's public system of higher education already faces serious financial problems. The situation becomes even more disturbing when viewed against projected increases in Vermont student enrollments. Two factors must be considered in evaluating the Vermont State Colleges' ability, or lack of ability, to handle these enrollment increases. The first factor involves plant capacity as it relates to capital construction. In addition to substantial increases in state operating appropriations in the 1960's, the University of Vermont and the Vermont State Colleges received major state authorization for new capital construction projects during this same period. Specifically, the University of Vermont was authorized to borrow \$16,580,000 for capital construction projects between 1960 and 1971, while the Vermont State Colleges borrowed another \$15,631,873 during this same period. Thus, by 1971, General Fund Bond Authorizations for the University and the state colleges totaled \$32,211,873.

	1968-69	ion and Fee 1970-71 ate/Out-of-	1971-72
Connecticut: Central Connecticut State College Bastern Connecticut State College University of Connecticut	\$184/484	190/790	270/920
	210/510	180/780	243/893
	252/400	305/1,005	654/1,079
Maine: Eastern Maine Vocational Technical Ins. Farmington State College Gorham State College University of Maine	277/452	300/475	247/262
	158/258	200/550	480/1,380
	160/260	265/615	530/1,380
	400/1,000	450/1,350	587/1,587
Massachusetts: North Adams State College Salem State College University of Massachusetts	240/640	275/675	292/692
	255/655	290/690	290/690
	319/719	446/846	408/808
New Hampshire: Keene State College N.H. Technical Institute Plymouth State College Univ. of New Hampshire	468/868	619/1,339	759/1,409
	310/810	310/810	300/755
	445/845	602/1,322	734/1,394
	688/1,433	894/1,859	1,084/2,084
Rhode Island: Rhode Island College Univ. of Rhode Island	320/655	370/1,055	506/685
	351/1 , 151	461/1,361	751/1,037
Vermont: Castleton State College Johnson State College Lyndon State College Univ. of Vermont Vermont Technical College	346/1,096	571/1,321	788/1,618
	346/1,096	591/1,341	808/1,638
	346/1,096	591/1,341	808/1,638
	677/1,877	877/2,327	1,072/2,522
	396/896	581/1,081	798/1,378

sizable increases in Vermont student enrollments in the years ahead, this will require a major new capital construction program by 1980. In an effort to indicate the magnitude of the costs that could face the Vermont State Colleges system if a decision is made to either establish one or more new college campuses (or to expand the academic facilities at Castleton, Johnson and Lyndon) to handle future enrollment increases, Paul Andrews has prepared a long-range estimate of capital construction cost requirements for academic facilities that is broken down into specific unit cost components in Table 2.6 (next page). Andrews' estimates are based on a phasing of construction through 1980 and on the further assumption that the inflationary spiral in the construction industry will add 6% per year to building costs, thus raising project costs for academic facilities from their current rate of \$45 per square foot to \$95 per square foot by 1980;

According to Andrews' estimates it will cost almost \$14,000,000 to build the academic facilities (exclusive of dormitories) for one new state college campus of 900 to 1,200 students by 1980. Since Andrews' enrollment projections of 6,089 students by 1980 indicate that two new college campuses could be required (if each campus were to be limited to 900-1,200 students), the construction costs of the academic facilities for these two colleges could total approximately \$28,000,000. As an alternative, if the present academic facilities at Castleton, Johnson and Lyndon are expanded to accommodate projected enrollments through 1980, this would require at least \$25,000,000 in new capital construction. These estimates indicate that it may not be desirable to expand state college facilities to handle future enrollment increases if some alternative course of

Table 2.6

POTENTIAL VSC LONG-RANGE CAPITAL CONSTRUCTION REQUIREMENTS

u H planning model developed in 1965, involving, among other factors, an enrollment of 900 plus students Capital construction requirements at the four-year campuses in the VSC system are based on any given campus,

completion of the various projects for which funding is requested in 1972 will complete construction at these Castleton and Johnson have already exceeded the 900 plus number used in the planning model and Lyndon could reach 900 plus in 1972. With the exception of periodic renovation and minor landscaping, cambuses.

260 expenditures are involved in providing the academic facilities for multiples of 900 to 1,200 additional In the years following fiscal 1971-1972, to the end of the decade, an annual increment of Whether accommodated at an existing or a new campus, significant students by fiscal year 1979-1980: four-year students is expected.

	Requirement	Year Funded	Year Completed	Cost	Footage
(1)	Classrooms and offices	1972	1974	\$ 1,465,000	25,000
(3)	Utilities, fields, roads, landscaping, parking	1972	. 1975	\$ 550,000*	
(3)	Library	1973	1975	\$ 1,305,000	20,000
(4)	Laboratories, physical education facilities, and auditorium	1973	1976	\$ 6,180,000	000,206
(5)	Maintenance-storage bldg	1974	1975	\$ 1.33,000	8,000
(9)	Utilities, fields, roads, landscaping, parking	1976	1979	\$ 750°000*	
(7)	(7) Student Union	1977	1979	\$ 1,140,000	12,000
(8)	Classrooms and offices Total Est.		1977 Cost (Academic Facilities)	\$ 2,375,000	25,000
:	one ne	w campus of 900	One new campus of 900 to 1,200 students		

Because of the variables of location, topography and campus design, Items 2 and 6 are extremely difficult determine with any accuracy. Only ranges can be provided. The above figures represent mid-point estimates possible ranges from \$400,000 to \$700,000 for (2) and from \$600,000 to \$900,000 for (6). to determine with any accuracy.

action is feasible. Since the higher education debt service has already reached \$2.1 million annually, it is questionable whether it would be wise for the State of Vermont to invest major new sums in the "bricks and mortar" of higher education in the future unless absolutely necessary.

One possible alternative course of action would be to cut back substantially on the number of out-of-state students attending the University of Vermont and the Vermont State Colleges in order to accommodate larger numbers of in-state students. This could seriously detract from the quality of the educational experience of the Vermont students if it made these institutions too parochial. In addition, such a course of action would hardly improve the already difficult financial situation with respect to the annual operating costs which faces the University of Vermont and the state colleges, since out-of-state tuitions are considerably higher than those paid by Vermont students.*

The issue of rising operating costs and their relationship to future tuition charges is the second factor that must be considered in evaluating the state colleges' ability to handle the projected increases in Vermont student enrollments in the years ahead. At the present time, the VSC operating budget is extremely tight, even though the Vermont State Colleges are not in as strong a competitive position as is desirable. To take the factor of faculty salaries alone, as Table 2.7 on the following page indicates, the Vermont State

^{*} Although only 40 percent of the students at UVM are non-residents, total non-resident tuition and fees income in 1971 amounted to \$5,758,397 compared to \$3,568,603 received in tuition and fees from Vermont students at UVM.

Table 2.7

AVERAGE COMPENSATION FOR ALL FULL TIME FACULTY AT NEW ENGLAND STATE COLLEGES, $1969-1970^*$

(Li	sted	by	Amount	οf	Compensation	١
-----	------	----	--------	----	--------------	---

Southern Connecticut	\$13,505
Central Connecticut	13,340
Eastern Connecticut	13,299
Farmington State (Me.)	13,017
Rhode Island	12,932
Fort Kent State (Me.)	12,469
Worcester State (Mass.)	12,442
Boston State (Mass.)	12,395
Salem State (Mass.)	12,362
Fitchburg State (Mass.)	12,153
Lowell State (Mass.)	12,150
Bridgewater State (Mass.)	12,137
Framingham State (Mass.)	11,868
Westfield State (Mass.)	11,552
Keene State (N.H.)	11,507
Plymouth State (N.H.)	11,212
VERMONT STATE COLLEGES	11,107
North Adams State (Mass.)	10,522

^{*} Source: AAUP Bulletin, June, 1970.

Colleges now rank next to the bottom in terms of average faculty compensation compared to other New England state colleges. Assuming again that inflation will continue at a rate of 6 percent per year, the state colleges will need a <u>minimal</u> increase of 6 percent per year in their annual operating budgets to handle increased operating costs and increased enrollments during the next decade. These funds grow even larger if we assume that a 9 percent increase in the annual operating budget is really needed to strengthen faculty compensation, to build up libraries and to make other improvements vital to provide sound educational services.

In an effort to provide a projection of what might be expected in the way of future increases in annual operating costs at the state colleges, Paul Andrews has prepared Table 2.8 (next page) which projects future cost estimates through 1980 at both the minimal 6 percent increase per year and the more desirable 9 percent increase per year. Both of these projections are based on the current 1971-72 state appropriation of \$3,834,000 and the 1971-72 tuition rates of \$670 for in-state students and \$1,500 for out-of-state students. Hence they indicate the amount of new funds that will be needed above and beyond the 1971-72 figures to meet projected operating budget increases.

These statistics provide additional evidence of the very difficult problems the State of Vermont is destined to face in financing the costs of its higher education system in the years ahead. Assuming that the State Colleges are to accommodate the enrollments predicted for the year 1980, this will require (at an annual 6 percent rate) an additional \$11,019,000 in increased annual revenues by 1980 to cover operating costs. These revenues must come in either the

Table 2.8

ESTIMATED OPERATING COSTS THROUGH 1980

At an Increase of 6 Per Cent Per Year

Academic Year	district.	1971-72	19	975-76	19	980-81
Projected Enrollments		3,440	4	,460	6,	,089
Total Revenue Needed	\$6,	753,000	\$11	,061,000	\$20	,094,000
Cost Per Student	\$	1,963	\$	2,480	\$	3,300
Balance Required in Increased Appropriations, and/or Increased Tuition		0	\$ 3	,392 , 000 [*]	\$11,	,019,000*

At an Increase of 9 Per Cent Per Year

	_	1971-72	19	75-76	_19	980-81
Total Revenue Needed	\$6,	753,000	\$12	359,000	\$25,	957,000
Cost Per Student	\$	1,963	\$	2,771	\$	4,263
Balance Required in Increased Appropriations and/or Increased Tuition*		o	\$ 4,	,690,000*	\$16,	,882 , 000 [*]

^{*} These balances indicate the amount of new funds that will have to be raised (above 1971-72 revenues), either by increased state appropriations, or increased tuition, or a combination of both.

form of higher state appropriations, or higher tuitions, or a combination of both. If the operating budget increase is moved up to 9 per cent per year to cover desirable improvements, it will require an annual increase of \$16,882,000 in new revenues by 1980, above and beyond existing revenues.

The deeper one looks into the future of Vermont higher education, the more difficult the issues become. In its 1968 report on "Higher Education in Vermont", the Commission on Educational Facilities recommended that the state assume the obligation of providing postsecondary educational opportunity for all qualified Vermont students. Assuming that the State of Vermont is willing to pursue this obviously desirable goal, it will have to face some very difficult choices. While General Fund revenues will hopefully continue to increase in future years, these resources are not infinite. The crucial question becomes one of how these revenues can be used to insure the most effective possible program of higher education within the resources available to the state.

4) Major Achievements (1960-1972)

Although Vermont is destined to face difficult problems in meeting its future postsecondary educational obligations, this fact should not detract from the substantial progress realized during the past decade.

The first major achievement has involved an expansion of the facilities and resources at the University of Vermont and the Vermont State Colleges to handle very significant increases in Vermont students enrolled at these institutions - a jump from

2,830 Vermonters in the 1962-63 academic year to 7,186 in 1970-71.

In addition to accommodating more Vermonters, those institutions are providing postsecondary educational opportunities to many students who would not have possessed the financial resources to benefit from a college education in the past, particularly as a result of such innovations as the VTC pre-tech program and Project Access. During the 1970-71 academic year, approximately 70 per cent of the students at Castleton, Johnson and Lyndon received VSAC scholarships, work-study grants, NDEA loans or some other form of financial assistance; and 74.5% of the Vermont Tech students received some type of financial aid. As a result, many Vermonters attending these institutions represented first-generation college students. Last year at Johnson, for example, over half the students qualified for federal funds under the \$7,500 family income level and 40% of the students came from families with incomes of \$6,000 or less per year.

In order to attract and educate these students, all four state colleges have developed balanced academic programs which have been accredited by appropriate regional and professional associations, including the New England Association of Colleges and Secondary Schools. Castleton, Johnson and Lyndon State Colleges have each developed four year elementary and secondary education programs which are grounded in a strong liberal arts curriculum. Vermont Technical College offers a variety of two year programs in agricultural and engineering technology plus a special pre-tech option. The development and expansion of these academic programs at all four

colleges represents an important addition to the postsecondary educational opportunities available to Vermonters.

Finally, the fact that the state has invested public funds in four colleges located in four different geographical areas of the state has had two important consequences. First this has helped to raise the aspiration rates among Vermont students to attend college. As Warren Willingham explains in his book, Free-Access to Higher Education:

"Proximity has become a key element in the accessibility of higher education...A nearby college is more likely to prove attractive to a marginal student because of its intangible identity, its familiarity and its relevance. Added to these 'motivating' characteristics is the fact that the student can live at home, work part-time and attend classes under circumstances that only commuting permits."

To bear out Willingham's point, during the 1970-71 academic year 892 full-time students, or 28 per cent of the total VSC student enrollment, commuted to one of the four state colleges.

In addition to making it possible for more students to attend college, the diverse geographical locations of the four Vermont State Colleges benefits the communities adjacent to these colleges in many important ways. During the past decade, the four state colleges have developed the resources to make substantial contributions to their respective regions. All of these colleges are of major economic importance to their surrounding communities, and each has developed a number of unique strengths. Since VTC is the only technical college in Vermont, it serves a statewide clientele in the

fields of agricultural technology, architectural and building engineering technology, civil and mechanical engineering technology, electrical and electronics engineering technology and surveying technology. The four year colleges at Castleton, Johnson and Lyndon sponsor a wide range of cultural events in such fields as drama, art and music. Through its Dibden Center, Johnson State College has developed into a major cultural resource for the state and it has recently been designated as the headquarters for the Vermont Symphony Orchestra. In a similar manner, Castleton sponsors a major evening division for residents of the Rutland area, it awards two year degrees in nursing and business administration and it sponsors special educational programs in such fields as social welfare and criminal justice. All three of the liberal arts colleges have also cooperated in developing such new programs as Project Access.

In its 1964 report, the National Educational Policies

Commission declared that "the goal of universal education beyond the high school is no more Utopian than the goal of full citizenship for all Americans, for the first is becoming a prerequisite to the second." During the past ten years, the State of Vermont has begun to move toward the realization of this goal. The challenge in the years ahead is to continue this forward movement by making the most effective possible use of the resources available to the state to provide equality of postsecondary educational opportunity to all qualified Vermonters.

III - THE PRIVATE SECTOR

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III - RECENT TRENDS AND FUTURE PROJECTIONS: THE PRIVATE SECTOR

"In 1798, Dr. Dwight happened to be at Middlebury, and...he encouraged the people of Middlebury to prosecute a plan of establishing a college at that place. They accordingly applied to the legislature for a college charter, with the hope, on the part of some, that they might also obtain the lands which had already been granted to the University. They succeeded in obtaining an act of incorporation dated November 1, 1800, but all endowment by the state was refused."

Thompson's Vermont, Part Second Civil History of Vermont, 1842

As was noted in Section I of this report, New England's private colleges and universities have long played a major educational role within the region, and they continue to make an extremely important contribution to New England's educational, cultural and economic life. In a recent editorial, the <u>Boston</u>

<u>Evening Globe</u> dramatized one aspect of this contribution by pointing out that:

"Massachusetts' independent colleges and universities are in many ways the state's proudest possession and tradition. They are also very big business...

The educational business...employs thousands of people from professors to dishwashers. Its endowments feed a steady stream of cash into the state's economy, flowing outward with the tuition payments of people from all over the world who respond to this region's reputation for educational quality."

Statistics which have been compiled by the New England Board of Higher Education (NEBHE) indicate the far-reaching impact of private institutions of higher education within the larger New England region and also within the State of Vermont:

I - TOTAL NUMBER OF HIGHER EDUCATION INSTITUTIONS (1971-72)

	New England	Vermont
Public Institutions	74	5
Private Institutions	174	16
	248	21

II - TOTAL HIGHER EDUCATION ENROLLMENT (Fall 1969)*
(Includes Undergraduate, Graduate, Evening and Extension Students

Public	New England	Vermont
Total Students	247,584	12,401
<u>Private</u>		
Total Students	310,127	9,903
Grand Total	557,711	22,304

The NEBHE total fall 1969 public enrollments in Vermont which were taken from their 1970-71 Facts Booklet (Table, page 19) are higher than those compiled by the VSC and UVM staff. The UVM enrollment figures for 1969-70 are 6,745 students and the VSC figures are 2,926 students for a total of 9,671 (see Table 2.1, Section II of this report).

III - TOTAL HIGHER EDUCATION FACULTY (1969-70)*

(Includes both full and part-time)

Public	New England	Vermont
Total Faculty	12,850	1,095
Private		
Total Faculty	29,711	892
Grand Total	42,561	1,987

The NEBHB statistics indicate that in the 1969-70 academic year, New England's public and private institutions of higher education involved more than 600,000 faculty and students, with private institutions accounting for some 340,000 of this total. During this same 1969-70 academic year, Vermont's independent colleges and universities engaged more than 10,000 faculty and students, which certainly makes this enterprise one of the state's most significant areas of privately funded activity. These figures are actually conservative since they exclude both administrative and custodial staff. The New England Board of Higher Education estimates that, when both professional and non-professional personnel are considered, New England's colleges and universities provide jobs for approximately 90,000 employees, in addition to the more than 550,000 students noted in Table II.

While much of the strength of the independent colleges and universities stems from their historical position of prominence that dates back to Colonial times, the private sector has continued to grow

at a very rapid rate during more recent years, especially in Vermont. At the present time there are sixteen major private colleges and/or universities in Vermont - five founded prior to 1900, five established during the first third of the present century, and six created during the past twenty five years:

	Institutions	Location	Year Founded
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	Middlebury College Norwich University Green Mountain College Vermont College Champlain College St. Michael's College Bennington College Trinity College St. Joseph College Goddard College Marlboro College Windham College College of St. Joseph the Provider	Middlebury Northfield Poultney Montpelier Burlington Winooski Bennington Burlington Old Bennington Plainfield Marlboro Putney Rutland	1800 1819 1834 1834 1878 1903 1925 1925 1926 1938 1946 1951
14.	Antioch-Putney Graduate School	Putney	1964
15. 16.	School for International Training Royalton College	Brattleboro Royalton	1964 1965

1) General Enrollment Patterns

Before commenting on the specific contributions which these sixteen institutions make to the State of Vermont, it is important to evaluate two general enrollment trends relative to the interaction between the private higher education sector and the postsecondary

^{*} Both Tables II & III were tabulated from the 1970-71 Facts booklet published by NEBHE. Raymond Hewitt, the NEBHE Director of Research, pointed out in a letter that aggregate faculty figures are very difficult to interpret. He developed a more comprehensive analysis of employees in New England's higher education institutions for the 1967-68 academic year which indicated that a total of 81,117 full-time and part-time professional and non-professional staff were employed at that time.

educational patterns of Vermont students.

extremely large percentage of Vermont students who continue their education beyond high school presently enroll in private, rather than public, colleges and universities. The recent Carnegie Commission report on The Capitol and the Campus indicates that, in nine states, over 40 percent of college and university students enrolled in private institutions during the fall of 1968:

PERCENT OF COLLEGE AND UNIVERSITY STUDENTS ENROLLED IN PRIVATE INSTITUTIONS (Fall 1968)*

Rank	State	Percent of Students In Private Institutions
1 2 & 3 4 & 5 6 7 8 9	Massachusetts Vermont Rhode Island Connecticut New Hampshire Pennsylvania New York Iowa New Jersey	69% 53% 53% 49% 49% 48% 47% 42% 41%
49 & 50	Nevada and Wyoming	0%

Second, although a very large percentage of Vermont's students enroll in private colleges and/or universities, a much smaller proportion of these students go to private institutions within the State of Vermont. As a result, Vermont's private colleges

^{*} The sixth New England state, Maine, ranked 14th among the 50 states, with 32% of its college and university students enrolled in private institutions in the fall of 1968.

and universities attract an extremely large percentage of their students either from the other New England states or from states outside New England.

This trend is clearly indicated in the following comparative analysis which was prepared by the New England Board of Higher Education for the academic year 1969-70:

RESIDENCE OF UNDERGRADUATES
ATTENDING PRIVATE INSTITUTIONS, FALL 1969

	Conn.	Maine	Mass.	N.H.	R.I.	<u>Vt</u> .	A11 N.E.
Resident of Home State	56.1%	34.9%	45.8%	24.5%	39.5%	15.7%	43,4%
Resident of Other N.E. States	7.9%	38.8%	15.9%	35.4%	25.9%	34.8%	19.2%
Resident of U.S., excluding N. E.	34.8%	24.4%	35,8%	38 _• 4%	33,4%	47.7%	35.5%
Resident of Foreign Country	1.2%	1.9%	2.5%	1.7%	1.2%	1.8%	1.9%

The above table indicates that almost 85 percent of the undergraduates enrolled at Vermont's private colleges and universities in the fall of 1969 came from outside the State of Vermont. While this trend certainly speaks well for the national reputation which has been achieved by Vermont's private institutions,

it also has very important implications in light of the potential future increases in Vermont student enrollments projected in Section II of this report.

The full significance of these patterns of out-of-state enrollments at Vermont's private colleges and universities becomes apparent in a number of tables which appear in the Carnegie Commission's report on The Capitol and the Campus. show that, despite the expansion that has taken place in both the UVM and VSC systems during the past decade, Vermont's record is still poor in providing in-state higher educational accommodations for its own students. In the fall of 1968, Vermont ranked 50th among the 50 states in the ratio of its resident students who enrolled as first-time undergraduates in Vermont's own colleges and universities (public and private) compared to the total number of Vermont high school students who graduated in June 1968. In effect, Vermont's colleges and universities, particularly in the private sector, have imported large numbers of postsecondary students from other states and Vermont has exported significant numbers of its own students to other states (again primarily to private colleges and universities).

The basic implications of these enrollment patterns are clear. A number of factors already summarized in this report suggest that future postsecondary enrollment pressures are destined to increase substantially within the State of Vermont during the next decade because:

- 1 the absolute numbers of Vermont high school graduates are increasing each year;
- 2 the percentages of Vermont high school graduates entering postsecondary educational programs are increasing each year.

In addition, the current analysis indicates that substantial numbers of today's Vermont students are receiving their postsecondary education at private institutions outside the state. Owing to rapidly rising higher education costs, significant numbers of these students may elect to remain in-state in the future in an effort to save money. If this occurs, it will place still further pressures on the State of Vermont to provide additional higher educational accommodations for these students.

There is a reverse side of this trend, however, which is worthy of very careful consideration. At the same time that the State of Vermont is destined to face increasing pressures to accommodate more of its own students, many of the private colleges and universities within the state are accommodating only limited numbers of Vermont students. The fact that only 15 percent of the 1969-70 enrollments at these private institutions consisted of in-state residents indicates that Vermont's private colleges have a great potential to accommodate more Vermont students in the years ahead if the anticipated in-state enrollment pressures materialize.

The difficulty here is once again financial. Tuitions at many of Vermont's private colleges and universities are already high and these institutions, like private educational institutions

everywhere, have been buffeted by rapidly escalating costs. While many of Vermont's private colleges possess the plant facilities and the faculty resources to handle larger numbers of Vermont students, it is highly questionable whether many Vermont students, or the private institutions themselves, can afford to follow such a course of action unless they receive some form of public assistance. Indeed, it is questionable whether some of Vermont's private colleges will be able to survive at all without public assistance.

The financial plight which faces Vermont's private colleges and universities represents both an opportunity and a challenge to the State of Vermont:

- an opportunity because it may well be more effective to invest state resources in these institutions to take increasing numbers of Vermont students, rather than to build new public facilities for future enrollment increases;
- a challenge because the private institutions already make so many important contributions to Vermont that the state can hardly afford to ignore their financial difficulties in the years ahead.

2) The Private Sector's Contributions

Vermont's private colleges and universities make three major contributions to the well-being of the state - educational, cultural and economic.

a) Educational Impact

Note has been made of the fact that only 15 percent of the students enrolled at Vermont's independent colleges in the 1969-70 academic year were in-state residents. Despite this relatively small percentage, New England Board of Higher Education statistics indicate that a total of 1,406 Vermont students were actually enrolled in these institutions in the fall of 1969.

This is a significant enrollment when evaluated against the types of capital construction estimates Paul Andrews prepared for Section II of this report. According to these estimates, it would cost in the vicinity of \$14,000,000 in capital funds to build the academic facilities for one new state college to handle 900 students by 1980. At the present time, Vermont's private colleges and universities are accommodating 1,400 Vermont students, or the number that could be enrolled in 1 1/2 new state colleges of the 900 student size. Any policies which would encourage Vermont's private colleges to take still more Vermont students in the future will further relieve projected enrollment pressures on public institutions within the state.

In addition, Vermont's private colleges and universities are located in all geographical areas throughout the state. A third of these private institutions are located in the southern portion of

Vermont, which does not have any major publicly-supported college or university. The private institutions possess great potential, particularly in southern Vermont, to handle larger numbers of commuter students from within the state which would hopefully reduce the postsecondary educational costs for these students if they could live at home.

b) Cultural Impact

In response to a written request, the presidents of Vermont's independent colleges provided a wide range of comments on the cultural and social contributions which their institutions are making to the State of Vermont. These comments reveal that Vermont's private colleges and universities are enriching the quality of life in the state in a host of important ways. Most provide library privileges to local residents and sponsor art exhibits, lecture series, concerts, dramatic productions and athletic events which are available to the general public. In addition, many have initiated "outreach" programs which are designed to provide research and professional assistance to local communities and professional organizations. Finally, Vermont's colleges and universities comprise one of the notable major "industries" within the state which enhances, rather than detracts from, the environment since they tend to be aesthetically attractive and non-polluting.

c) Economic Impact

Vermont's private colleges and universities represent
a powerful economic force within the state. Eleven of the sixteen
private colleges and universities in Vermont provided financial data

for this report.* These data reveal that the operating budgets for these eleven institutions increased from \$9,071,733 in 1960 to \$16,926,335 in 1965 to \$26,925,712 in 1970. As of the current fiscal year, the book valuation of plant and equipment at these eleven institutions totaled \$77,092,509 and endowment funds totaled \$26,954,115.

The above figures make it obvious that the private higher education community has become a major employer within the state. The figures substantially understate the importance of the contribution these private institutions make to the state's economy since they only cover two-thirds of the sixteen institutions. They also fail to indicate how much money out-of-state students pump into the state's economy above any direct educational expenses they may incur for tuition, room and board. This latter point highlights the fact that Vermont's private colleges and universities exercise a very strong "generative", or "multiplier", impact on their local business communities to the extent that they help to attract and support a wide variety of retail sales and services. When these factors are added to the above figures, there is little doubt that Vermont's private educational institutions represent a multi-million dollar industry which makes a substantial contribution to the state's economy.

In light of the educational, cultural and economic contributions which Vermont's private colleges and universities make to the state, it would appear that the state can hardly ignore the

^{*} The eleven private institutions providing financial data were:
Antioch-Putney Graduate School, Bennington College, Champlain College,
Middlebury College, Norwich University, St. Joseph College, the
College of St. Joseph the Provider, St. Michael's College, the
School for International Training, Vermont College and Windham
College.

Table 3.1

FINANCIAL DATA: VERMONT'S PRIVATE COLLEGES AND UNIVERSITIES (1970-71)

Th C C A T A T T T T T T T T T T T T T T T	TOTAL		VERMONT	ANNUAL OPERATING RIDGET	NG NG	CAPITA AND EQ (ROOK	CAPITAL PLANT AND EQUIPMENT (ROOK VAlue)	ENDOWMENT	
NOT TO TIT SAT	OT VETTO TO		O T VET CO T O	2000	4	XXXXX	(2000)		1
Antioch-Putney Grad. School	09		15	\$ 180,000	8		000,06	\$ }	
Bennington College	195		7,4	3,100,0	8	7,56	7,565,000	\$ 1,838,000	
Champlain College	621		567*	1,400,000	8	, d	1,600,000	1	
Goddard College		o N	Infori	Information	Provided	led			
Green Mountain College		o N	Inform	Information	Provided	led			
Marlboro College		o N	Infort	Information	Provided	led			
Middlebury College	1,654		81	5,451,048	Δ, Θ	20,02	20,044,386	17,439,023	
Norwich University	970		102	4,500,000	8	20,02	20,000,000	000,000,9	
Royalton College		Š	Infor	Information	Provided	ed	•	•	
St. Joseph College	146		121	177,000	8		444,000	1 1	
College of St. Joseph							•	-	
the Provider	150		79	400,000	8	2,38	2,380,863	1 1	
St. Michael's College	1,273	•	182	5,042,084	84	11,26	11,261,918	940,574	
School for International				-		•	•	•	
Training	392		0	2,000,000	8	1,16	1,169,000	364,190	
Trinity College		N N	Inform	Information	Provided		•	•	
Vermont College	375		45	1,683,206	90	3,03	3,037,342	294,368	
Windham College	816		67	2,992,374	74	9,50	000,005,6	78,000	

^{*} Includes full-time and part-time students.

9/20/71

difficult problems which face these institutions. Any planning effort regarding the future development of higher educational programs in Vermont must take into account the potential role of the private It is difficult to ascertain the types of specific policies sector. the state might consider in this area without the benefit of detailed In the past, Vermont was unusual among the states in that it appropriated a modest amount of direct public funds to Norwich University and Middlebury College. This practice was discontinued, however, following the establishment of the Vermont Student Assistance Corporation in 1965 and the subsequent disappearance of the Senatorial Scholarship program. At the present time the State of Vermont is indirectly subsidizing private colleges and universities by providing VSAC funds to Vermont students attending these institutions, but unless these funds are increased markedly it is doubtful that they will be sufficient to help Vermont's private colleges meet the very difficult financial crises they are destined to face.

A number of alternative state assistance programs appear to be worthy of examination. The new Minnesota Plan, for example, has established a minimal "base year" state subsidy for private institutions within the state, computed on the numbers of in-state students enrolled at each institution in a given year. This base year subsidy is then increased by an extra grant for each additional in-state student accepted at the institution in the future, with a special bonus if the institution provides financial support for economically disadvantaged students. Preliminary studies indicate that this program will cost the State of Minnesota less per student than the additional sums which would be involved in expanding public facilities to accommodate additional in-state students.

Whatever approach might be considered in Vermont, time is of the essence. The state cannot afford to delay any longer in creating a comprehensive master plan for higher education which takes into account the needs and the resources of both the public and private sectors of Vermont's higher educational community.

IV - STRATEGIES FOR THE FUTURE

IV - STRATEGIES FOR THE FUTURE

"Large amounts of money are, it is true, annually raised and expended for the support of schools, but no means are provided by which it may be known whether these moneys have been advantageously expended or not... until these deficiencies are supplied, enlightened and useful legislation upon the subject of education cannot be expected."

Thompson's Vermont, Part Second Civil History of Vermont, 1842

When considering the future of higher education in Vermont, the first fact that becomes apparent is the need to create a comprehensive state master plan for higher education which will clarify the objectives, the priorities and the strategies the state should follow in an effort to expend its resources most effectively in meeting its postsecondary educational obligations. On the assumption that it is the policy of the state to provide for equality of postsecondary educational opportunity for all qualified and interested Vermont students, the issue of priorities and strategies is of crucial importance.

The foregoing analysis has attempted to make it clear that, despite the progress and contributions that they have made during recent years, Vermont's colleges and universities, both public and private, are destined to face difficult and complex challenges in the years ahead -- challenges involving increasing enrollment pressures, increasing financial pressures, and the need to build upon their present quality and excellence if they are to be fully responsive to the educational needs which will face our society in the future.

The above challenges can only be met by means of a coordinated and cooperative approach between Vermont's public and private colleges and universities. Within the context of this coordinated effort a number of new strategies -- both programmatic and organizational -- will have to be considered.

a) Programmatic Strategies

A variety of programmatic innovations should be considered within both the public and private sectors which would be designed to make fuller use of existing facilities to accommodate more qualified students.

In a recent report entitled <u>Less Time</u>, <u>More Options</u>, the Carnegie Commission urged consideration of reduction of the time required for the B.A. degree from 4 to 3 years; increased opportunities for students to interrupt their college education in order to gain service and/or work experience; more options for students to change directions while in college; more emphasis on the possibility of earning an Associate in Arts or other degree at the end of two years of formal college education; and more flexibility in transferring credits between institutions to give students more freedom in planning their educational programs.

All of the above options are important, especially in light of the fact that very sizeable numbers of students attending college drop out before they secure a degree. To illustrate this point, the Carnegie Commission prepared a model of "Success and Attrition of American College Students" which indicates that 47 percent of all undergraduates who enter American colleges terminate their education before receiving a college degree.

In addition to the above curricular reforms, another way to make better use of existing college facilities involves calendar innovations of a "tri-mester" or "quarterly" variety which will permit more effective year-round utilization of educational buildings.

A second programmatic strategy that promises to be of increasing importance to postsecondary education in the future involves approaches which are designed to <u>supplement</u> existing educational options by means of such new innovations as 13th and 14th year regional vocational high school programs, the increased use of educational television for postsecondary education, and the establishment of community college programs which are designed to make full use of existing educational facilities at local, regional or state levels. In a second report entitled, <u>The Open Door Colleges</u>, the Carnegie Commission estimates that 230 to 280 new community colleges will be required in the United States by 1980.

Vermont began to experiment with its own community college program in November, 1970, following receipt of a \$60,000 planning grant from the U.S. Office of Economic Opportunity. This initial grant has subsequently been supplemented by an additional \$500,000 grant from OEO which is designed to cover the administrative costs for the new community college operation through June 30, 1973. The record established thus far by the new Vermont Community college program is impressive.

Late last year the Vermont Regional Community College

Commission worked out a provisional relationship with the Vermont

State Colleges which permits special VSC credits to be granted to

community college students for approved course work. Since that time

the Commission has initiated a community college demonstration project

in Washington County which enrolled 156 students during the spring and summer terms and a second demonstration project in the Northeast Kingdom which enrolled 108 students during this same period. An additional 134 students enrolled in a variety of special community college courses in other areas of the state. In August 1971 the Community College Commission established a third major demonstration project in the Springfield-Windsor area and it has developed plans to serve at least 2,000 students during its second year of operations.

This new community college effort represents an extremely important addition to the postsecondary educational offerings available to the people of Vermont. It is particularly significant that this program is designed to provide new educational opportunities to Vermonters who are not being reached by other institutions because of economic, geographical or other handicaps. In addition, the program has adopted the philosophy of using existing plant facilities -- regional vocational centers, union high schools, public and private colleges, churches and other community buildings -- rather than attempting to build new facilities. Any new planning organization designed to coordinate the higher educational effort in Vermont should include the community college concept, as well as the other types of new programmatic strategies described above.

b) Organizational Strategies

In August 1971, a new Joint Committee on Higher Education Planning was established by the UVM and VSC Boards of Trustees to recommend an appropriate organizational scheme to provide for better coordination and planning of Vermont's higher education programs. In

light of the fact that this new Joint Committee has just begun its study, it is inappropriate to pre-empt its work by presenting detailed recommendations on organizational strategy in this background report. However, a few general observations on the issue of reorganization are in order.

Vermont is unique in not having established a more formal approach to higher education coordination and planning. The Carnegie Commission's report on The Capitol and the Campus indicates that the great majority of states have taken this action during the past quarter century with most choosing some form of State Coordination Board, either advisory or regulatory:

STATE COORDINATION OF HIGHER EDUCATION

States With	1939	1949	1959	1969
No Formal Coordination	33	28	17	3
Voluntary Coordination	0	3	7	1
Coordination Boards	2	3	10	27
(Advisory)	(1)	(1)	(5)	(13)
(Regulatory)	(1)	(2)	(5)	(14)
Consolidated Governing Board	15	16	16	19

Second, as regards the particular organizational problems facing higher education in Vermont, the key issue does not appear to be one of simple administrative efficiency. The major problem in Vermont relates to the need to create a comprehensive planning mechanism which will identify the means by which the state can allocate its resources most effectively to foster excellence in both the quality and the scope of the higher educational offerings available to its citizens.

If this objective is to be realized, any new organizational strategy for postsecondary education in Vermont must be designed to:

- establish as soon as possible a comprehensive planning mechanism which will possess the authority to coordinate the orderly long-term development of public postsecondary educational programs in Vermont (i.e. UVM, VSC, Community Colleges, VSAC and Educational TV);
- facilitate future cooperation and coordination between the public and the private sectors of the higher educational community in Vermont;
- 3. assure equality of access to postsecondary educational opportunities for all qualified Vermonters;
- 4. assure sufficient flexibility and creativity within the state's postsecondary educational offerings to meet the diverse needs of the people of Vermont.

The above guidelines indicate that, while the state has a legitimate and significant role to play in the field of higher education, a reasonable degree of flexibility and autonomy must be maintained in this area. As Robert O. Berdahl comments in his study on Statewide Coordination of Higher Education:

"The real issue with respect to autonomy is not whether there will be interference by the state, but rather whether the inevitable interference will be confined to proper topics and expressed through a suitably sensitive mechanism.

... Though difficult to prove, it is nonetheless true that the state stands to lose far more through the diminished creativity... of an overly controlled (system) than through the relatively small sums that might be saved through the imposition of a tight preaudit of expenditures.

This latter point highlights a third, and final observation.

Any program of reorganization that may take place in Vermont should not be expected to "save" massive sums of money. Every sign points to rising costs in the field of higher education in the years ahead and

it would be deceptive to imply that any new planning mechanism can make these costs magically disappear.

It is very important for Vermonters to gain an accurate perspective on the "costs" of higher education in the state. Despite the fact that the state has made substantial increases in its higher education appropriations during the past decade, Vermont and the other New England states rank comparatively low in terms of the national per capita expenditure effort for higher education:

STATE FUNDS FOR HIGHER EDUCATION 1970-71

State Ranking Per Capita	State	1970-71 Appropriations	2 year gain	Appro- priations Per Capita
26	Rhode Island	\$31,413,000	+ 46%	\$ 34.05
28	Vermont	14,758,000	+ 35%	33,71
33	Connecticut	97,353,000	+ 58%	32,58
41	Maine	27,783,000	+ 55%	28,43
49	Massachusetts	116,093,000	+ 68%	20.62
50	New Hampshire	10,938,000	+ 7%	15.13

^{*} Source: The Chronicle of Higher Education, October 12, 1970.

In contrast to the above, the State of Hawaii which ranks first nationally is devoting \$73.70 in per capita appropriations to its higher education budget and the State of Alaska which ranks second is spending \$57.70 in per capita appropriations. Thus, while Vermont has increased its state commitment to higher education, its per capita state support of higher education programs remains under the national average of \$34.98.

A second aspect of the "cost" of higher education relates to fact that it is necessary to evaluate the return that the state receives from any appropriations it makes in this area. Mention has already been made of the extremely important educational, social, cultural and economic contributions which Vermont's colleges and universities -- both public and private -- make to the state. addition, by increasing the productivity of its educated citizens, the state realizes substantial long-range financial benefits. A recent Census Bureau study points out that the average income in 1968 of men who had completed four years or more of college was \$4,500 higher per year than the average income of those men who only received a high school diploma. During the course of a 40 year career, the estimated lifetime income of the above college graduate would be \$180,000 greater than that of the terminal high school graduate, with a sizable portion of this higher income being returned to the public sector in the form of increased taxes.

In the final analysis, rather than referring to the "costs" of higher education, Vermont's higher education appropriations should be regarded as an investment which yields many significant returns for the state. The people of Vermont should certainly expect that this investment will be planned and managed in the most effective possible manner, but they should also appreciate the many benefits the state receives from its public and private colleges and universities.

APPENDIX A

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