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0017-2 Higher Education

Colorado Legislative Council

LEGISLATIVE COUNCIL

REPORT TO THE

COLORADO GENERAL ASSEMBLY

HIGHER EDUCATION

RESEARCH PUBLICATION NO. 17-2

December, 1956

LEGISLATIVE COUNCIL

OF THE

COLORADO GENERAL ASSEMBLY

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* * * * *

The Legislative Council, which is composed of five Senators, six Representatives, and the presiding officers of the two houses, serves as a continuing research agency for the legislature through the maintenance of a trained staff. Between session, research activities are concentrated on the study of relatively broad problems formally proposed by legislators and the publication and distribution of factual reports to aid in their solution. During the sessions, the emphasis is on supplying legislators on individual request with personal memoranda providing them with information needed to handle their own legislative problems. Reports and memoranda both give pertinent data in the form of facts, figures, arguments, and alternatives, without these involving definite recommendations for action. Fixing upon definite policies, however, is facilitated by the facts provided and the form in which they are presented.

*Speaker Hamil resigned from the legislature effective July, 1956.

LEGISLATIVE COUNCIL

REPORT TO THE

COLORADO GENERAL ASSEMBLY

HIGHER EDUCATION

Research Publication No. 17-2

December, 1956

THIS REPORT, RESEARCH PUBLICATION NO. 17-2, CONCERNS ITSELF WITH RESEARCH AND STUDY OF HIGHER EDUCATION, CONDUCTED BY THE LEGISLATIVE COUNCIL COMMITTEE ON EDUCATION DURING 1955 - 56.

RESEARCH PUBLICATION NO. 17-1 CONTAINS THE MAJOR RESEARCH AND STUDY OF ELEMENTARY AND SECONDARY SCHOOL FINANCE. THESE TWO PUBLICATIONS COMPRISE THE SECOND ANNUAL REPORT OF THE COMMITTEE ON EDUCATION TO THE GENERAL ASSEMBLY, IN ACCORDANCE WITH THE PROVISIONS OF HOUSE JOINT RESOLUTION NO. 8 (1955).

LETTER OF TRANSMITTAL

December 1, 1956

The Honorable Palmer L. Burch, Chairman
Colorado Legislative Council
Denver, Colorado

Dear Representative Burch:

Transmitted herewith is the report on the study of higher education, conducted by the Legislative Council Committee on Education during 1955-56.

This is the first higher education report to be submitted by the Committee on Education to the Colorado General Assembly in accordance with the provisions of House Joint Resolution No. 8 (1955) and, with Research Publication No. 17-1, it constitutes the second annual report of the Committee.

Sincerely yours,

/s/ John G. Mackie, Vice-chairman
Higher Education

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FOREWORD

House Joint Resolution No. 8 (1955), passed by the 40th General Assembly, directed the Legislative Council to "....begin a study of school finances for primary and secondary schools and institutions of higher learning, the effects of contemplated increased enrollments on these schools, and the state's role in the problems arising therefrom. That, for the purposes of carrying on this study, a permanent subcommittee of the Legislative Council be appointed." The field of Higher Education was specifically included as a part of the responsibility assigned to the Legislative Council and, in turn, to its Committee on Education. Thus, for the first time a Legislative study was undertaken which would encompass the entire field of public supported education in Colorado, kindergarten through college. The The Council has released Research Publications No. 17 and 17-1 which set forth the findings with respect to elementary and secondary education. In this report are presented the initial findings for education beyond high school.

Since June 1955, one person, Miss Elaine Homan, Research Assistant on the Legislative Council staff, has been assigned on a half-time basis to the Committee on Education's subcommittee studying the problems facing higher education in Colorado. During this period, the Council has enjoyed the cooperation of the officials of the tax-supported institutions of higher education, including the junior colleges, the High School-College Relations Council, and also the State Department of Education. To these individuals, the Legislative Council expresses its sincere appreciation.

This is the beginning of what of necessity must be a long range and continuing effort. Much time has been devoted to building the foundation upon which the ultimate findings and conclusions will be based. The highlights of this research are presented in this report, and it is hoped that this material will aid members of the General Assembly and other interested persons to more fully understand what constitutes tax supported higher education in Colorado.

This report goes two steps beyond that; first, it cites what are believed to be some of the more critical problems facing Colorado, its lawmakers and educators, in the next decade; second, it offers "food for thought" in the form of suggested alternatives for meeting these problems.

The Legislative Council commends the authors of House Joint Resolution No. 8 (1955) for the understanding of the magnitude of the problems facing education, which they demonstrated in making this a continuing study. Certainly no field of state activity is changing more rapidly than is that of education. To make a "one shot" study and report on educational matters, and then to turn away to study some other fields of activity is like trying to understand the ocean by bottling one wave breaking upon the shore. Through this study and its report, we have identified only tax supported higher education in Colorado and enumerated what, in November, 1956, appear to be the problems facing Colorado in this phase of education. A big job remains to be

done, and time is of essence. It is hoped that 1957 will see continued effort expended by the General Assembly, through the Legislative Council, toward meeting with foresight and imagination, the challenges of a dynamic society in a vigorous, growing "go forward" state.

The General Assembly is not alone in working to solve these problems. The governing officials of the state supported university and colleges have undertaken a comprehensive analysis of their operation, whereby the Presidents' Association, subject to the approval of the respective governing boards, are jointly assembling on a uniform basis enrollment and financial data. This data developed thereby will provide valuable and needed information regarding the complexities of educating 22,000 college students. Likewise, the junior college officials are working to bring about a more thorough understanding of the place which these two-year institutions will occupy in providing education beyond the high school. Although time has not permitted the Council to develop information regarding the privately supported universities and colleges, it is planned to do so at an early opportunity.

The Legislative Council has called upon the United States Office of Education to assist it by providing qualified professional educators for consultation and guidance. We acknowledge with sincere appreciation the excellent counsel which has been provided to the Council's Committee on Education by Dr. E. V. Hollis, Chief of College Administration, and by Dr. S. V. Martorana, Specialist for Junior and Community Colleges.

IN BRIEF

* There are 13 institutions of higher education in Colorado which are publicly supported: 7 are under state control, and 6 are locally (and state) supported junior colleges.

* The 7 state supported institutions are under the control of 4 governing boards. Each junior college is administered by its local committee.

* In Fall of 1956 approximately 23,000 full-time students enrolled in these 13 institutions--this is an increase of 30% over the 1950 enrollment. It is conservatively estimated that, based upon ability to manage enrollments with anticipated facilities, there will be 29,100 full-time students in Fall of 1960--this is an increase of 26% over Fall of 1956.

* At present there is no uniform admission policy for Colorado's state supported institutions of higher education. Each institution establishes its own standards.

* There is an increased tendency on the part of students to continue their college educations, and this will result in a larger percentage of students completing their work for degrees, and even going into graduate level work.

* The total educational and general expenditures for the 7 state institutions has risen from $12,212,567 in 1950-51 to $15,697,406 in 1954-55, this is an increase of $3,484,838, or approximately 30%. During this same period the General Fund appropriation doubled, and in 1954-55 was $4,515,000. (For 1956-57 the General Fund appropriation is $6,536,420)

* Colorado has one of the very best laws relating to junior colleges in the United States. The Legislative Council Committee on Education was impressed with the work which these institutions are doing both in providing lower division college courses and in meeting the indigenous needs of the community. It believes that this level of post secondary education should be expanded in Colorado. State aid to Junior College approximates 20% of their total income; in 1956-57, state aid to Junior Colleges amounted to $307,800.

* There is a definite relationship between proximity of higher education facilities and the number of youth going to college. The Legislative Council Committee on Education sees an immediate need for development of post secondary educational facilities which will provide full opportunity for all youngsters in Colorado to obtain education beyond the high school at a reasonable financial burden (not only in terms of tuition, but also living costs) to them and their parents.

* The most recent national information (1949-50) on in-migration and out-migration of college students to tax supported institutions shows that Colorado (for the seven state supported schools) had a net in-migration of 6,909 students, and

ranked 2nd percentage wise, and 3rd in terms of numbers, in the nation in this respect. For Fall, 1955, the 7 state supported institutions had an in-migration of 7,139 (information on out-migration is not available for 1955, but it is unlikely that the proportion has changed considerably from that which prevailed in 1949-50).

* Nationwide, the percentage of students enrolled in publicly controlled institutions of higher learning in 1955 as compared with private schools was 56.3% and 43.7%. In Colorado 69.4% of college students were in public colleges in 1955 while 30.6% enrolled in privately controlled institutions. Private colleges are not likely to expand greatly during the years ahead; hence it will be necessary for publicly controlled institutions to absorb increasingly greater proportions of college students.

* These increased enrollments offer a sizeable challenge to Colorado, and there are several questions which must be answered before the state can work out the solution, or solutions, namely:

Must all of these students be accommodated at the traditional four year institutions?

What are the alternatives for providing education "beyond the high school" for those graduates who seek additional schooling?

Can and should the community-junior college program be expanded?

Should there be a state-wide plan for community-junior college development?

Should there be increased state financial participation in the junior college program, not only for operation but also for capital outlay?

Can and should the four-year institutions establish additional extension centers?

Can and should a "continuation high school" program be instituted by the regular high schools?

* Should the existing admissions standards be reviewed to provide a more "selective" screening of applicants, or should the law provide that all resident applicants must be admitted to Colorado's tax supported institutions of higher education? (Selecting the proper approach to the problem of establishing a sound admissions policy is most difficult.)

Should the admission of non-resident students be restricted to outstanding applicants?

With respect to resident students, should there be a standard measuring "technique", aside from rank in graduating class, and whether or not the

school is accredited or unaccredited, for evaluating the application of a high school senior? Should there be state-wide testing of all high school seniors?

What is the "drop-out" rate from the highly expensive professional and technical programs at the four-year institutions? Should there be a more selective screening process before students are admitted into these programs?

* Can and should the work in the field of high school-college relations be improved and expanded in order to:

Recruit the "superior" high school student who may otherwise not seek advanced schooling, whose talents may otherwise be lost during this period of great need for qualified, professionally-trained persons.

Improve the guidance function in the high school in order to assist the student in better selecting his course of study, and to guide him into the college best equipped to meet his needs; this should lead to a reduction in the mortality rate among first and second year college students, and to more efficient utilization of the state's education facilities.

Develop a closer coordination between the high schools and colleges in order to more clearly define the prerequisites necessary for entrance into and successful achievement in college, and also envision a program which will recognize high school level credit as acceptable for college credit.

Explore the entire field of scholarship availablility and acquaint and orient high school students with the opportunities of applying for these awards.

* Should there be an "overall" coordinating authority for all of the state level tax supported institutions of higher learning, or is it sufficient to have these institutions continue to "cooperate" through a voluntary association?

* Is it possible for Colorado to develop a "state plan" for higher education in the absence of an overall coordinating agency for the state-level institutions?

Can a "state plan" for meeting the challenge of tomorrow in higher education be formulated successfully through the present voluntary association of the college presidents?

Will the "voluntary" approach withstand the pressures of competition for "limited" funds?

Will the "voluntary" approach be able to produce impartial decisions with respect to demands for expansion of program and curricula by the individual institutions?

Should the "voluntary" association of the college presidents be formalized through legislative enactment which would give this group definite and statutory responsibilities and adequate financial aid for association activities? or

Should there be a different approach toward obtaining a "state plan" for higher education and full cooperation and coordination among the state-level institutions? (This report outlines plans which have been put into operation in other states which are faced with the same problems as Colorado.)

* How will Colorado meet the financial requirements for supporting higher education under the strain of vastly increased enrollments?

What is the proper proportion which the state should bear? (Should earmarked property tax support be continued?)

What is the proper proportion which the student should bear? (Resident as well as non-resident)

Are there new sources of support for tax supported institutions of higher education?

Can alumni support be obtained on a continuing basis?

Can corporate contributions be obtained on a continuing basis?

* Along with the answers which are needed to the foregoing--we must also seek the solution to providing the "intellect" to staff the faculties of the universities and colleges.

These are the highlights of the findings and the questions which the Legislative Council Committee on Education developed in its studies of tax supported higher education in Colorado. It will be noted that the report asks more questions than it answers. However, the Council sincerely believes that a reading of the entire report will prove fruitful in that it serves not only to identify the issues but also to point the way toward finding solutions to these problems. It is emphasized, again, that this marks the beginning of what must necessarily be a long-range and continuing project.

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PART I

THE CURRENT STATUS OF HIGHER EDUCATION IN COLORADO

Organizational and Structural Pattern

There are in Colorado, thirteen institutions of higher education that are publicly supported. Seven of these are under the support and control of the State. Six are junior colleges, receiving some state moneys but locally governed. The present institutional pattern is shown on the organizational chart on the preceding pages along with a picture of the institutional governing boards and the institutions under the control of each. On page 2 is a map of Colorado with locations indicated for Colorado's seven state supported institutions of higher education, and the six public junior colleges.

State Supported Colleges

The seven state supported institutions of higher education in Colorado in order of size, based on enrollments for Fall, 1956, are:

The University of Colorado, located at Boulder in Boulder County in north central Colorado, approximately 30 miles northwest of Denver, enrolled 9,850 students on the Boulder campus for the fall semester.

Colorado A & M College, 70 miles north of Denver in Larimer County, reports that its fall enrollment is 4,986.

Next in size is the Colorado State College of Education at Greeley with an enrollment of 2,951. This college is located approximately 50 miles northeast of Denver in Weld County.

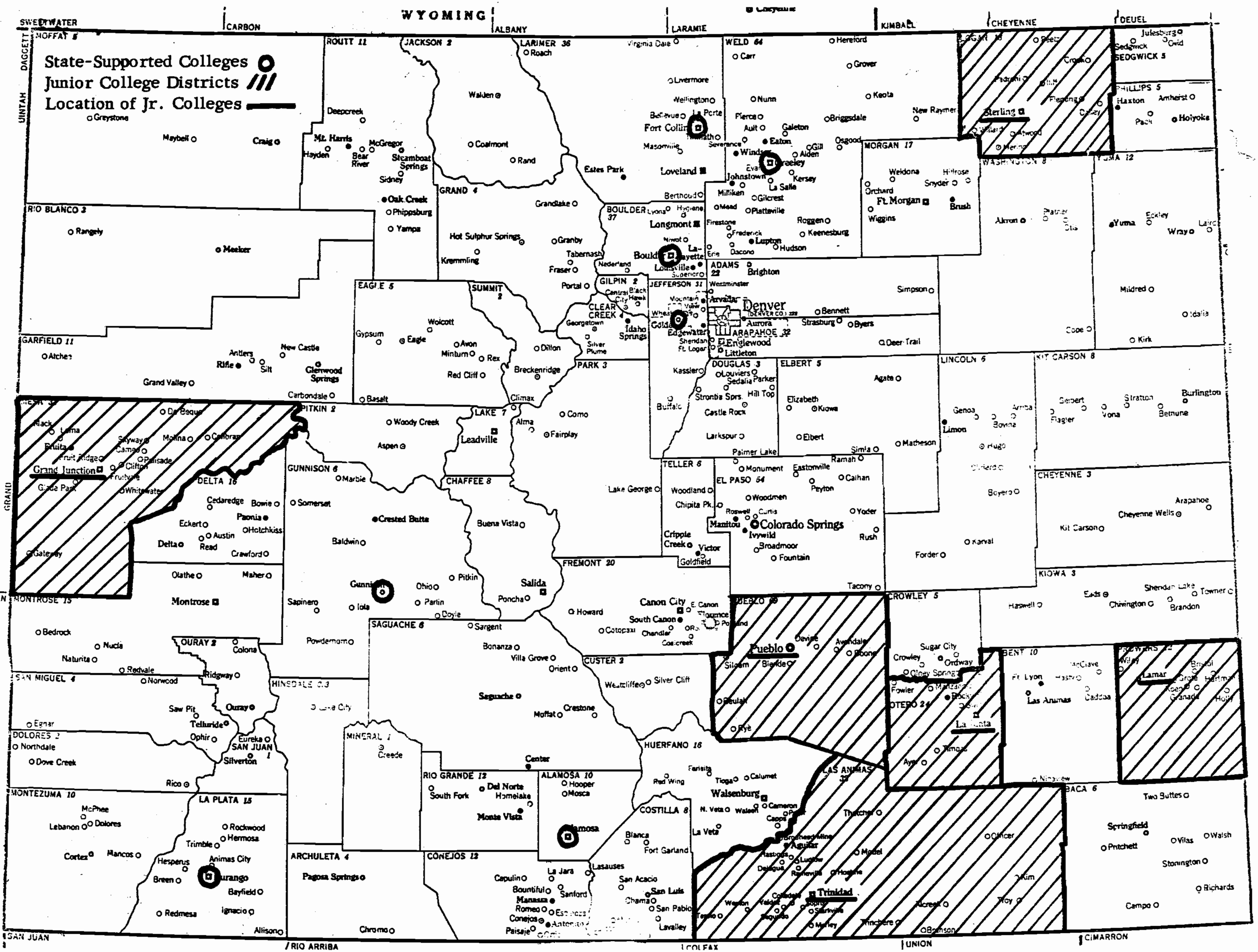
The Colorado School of Mines, located 12 miles west of Denver in Golden, the county seat of Jefferson County, has a current registration of 1,147 students.

The only senior college on the western slope, Western State College, in Gunnison County, about 200 miles southwest of the capitol city, has an enrollment of 884.

Adams State College at Alamosa in Alamosa County, south central Colorado, about 220 miles from Denver, registered 601 students for the fall quarter.

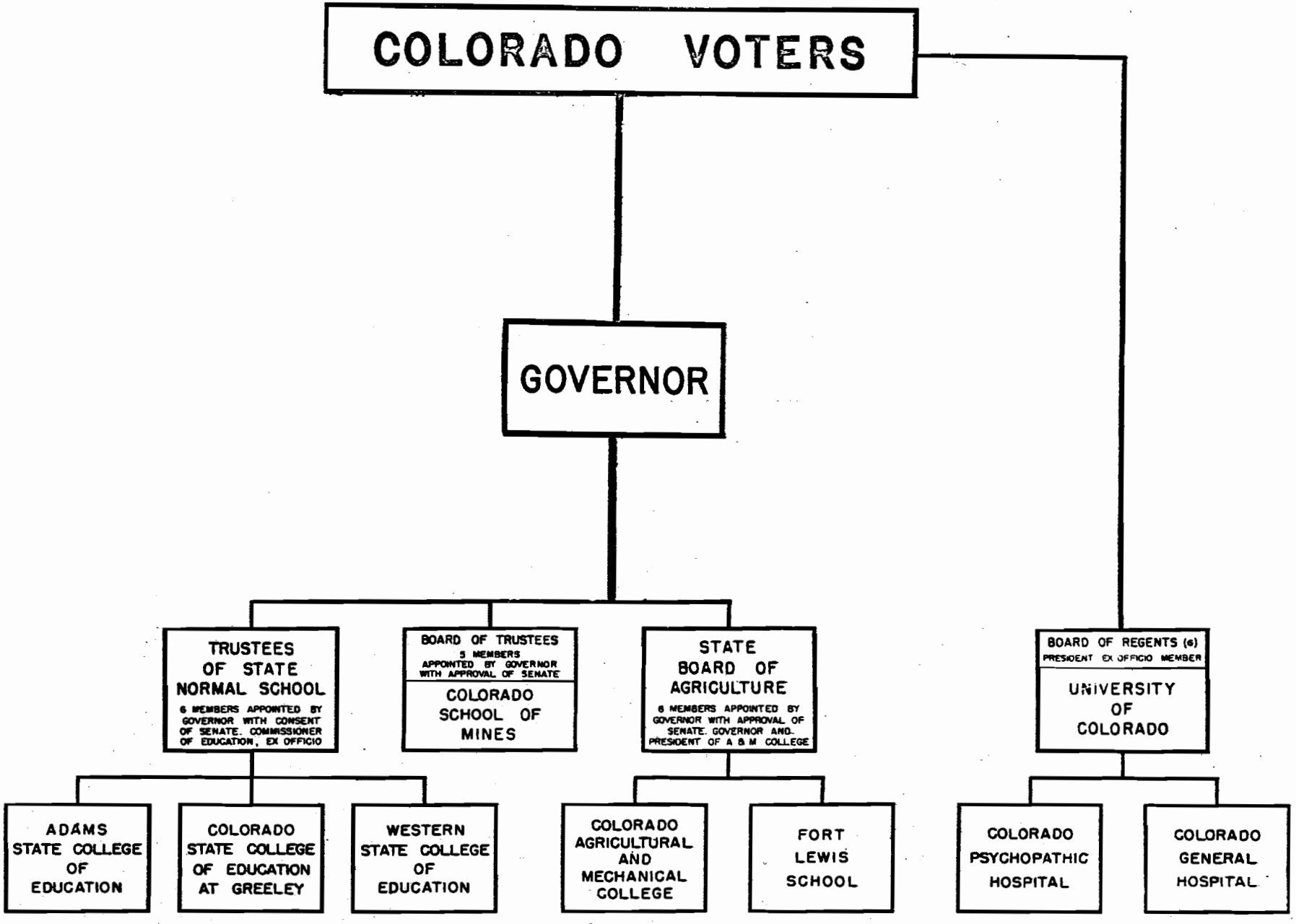
Fort Lewis A & M College, a two-year college, with an enrollment of 294, is located in Durango in Montezuma County in the southwestern corner of the state.

Of a total of 21,713 students enrolled at the seven institutions, 18,934 are attending the first four schools listed, which means that 91.4 per cent of the enrollees



WYOMING
SWEETWATER
CARBON
ALBANY
LARAMIE
KIMBALL
CHEYENNE
DEUEL
State-Supported Colleges
Junior College Districts
Location of Jr. Colleges
MOFFAT
ROUTT 11
JACKSON 2
LARIMER 36
WELD 64
LOGAN 13
SEDGWICK 5
PHILLIPS 5
MORGAN 17
WASHINGTON 8
YUMA 12
RIO BLANCO 3
GRAND 4
BOULDER 37
GILPIN 2
CLEAR CREEK 4
JEFFERSON 31
ADAMS 22
ARAPAHOE 32
DENVER CO.
EAGLE 5
SUMMIT 2
GARFIELD 11
PARK 3
DOUGLAS 3
ELBERT 5
LINCOLN 6
KIT CARSON 8
MESA 33
PITKIN 2
LAKE 7
DELTA 16
GUNNISON 6
CHAFFEE 8
TELLER 6
EL PASO 54
CHEYENNE 3
FREMONT 20
KIOWA 3
MONTROSE 15
OURAY 2
SAGUACHE 6
CUSTER 2
PUEBLO 60
CROWLEY 5
BENT 10
PROWERS 12
SAN MIGUEL 4
HINSDALE 0.3
OTERO 24
DOLORES 2
SAN JUAN 1
MINERAL 1
HUERFANO 16
LAS ANIMAS 33
RIO GRANDE 12
ALAMOSA 10
COSTILLA 8
BACA 6
MONTEZUMA 10
LA PLATA 15
ARCHULETA 4
CONEJOS 12
GRAND
UINTAH
DAGGETT
SAN JUAN
APACHE
RIO ARRIBA
COLFAX
UNION
CIMARRON
Greystone
Maybell
Craig
Hayden
Mt. Harris
Steamboat Springs
Oak Creek
Phippsburg
Yampa
Walden
Coalmont
Rand
Fort Collins
Loveland
Estes Park
Greeley
Eaton
Windsor
Longmont
Boulder
Sterling
Julesburg
Holyoke
Ft. Morgan
Brush
Akron
Yuma
Wray
Rangely
Meeker
Hot Sulphur Springs
Kremmling
Granby
Grandlake
Brighton
Denver
Aurora
Englewood
Littleton
Golden
Arvada
Idaho Springs
Georgetown
Eagle
Gypsum
Dillon
Breckenridge
Rifle
Glenwood Springs
Grand Valley
Carbondale
Basalt
Aspen
Leadville
Climax
Fairplay
Castle Rock
Limon
Burlington
Grand Junction
Fruita
Palisade
Delta
Paonia
Hotchkiss
Cedaredge
Montrose
Olathe
Gunnison
Crested Butte
Salida
Buena Vista
Colorado Springs
Manitou
Cripple Creek
Victor
Canon City
Florence
Pueblo
Rocky Ford
La Junta
Las Animas
Lamar
Eads
Kit Carson
Cheyenne Wells
Ouray
Telluride
Silverton
Saguache
Monte Vista
Del Norte
Alamosa
Walsenburg
La Veta
Trinidad
Aguilar
Springfield
Durango
Cortez
Pagosa Springs
Creede
San Luis
Manassa

ORGANIZATION CHART FOR HIGHER EDUCATION IN COLORADO



GOVERNING BOARDS OF COLORADO'S INSTITUTIONS OF HIGHER EDUCATION

Title of Board	Institutions Supervised by Board	No. Bd. Members	Length of Term, Years	Method of Selection	Legal Basis for Board
Board of Trustees, Colorado School of Mines	School of Mines	5	6	Apptd. by Gov. with consent of Senate	Statute CRS, 1953 124-9-1
Board of Regents, University of Colorado	University of Colorado	6	6	Elected by popular vote	Constitution Article IX, Section 12
Board of Trustees, State Normal Schools	1. Colorado State College of Education at Greeley 2. Adams State College 3. Western State College	6 1/	6	Apptd. by Gov. with consent of Senate	Statute CRS, 1953 124-5-1
State Board of Agriculture	1. Colorado A & M College 2. Fort Lewis A & M College	8 2/	8	Apptd. by Gov. with consent of Senate	Statute CRS, 1953 124-10-9

1/ Commissioner of Education is an ex officio member.

2/ Governor, and President of Colorado A & M College are ex officio members.

in Colorado's state supported institutions of higher learning attend a college within a 70 mile radius of Denver.

Junior Colleges

In addition to the seven public state supported colleges in Colorado, there are six public junior college districts which have been established in accordance with the Junior College Act of 1937. (Chapter 123-23-1 to 32, CRS, 1953) This act declares that colleges which are established under its provisions are an integral part of the public school system of the State of Colorado and, as such, they are under the general supervision of the State Board of Education. The statute defines a junior college as "an educational institution which shall provide not to exceed two years of training in the arts, sciences, and humanities beyond the twelfth grade of the public high school curriculum or vocational training."

A junior college district may consist of the territory of a county[1], or of two or more counties, if such area shall have a school population of 3,500 or more, and an assessed valuation at the time of the organization of such district of $20 million or more. A junior college district may be formed upon the petition of 500 electors[2] of the county or counties, if more than one, having the proper qualifications. If the petition is for the formation of a junior college district consisting of the area of a single county, it shall be filed with the county superintendent of public schools of that county, and if the petition is for the formation of a junior college district consisting of two or more counties, a copy of the petition is filled with each of the county superintendents. If a majority of the votes cast at the election to decide on organization are in favor, a district shall be formed.

For junior college districts formed prior to 1951, five committee members are elected by all of the directors of the respective school districts of the junior college district, for a term of six years. Nominations may be by petition containing the names of one-hundred qualified electors of the district, or they may be made from the floor of the meeting.

For those colleges organized subsequently to 1951, five members of the junior college committee shall be elected (by electors qualified to vote at a general election in the county of his residents, and having resided in the junior college district for thirty days preceding the election), at the first regular election following organization, one for a term of two years, two for four years, and two for six years. Any person who desires to be a candidate, and who is qualified to vote at the next general election in said junior college district, shall file written notice of his intent at least eight days

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[1] Each junior college district in Colorado consists of but one county, the county of location.

[2] An elector is a voter who is legally qualified to vote at a bond election of a school district.

prior to the election, and shall file with this notice a certificate of nomination signed by not less than fifty qualified electors of the junior college district.

By law, then, control and administration of the junior college in Colorado is vested in a local board called the College Committee. This committee determines financial and educational policies and provides for the proper execution of these policies by selecting competent administrators, instructors, and such other personnel necessary to the operation and maintenance of the institution.

Legal Background and History of Institutions of Higher Education in Colorado

A summary of the legal and historical background of the seven state supported colleges and the six public junior colleges in Colorado will further help to familiarize the reader with the structure of higher education in the state.

State Supported Colleges

The University of Colorado at Boulder was incorporated by an act of the First Territorial Legislature of Colorado in 1861; the Constitution of Colorado, adopted in 1876, made the "University at Boulder" an institution of the state. (Article VIII, Section 5.) Section 12 of Article IX provides for the election of six regents of the university by the qualified electors of the state, these regents to be known as "The Regents of the University of Colorado". Section 14 states, "the board of regents shall have general supervision of the university, and the exclusive control and direction of all kinds of, and appropriations to, the university."

According to Chapter 123-2-1, CRS, 1953, "The objects of the University of Colorado shall be to provide the best and most efficient means of imparting to young men and women, on equal terms, a liberal education and thorough knowledge of the different branches of literature, the arts and sciences, and their varied applications." The regents may establish the several departments of the univeristy at such times as, in their judgment, the wants and necessities of the people require them.

The University of Colorado opened on September 5, 1877 with two departments, "preparatory" and "normal", both of which have since been discontinued. Today the univeristy operates eleven schools and colleges and a sizeable extension service.

Article VIII, Section 5 of the Constitution also declared the School of Mines at Golden an institution of the state of Colorado. Founded by an Episcopal bishop, the School of Mines was transferred to the Territory of Colorado in 1874. Chapter 124-9-2, CRS, 1953, provides that "there shall be a board of trustees of the Colorado School of Mines to be comprised of five persons appointed by the governor." The object of the school as set forth in 124-9-5, is to "furnish such instruction as is provided for in like technical schools of a high grade, and by its board of trustees, may confer all degrees appropriate to the courses of study pursued." The Colorado School of Mines is the oldest and largest institution in the United States devoted exclusively to the training of engineers for the mineral industries.

The Colorado Agricultural and Mechanical College was designated a state institution by Article VIII, Section 5 of the Constitution. Its history dates to 1870, when the Council and House of Representatives of Colorado Territory passed an act to establish "The Agricultural College of Colorado" at Fort Collins. The first students were registered on September 1, 1879. That same year the Colorado General Assembly accepted the terms and grants of the Federal Morrill Act of 1862; thus the college became one of the Land Grant colleges with part of its financing furnished by the federal government.

Chapter 124-10-9, CRS, 1953, provides, "The State Board of Agriculture shall have the general control and supervision of the Colorado Agricultural and Mechanical College, the farm pertaining thereto, and lands which may be vested in the college by the state for the support of the same." The eight member board is appointed by the governor, by and with the consent of the senate; the governor and the president of the Colorado A & M College are ex officio members of the board.[3]

Chapter 124-10-1 defines the objective of the Colorado Agricultural and Mechanical College as follows: "The design of the institution is to afford thorough instruction in agriculture and the natural sciences connected therewith. To effect that object most completely, the institution shall combine physical with intellectual education, and shall be a high seminary of learning, in which the graduates of the common school, of both sexes, can commence, pursue and finish a course of study, terminating in thorough theoretical and practical instruction in those sciences and arts which bear directly upon agriculture and kindred industrial pursuits."

Provisions for a governing board for the three Colorado colleges concerned primarily with education and teacher training are included in Chapter 124-5-1 and 2: "The Colorado State College of Education at Greeley, Western State College of Colorado, and Adams State College of Colorado shall be under the control of a board of six trustees, appointed for six year terms by the governor, by the advice and with the consent of the Senate. The state commissioner of education shall be ex officio, a member of the board of trustees. The major difference between the separate provisions for establishment of each of these three schools is that a "suitable practice department" is specified for the school at Greeley along with "instruction in the science and art of teaching, and in such branches of knowledge as shall qualify teachers for their profession...." The latter quote is applicable to all three colleges.

The Colorado State College of Education at Greeley was created by the General Assembly as the State Normal School in 1889. By 1911, the school had developed from a two-year to a four-year institution and had its name changed to Colorado State Teachers College; the present name was adopted in 1935, to recognize the fully developed graduate program which began in 1913.[4]

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[3] The State Board of Agriculture will ask the General Assembly in January, 1957 to change the college's name to Colorado State University.

[4] The Board of Trustees has approved shortening the name to Colorado State College and the General Assembly will be asked during the 1957 session to pass a bill approving this change.

Western State College was first established in 1901 at Gunnison by the Colorado General Assembly, as a two-year institution. The first appropriation for a building was made in 1909 and the school opened in 1911. In 1920 the Board of Trustees authorized an extension of the program to four years, and in the following year the program was extended to five years with the awarding of the Master Arts Degree.

It is noted that both The Colorado State College of Education at Greeley and Western State College grew out of junior-college origins, a pattern somewhat typical for the development of four-year colleges from two-year normal schools during the early 1900's. This is mentioned to call attention to the fact that the nature of the community-junior college as an institution has changed so that this kind of evolution is seldom seen today.

The General Assembly of Colorado established the State Normal School at Alamosa in 1921; in 1923 the first appropriation was made for a building, and the school opened in June, 1925, offering four years of college instruction leading to a Bachelor of Arts Degree with a life certificate to teach in the public schools of Colorado. The name of the college was changed in 1929 to The Adams State Teachers College of Southern Colorado; it received its present designation, The Adams State College of Colorado, in 1945, to recognize development in fields other than teacher education.

Fort Lewis Agricultural and Mechanical College, originally an Indian School was terminated as such in 1911, when the land was transferred from federal to state ownership. The Colorado Legislature established (Chapter 124-14-1, CRS, 1953), "at the Fort Lewis School in La Plata County a school of agriculture, mechanic arts and household arts upon the grounds heretofore accepted by the governor of the state of Colorado...." Chapter 124-14-2 provides that "the State Board of Agriculture shall take and assume control of the lands, buildings, and equipment at the Fort Lewis School, now owned and held by the state, and the lands, buildings and equipment shall be a part of the agricultural system of the state, and shall be controlled and managed under the same laws, rules, and regulations by the state board of agriculture as the Colorado Agricultural and Mechanical College; provided that Indian pupils shall at all times be admitted to such school free of charge for tuition and on terms of equality with white pupils."

Formerly located on the site of an early United States Army fort, seventeen miles west of Durango, the Fort Lewis School moved to its new location in the city of Durango for the opening of the 1956 fall semester. Fort Lewis A & M School was established as an agricultural and vocational high school in 1911 and was maintained as such until 1933, although some college courses were added to the academic offerings in 1927. From 1933 to the present time it has been exclusively a college-level institution. Until 1946 it was a branch of Colorado A & M College, but in July of that year it became an independent institution. The school, a member of the American Association of Junior Colleges, offers a curriculum with two major areas: Lower Division, and Terminal Education.

Junior Colleges

The junior colleges at Grand Junction and Trinidad were the first public junior colleges in Colorado and also the first ones to be established by state law in Colorado. Chapter 123-24-1, CRS, 1953, which provides for the college at Grand Junction, is identical with 123-24-3 which establishes the junior college at Trinidad, Colorado:

"A junior college is hereby established at the city of _____, in the county of _____, and the State of Colorado, to be known as "The Junior College of _____, Colorado" for the purpose of providing instruction in the arts and sciences and in such branches of knowledge as may be designated by the board of trustees of said institution so as to provide a junior college or school which shall give instruction covering the first two years of the usual college course in the sciences and liberal arts, and so as to permit the graduates of said junior colleges to be admitted to the higher courses and the different professional schools of the University of Colorado and other institutions of like character; provided, however, that a suitable tract of land shall be donated to the state of Colorado for the site of said institution."
(Source: L. 25, p. 336.)

Both Trnidad State Junior College and Grand Junction Junior College took advantage of the Colorado Junior College Act of 1937 which enabled them to form junior college districts; at that time, the name of the latter was changed to Mesa College.

The junior college in Pueblo opened as a private institution, San Isabel College of Pueblo, in 1933 and became known as Southern Colorado Junior College in 1934. The people of Pueblo County, in 1937, organized the Pueblo County Junior College under the provisions of the new state law, thereby making the college a part of the public school system supported by county-wide taxes. The name was changed to Pueblo Junior College.

Lamar Junior College was organized in 1937 as the Junior College of Southeastern Colorado and, for the first several years, depended wholly upon gifts, tuition, and fees for support. In May of 1946, the taxpayers of Prowers and Baca Counties, having decided to place the college on a tax-supported basis, voted to form a junior college district and called their college Baca-Prowers Junior College. The voters of Baca County voted in 1947 to withdraw from the district, and the Junior College Committee, in 1948, changed the name to Lamar Junior College.

Originally established in the spring of 1941 at a joint meeting of the School Board of District No. 12 and the Logan County High School Committee, the Junior College of Northeastern Colorado became tax-supported in accordance with the Colorado Junior College Act of 1937, as a result of an election held for that purpose in 1944. The college was known as the Sterling Junior College from 1945 to 1950, when it became the Northeastern Junior College, so

designated in order to encourage the people of the northeastern part of Colorado to make use of the opportunities offered at the college.

Otero Junior College, formerly La Junta Junior College, dates from 1941 when it was established as part of the local school district. It operated as a continuation high school until 1948, when the voters of Otero County elected to establish a tax-supported junior college under the 1937 state law. However, the junior college committee and the local district school board did not come to an agreement on tax levies until 1955, thus giving Otero Junior College status under the state law as of January 1, 1956.

Scope of Services

To understand the magnitude of the mission performed by these institutions of higher education, consideration must be given to the numbers of individuals served and the programs offered by the various institutions to meet the needs of these individuals. This report will concern itself only with those students who are pursuing programs at Colorado's colleges on a full-time equivalent basis, during the regular academic year, and it will not take into account the thousands of persons who avail themselves of services rendered by these schools through summer schools, extension and community services, adult education, workshops, short courses, conferences, and the many other activities which are held for the benefit of participants in all walks of life.

Enrollment at the State-supported Colleges

According to the Colorado Year Book, enrollments at Colorado's state supported institutions of higher education for the year 1930-31 totaled 8,033. At the beginning of the next decade, 1940-41, the count had risen to 9,961. In Fall, 1956, 16,177 students enrolled at these schools, and by Fall, 1955, there were 18,874 enrollees. The current (1956) enrollment at these schools is 20,713, a gain of 9.7 per cent over the figure for 1955, and an increase of 28 per cent over the 1950 enrollment. (Table, p. 9; graphs, pp. 11-18.)

Enrollment at the Public Junior Colleges

Public junior college enrollments show a corresponding rising trend, particularly during the past several years. In 1950, a total of 1,695 students attended the six junior colleges (La Junta, now Otero, is included); enrollments during the next three years fell below this figure, due to a decrease in the number of veterans attending under the GI Bill and the manpower demands of the Korean conflict. In Fall, 1955, the enrollment totaled 1,989, a 17.6 per cent increase over the 1950 figure. While data for 1956 are not available, indication are that approximately 2,400 students are currently attending Colorado's public junior colleges. (Table, p. 10.)

COMPARISON, FRESHMEN[1] AND TOTAL FALL ENROLLMENT 1950-56
COLORADO STATE-SUPPORTED COLLEGES
Enrollment Predictions 1957-1960

Year	Adams State College		Colorado A & M		Colo. State College		Colo. School of Mines		University of Colo.		Western State College		Ft. Lewis A & M		TOTAL FRESH.	% Change Fresh. ov. 1950	TOTAL ENROL.	% Change Enrol. ov. 1950
	Fresh-men	Total Enrol.	Fresh-men	Total Enrol.	Fresh-men	Total Enrol.	Fresh-men	Total Enrol.	Fresh-men	Total Enrol.	Fresh-men	Total Enrol.	Fresh-men	Total Enrol.				
1930		205		1,502		1,894		503		3,450		370		109			8,033	
1940		369		2,057		1,583		769		4,559		495		129			9,961	
1950	129	440	944	3,677	453	2,174	224	1,012	1,491	8,061	134	664	95	149	3,470		16,177	
1951	103	370	963	3,502	307	1,756	133	852	1,613	7,086	146	664	81	138	3,346	- 3.6	14,368	-11.2
1952	102	366	1,120	3,626	407	1,761	291	913	1,836	7,113	133	632	102	170	3,391	- 2.3	14,581	- 9.9
1953	114	381	1,103	3,545	451	1,863	274	876	1,952	7,262	168	691	78	153	4,140	+19.3	14,771	- 8.7
1954	171	407	1,203	3,987	471	2,201	380	996	2,360	8,220	198	747	89	167	4,872	+40.4	16,725	+ 3.4
1955	191	513	1,446	4,505	652	2,695	339	1,064	2,445	9,040	230	832	104	225	5,407	+55.8	18,874	+16.7
1956		601		4,986		2,951		1,147		9,850		884		294			20,713	+28.0
1957[2]		726		5,300		3,037		1,225		9,700		973		298			21,259	
1958[2]		810		5,660		3,130		1,260		10,300		1,048		350			22,558	
1959[2]		900		6,100		3,228		1,300		10,700		1,121		401			23,750	
1960[2]																	25,000	

[1]Entering College for the first time

[2]Estimated by officials of the individual institutions.

1956 enrollment taken from Denver Post News Item

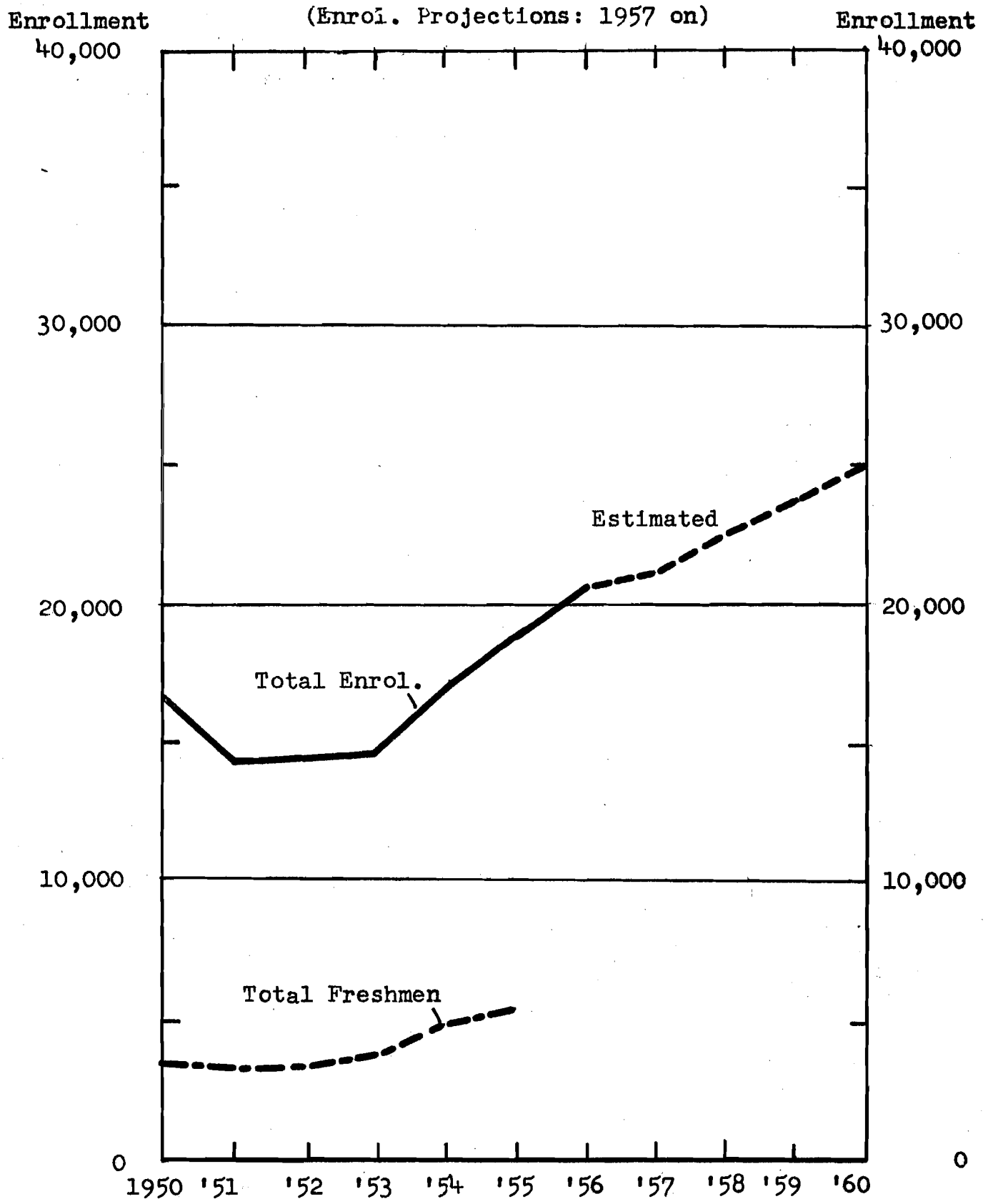
TOTAL FALL ENROLLMENT 1950-1955
COLORADO JUNIOR COLLEGES
Enrollment Predictions 1956-1960[1]

Years	La Junta Jr. College	Lamar Jr. College	Mesa Jr. College	Northeastern College	Pueblo Jr. College	Trinidad Jr. College	Total all Jr. Colleges	Percent of change from 1950 Enrollment
1950	119	78	495	106	489	405	1,692	
1951	115	99	325	119	334	318	1,310	- 22.6%
1952	117	98	398	156	427	265	1,461	- 16.4
1953	118	104	387	157	475	327	1,568	- 7.3
1954	169	104	470	180	576	355	1,854	+ 9.6
1955	184	90	540	206	635	334	1,989	+ 17.6
1956[1]	216	119	800	225	750	385	2,498	+ 47.6
1957[1]	253	149	900	275	850	400	2,827	+ 67.1
1958[1]	296	186	1,000	300	1,000	425	3,207	+ 89.5
1959[1]	346	233	1,100	325	1,200	450	3,654	+116.0
1960[1]	405	291	1,200	350	1,400	475	4,121	+143.6

1. Estimated by officials of individual institutions.

Freshmen and Total Fall Enrollment 1950 - 55

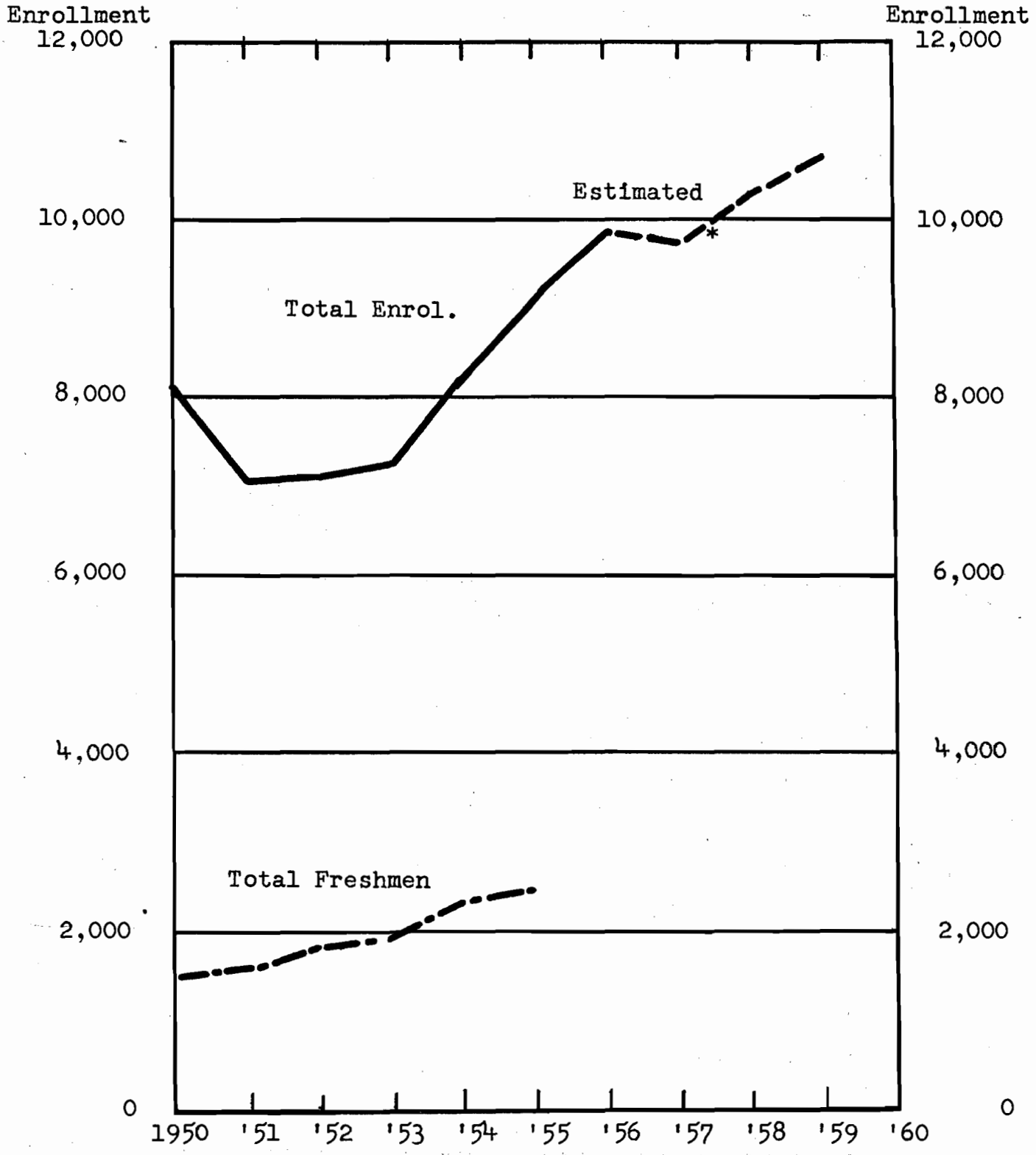
Colorado State-Supported Four-Year Colleges



UNIVERSITY OF COLORADO

Freshmen and Total Fall Enrollment 1950 - 55

(Enrol. Projections: 1957 on)

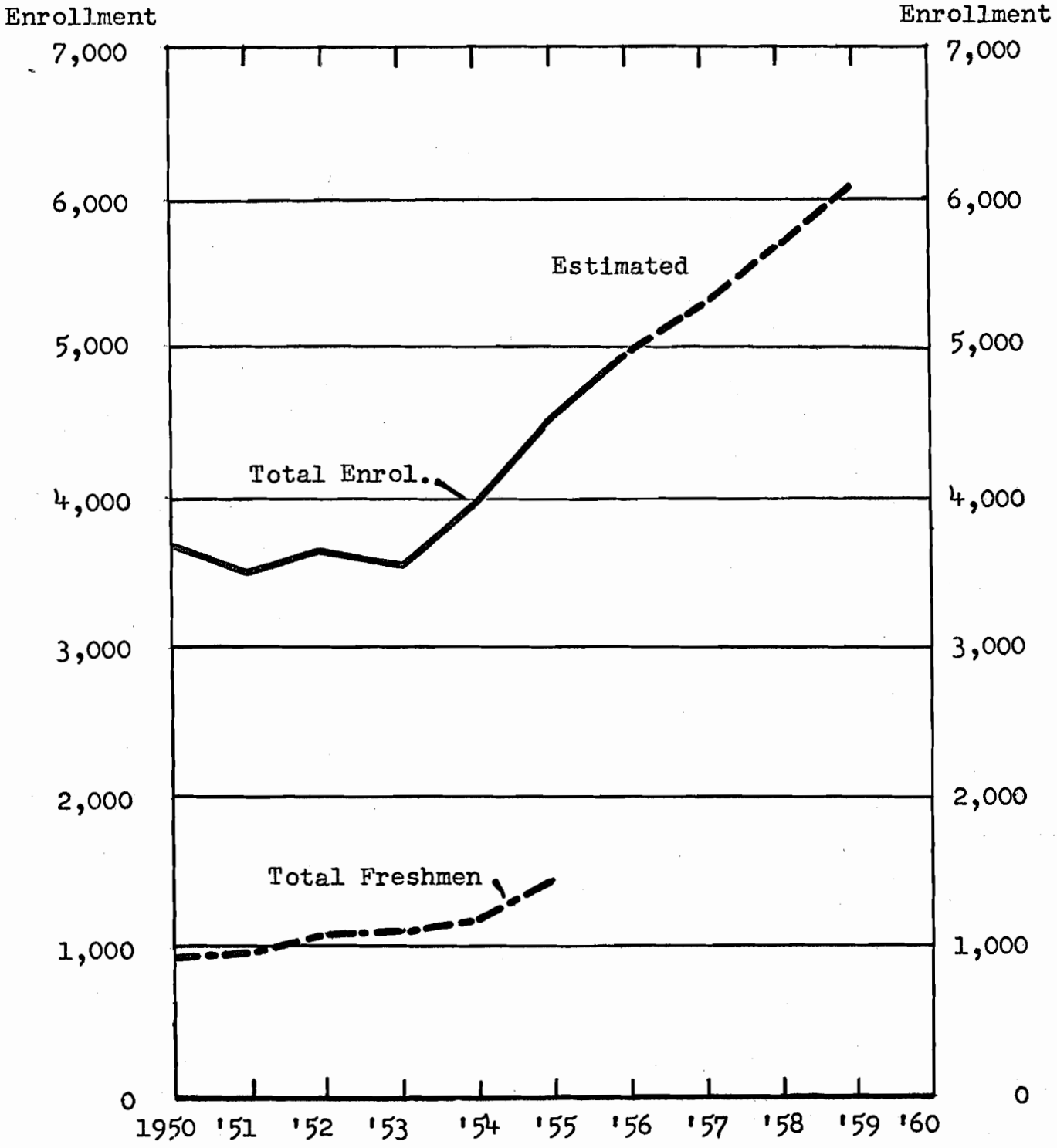


Descending trend for total enrollment between 1956 and 1957 is due to an increase of 550 in the actual enrollment for 1956 over the prediction of 9,300 made for that year.

Colorado A. & M. College

Freshmen and Total Fall Enrollment 1950 - 55

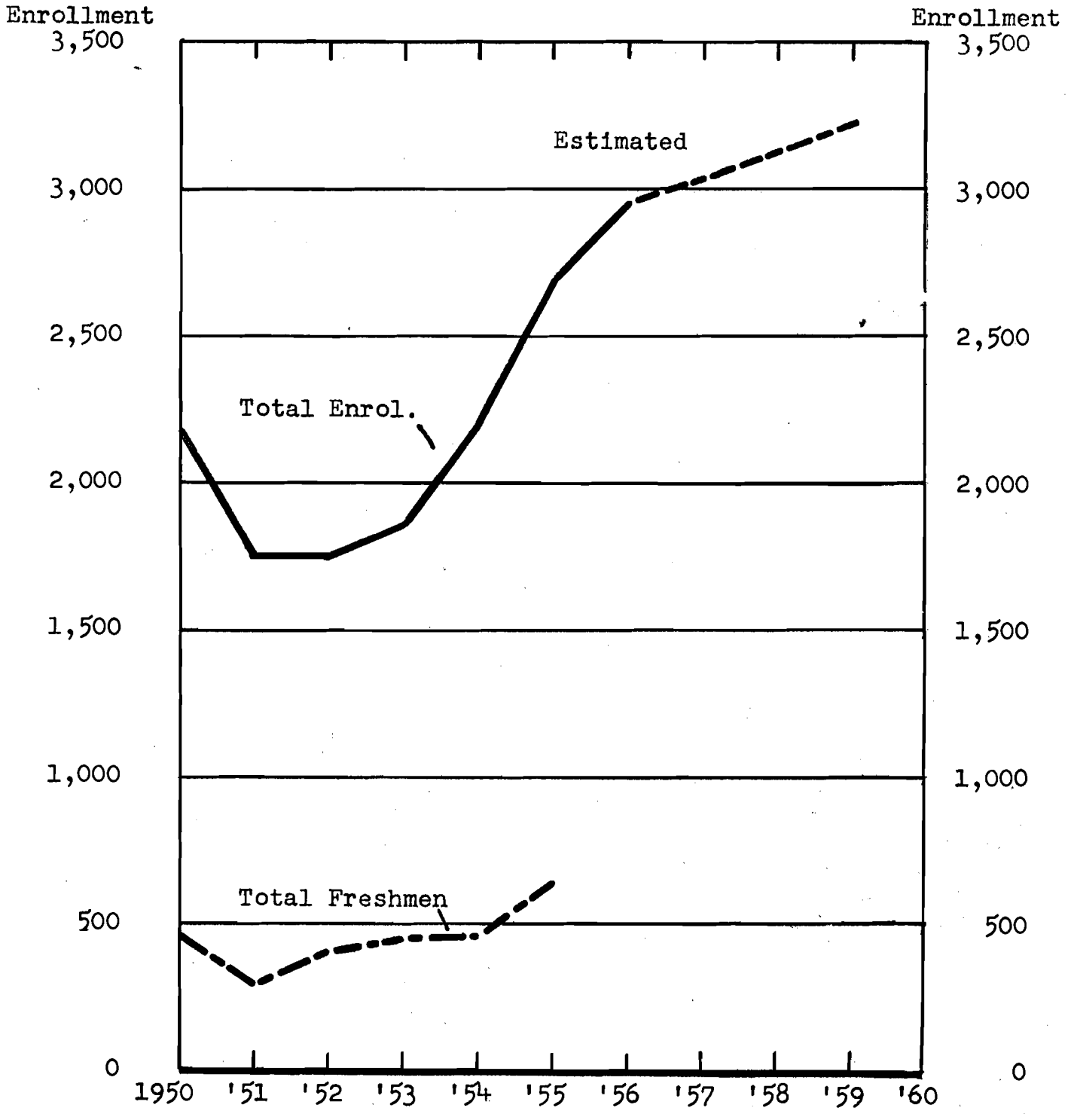
(Enrol. Projections: 1957 on)



Colorado State College of Education

Freshmen and Total Fall Enrollment 1950 - 55

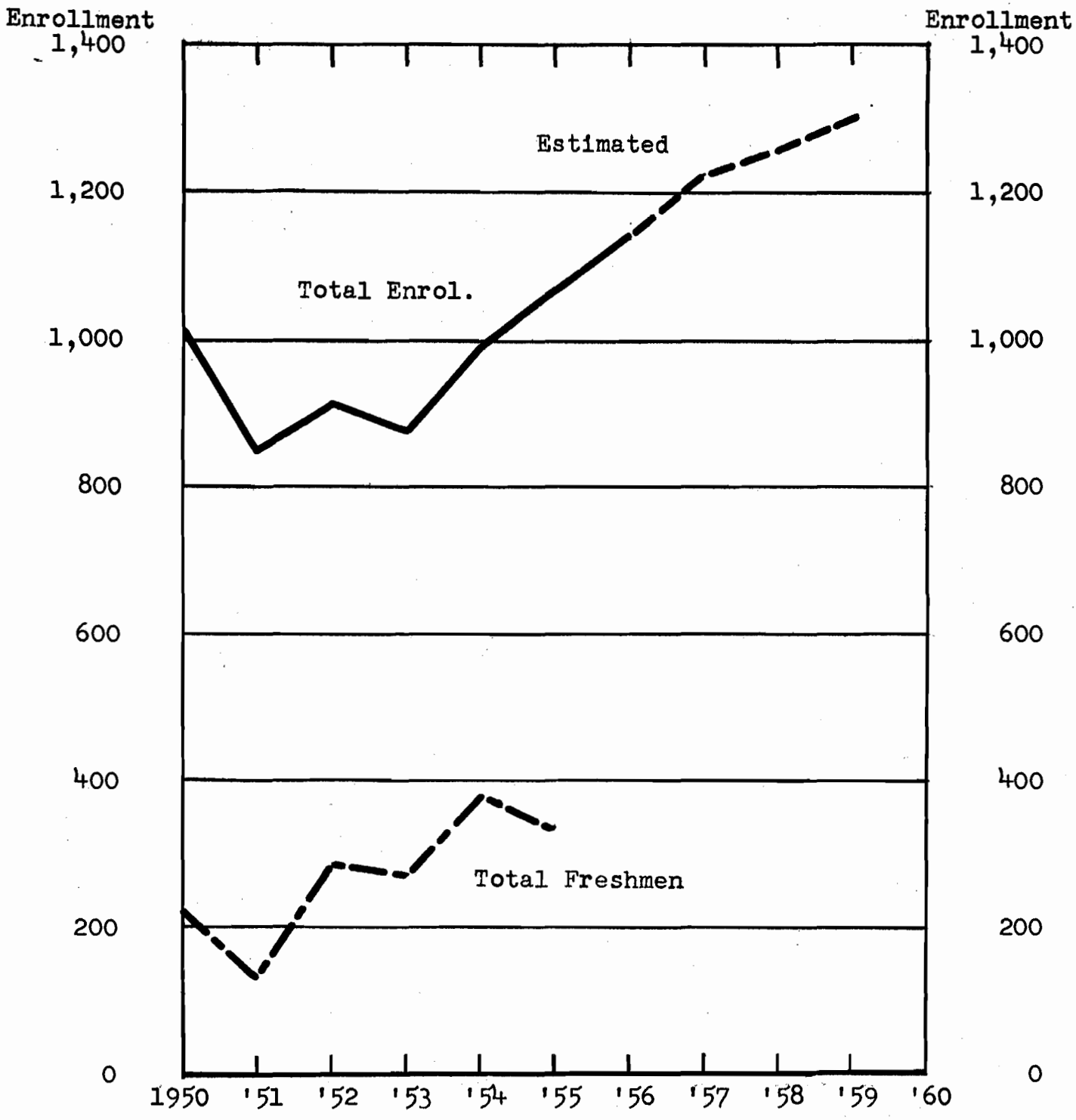
(Enrol. Projections: 1957 on)



Colorado School of Mines

Freshmen and Total Fall Enrollment 1950 - 55

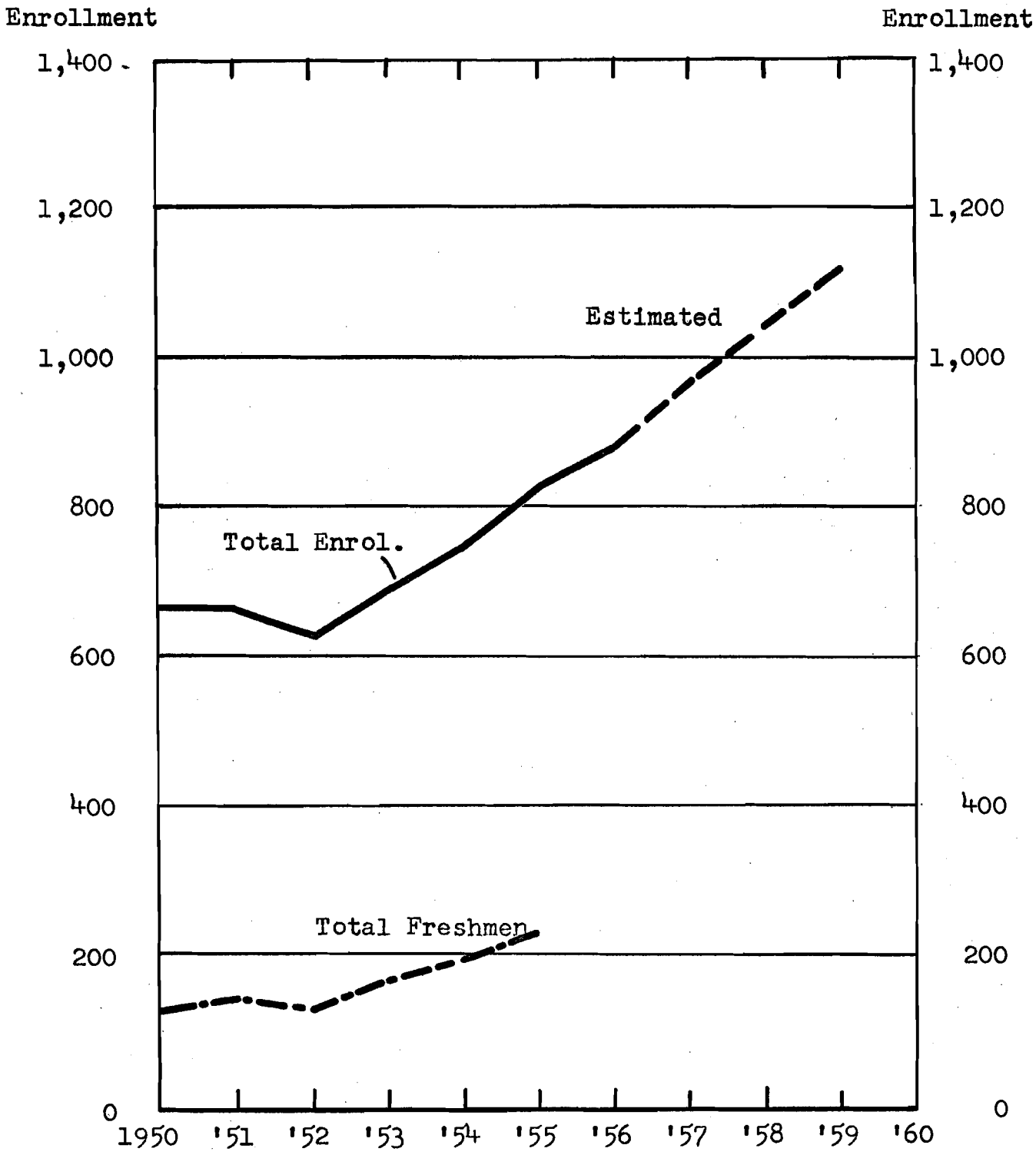
(Enrol. Projections: 1957 on)



Western State College

Freshmen and Total Fall Enrollment 1950 - 55

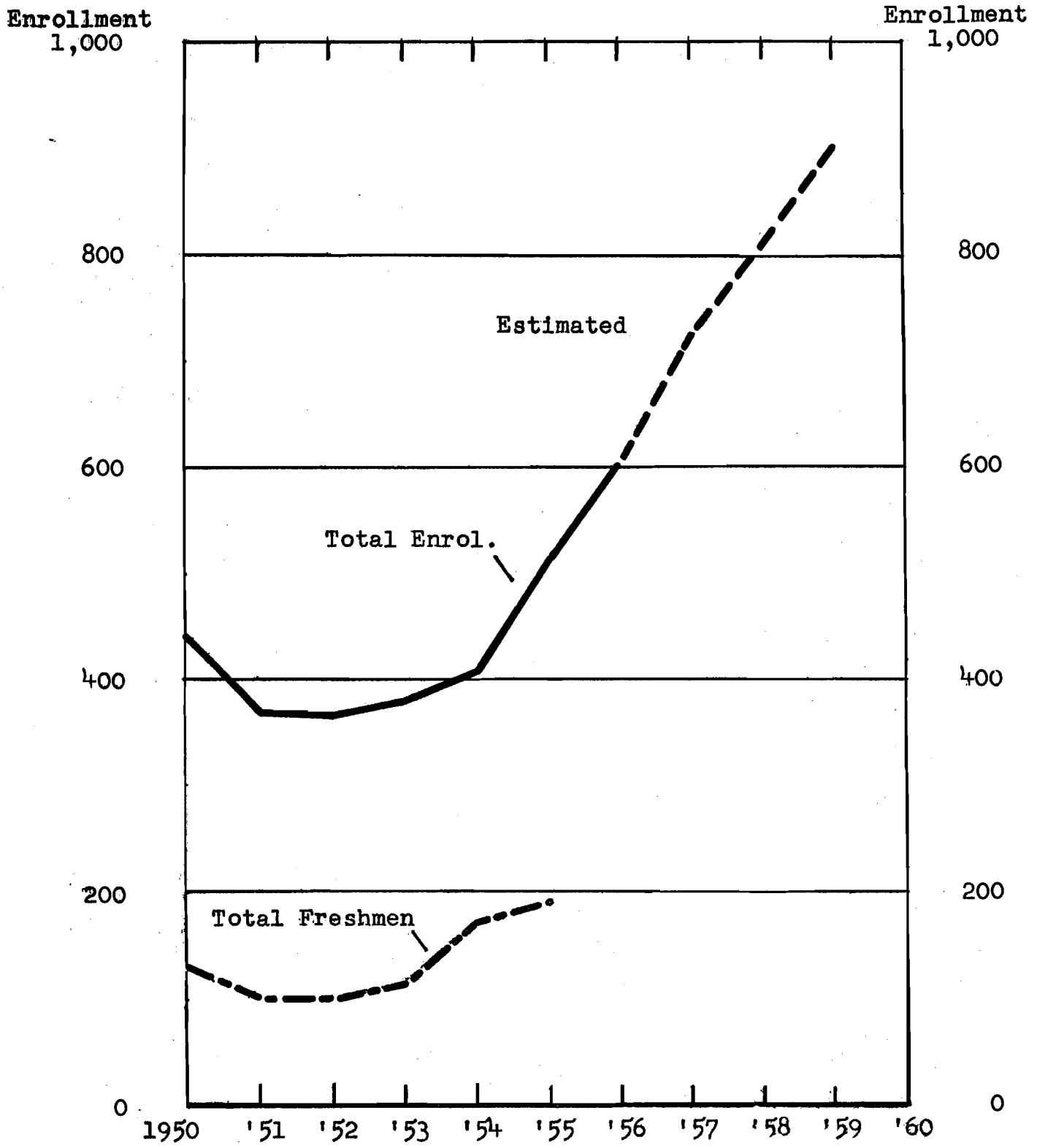
(Enrol. Projections: 1957 on)



Adams State College

Freshmen and Total Fall Enrollment 1950 - 55

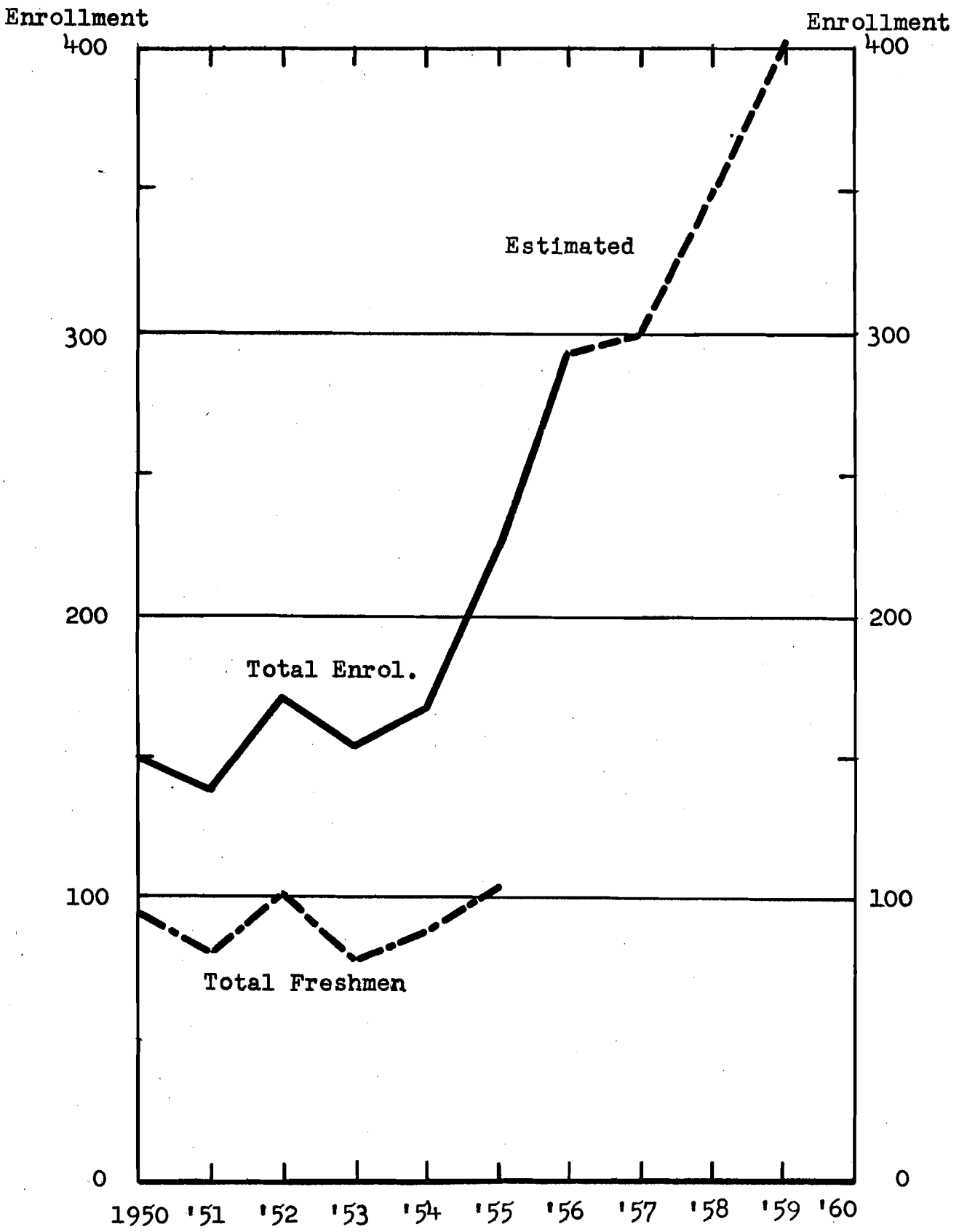
(Enrol. Projections: 1957 on)



Fort Lewis A. & M. College

Freshmen and Total Fall Enrollment 1950 - 1955

(Enrol. Projections: 1957 on)



Programs Offered at the State-supported Colleges

It is possible for the prospective college student in Colorado to select from a comparatively wide range of offerings, as revealed by an examination of the fields of study which lead to the granting of degrees at the several levels. Study of the "Index of College Offerings," in Part VI of the 1955 Handbook of the Colorado Council on High School - College Relations, resulted in compilation of a table which indicates the number of degree-granting subject fields:

	Doctorate	Masters	Bachelors
University of Colorado	36	64	63
Colorado A & M College	7	35	50
School of Mines	5	6	6
Adams State College		7	46
Colorado State College of Education	9	25	43
Western State College		6	33

Note: Since publication of the above document, Colorado A & M has added four doctorate programs, which accounts for 7 instead of the 3 listed in the handbook. Colorado State College of Education has also added four new majors for doctoral study.

A breakdown of program offerings[5] at each of the seven state supported institutions of higher education in Colorado is hereby presented to acquaint the reader with the entire scope of programs available at state supported schools. This breakdown of courses is subject to greater refinement, but curtailment of space precludes such a further subdivision.

UNIVERSITY OF COLORADO

College of Arts and Sciences: More than 26 liberal arts major fields leading to the degrees B.A. and B.S., and specialized programs in

College of Education
College of Journalism
Department of Home Economics
Department of Fine Arts
Department of Physical Education
Medical Technology
Physical Therapy

[5] Course outlines as presented were approved by officials of the individual institutions.

Graduate School: Offers advanced instruction leading to following degrees:

Doctor of Philosophy
(in a number of fields)
Doctor of Education
Aeronautical Engineer
Architectural Engineer
Chemical Engineer
Civil Engineer
Electrical Engineer
Mechanical Engineer
Doctor of Musical Arts

Master of Arts
Master of Science
Master of Education
Master of Music
Master of Music Education
Master of Fine Arts
Master of Business Education
Master of Personnel Service

School of Nursing: Leading to B.S. degree.

College of Engineering: Leading to B.S. degree.

Aeronautical Engineering
Architectural Engineering
Architecture
Chemical Engineering
Civil Engineering
Electrical Engineering
Engineering Physics
Mechanical Engineering

School of Medicine: Leading to M.D. degree.

School of Law: Leading to Ll.B. degree.

College of Pharmacy: Leading to B.S. degree.

College of Music: Leading to B. Mus. and B. Mus. Ed. degrees.

School of Business: Leading to B.S. degree.

Summer Session

Division of Extension.

COLORADO A & M COLLEGE

School of Agriculture: Leading to the Bachelor's degree.

Department of Agronomy
Department of Animal Husbandry
Department of Entomology
Department of Horticulture
Department of Poultry Husbandry

School of Engineering: Leading to the Bachelor's degree.

Department of Civil Engineering
Department of Electrical Engineering
Department of Mechanical Engineering

School of Forestry and Range Management: Leading to the Bachelor's degree.

- Department of Forest Management and Utilization
- Department of Forest Recreation and Wildlife Conservation
- Department of Grazing and Range Management

School of Home Economics: Leading to the Bachelor's degree.

- Department of Art
- Department of Foods and Nutrition
- Department of General Home Economics
- Department of Textiles and Clothing

School of Science and Arts: Leading to the Bachelor's degree.

- Department of Botany and Plant Pathology
- Department of Chemistry
- Department of Economics and Sociology
- Department of English and Modern Languages
- Department of History and Government
- Department of Music
- Department of Physical Education
- Department of Physics
- Department of Psychology and Education
- Department of Vocational Education
- Department of Zoology
- Department of Mathematics
- Department of Industrial Arts

School of Veterinary Medicine: Meading to the D.V.M. degree.

- Department of Pathology and Bacteriology
- Department of Physiology
- Department of Veterinary Anatomy
- Department of Veterinary Clinics and Surgery
- Department of Veterinary Medicine

Divison of Armed Forces Sciences: Qualified graduates receive reserve commission as Second Lieutenants in either the Army or the Air Force.

- Department of the Army
- Department of the Air Force

Graduate School:

- Master of Science
- Master of Education
- Master of Forestry
- Master of Home Economics
- Master of Engineering
- Doctor of Philosophy (in a number of fields)

COLORADO SCHOOL OF MINES

Geological Engineering	Mining Engineering
Geophysical Engineering	Petroleum Engineering
Metallurgical Engineering	Petroleum-Refining Engineering

Note: A professional degree is granted at the end of the undergraduate study rather than a Bachelor of Science degree which is granted in many other institutions. A professional degree represents more work than is normally required for a Bachelor of Science degree. Besides the engineering degrees awarded to undergraduates, the Colorado School of Mines awards the following graduate degrees: Master of Science in all six fields, and Doctor of Science in all fields. However, due to a shortage of qualified teachers, students have not been accepted for doctoral study in the field of Petroleum Engineering for several years. It is interesting to note that diplomas awarded by the Colorado School of Mines are of sterling silver, rather than the traditional parchment type.

COLORADO STATE COLLEGE OF EDUCATION

Bachelor of Arts Degree: Teaching Certificate.

Major and Minor Plan
General Secondary Major
Elementary Education Major

Bachelor of Arts Degree: Liberal Arts

Graduate Program:

Master's Degree in seven instructional divisions

Specialist-in-Education Degree: One year beyond Master of Arts degree.

Doctor of Education.

WESTERN STATE COLLEGE

Undergraduate Program:

Bachelor of Arts Degree: Teacher Education

Bachelor of Arts Degree: Liberal Arts

Pre-professional programs

Business Curricula

Short Term and Terminal Curricula

Graduate Program:

Master of Arts Degree

Certificate of Advanced Study

ADAMS STATE COLLEGE OF COLORADO

Undergraduate Program:

Bachelor of Arts Degree: Teaching in the Elementary Schools

Bachelor of Arts Degree: Teaching in the Secondary Schools

Bachelor of Arts Degree: Liberal Arts

Pre-professional Programs

Short-term Programs: Secretarial and Medical Technician Programs

Graduate Program:

Master of Education Degree.

FORT LEWIS A & M COLLEGE

Course offerings at Fort Lewis A & M College are lower division undergraduate and are classified under the following two headings:

Lower Division College Work: Major Areas	Terminal Vocational Courses
Agriculture	Practical Agriculture
Arts and Sciences	Secretarial Science
Business	Terminal Engineering
Engineering	Terminal Home Economics
Forestry	Vocational Business & Administration
Home Economics	
Industrial Arts	

The degrees offered at Fort Lewis A & M College are as follows:

Associate of Science
Associate of Arts
Associate of Applied Science
Certificate of Completion.

The curricula in lower division college work have been planned with reference to the requirements of typical four-year colleges where students may be likely to continue their work after two years at Fort Lewis A & M College. Terminal vocational courses are offered for those students who are not planning to take a full four-year program.

Programs: Junior Colleges

General speaking, the junior colleges, or community colleges, as many leaders prefer to call them, have five major functions:

1. Offering pre-professional courses, often referred to as transfer courses. This is work which can be transferred to a senior college. The aim of these courses is to lay the foundation for advanced study later in law, engineering, teaching, or some other field of specialization. Courses that fit into this pattern, to give a few examples, include chemistry, psychology, government, and French. In this activity, the junior college represents an abbreviated form of the senior college by conducting lower division college education.

2. Providing vocational or occupational education, often referred to as "terminal programs." This type of education is for those who plan to terminate their formal education in the junior college. This training should be designed to achieve occupational competence and give opportunities to achieve civil and technical competence and personal adequacy for living. Common examples of this course work would be in automobile mechanics, welding, or woodworking and building construction.

3. Providing general education, the type of training which will prepare a student to function effectively as a member of his family, and as a citizen in his community, his state, his nation, and his world. If courses are planned specifically to increase a student's social and civic intelligence, these courses often may not be transferred to senior colleges. Usually, general education may be combined with the pre-professional courses.

4. Furnishing adult education or, as it is sometimes called, community service. Such education enables older members of the community to do further study in either vocational or avocational fields. The community or junior colleges are ideally situated for organizing additional educational facilities for this group of people. Every junior college should cooperate with other public educational institutions in providing instruction to meet the needs of all people living in the region. The program of training should include occupational and general education.

5. The fifth function, guidance, is a two-fold function. The community-junior college will help each student to help himself in the choice of an occupation adjusted to his interests, aptitudes, and abilities, so that he may prepare for the successful pursuit of a life's work. Also, the community-junior college can "screen" students for further study; this is sometimes called the "guidance and

selection" function. It is at this educational level that there is a "division of labor" whereby the community-junior colleges handle high school graduates from high school to either higher study or employment.

Based on information furnished by the Colorado junior colleges, relative to enrollments in the various types of programs, it is apparent that transfer or pre-professional courses are in greater demand by students in regular attendance than are courses of a terminal nature. Approximately 81 per cent of the students enrolled in the six public junior colleges were registered in transfer courses, with 19 per cent concentrating on terminal programs during the 1954-55 academic year. These proportions should change as terminal programs are expanded and improved to meet the needs of the state's economy.

We shall deviate slightly from the original intent of treating only students in attendance on a full-time equivalent basis, to present statistics which present the effort expended on adult education programs at the junior colleges. Size of adult programs for 1954-55 ranges from that at the newest of the junior colleges, Otero, which enrolled 71 adults in 4 classes, to the program at Mesa College where there were 2,289 enrollments in 91 classes. These figures do not represent individuals served since one person may have enrolled in several classes.

Totals for the six schools for the 1954-55 school year were:

College	Enrollments, Adult Classes
Mesa	2,289
Pueblo	2,039
Trinidad	1,596
Northeastern	493
Lamar	274
La Junta	71
Total	6,752

Degrees Conferred at State-supported Institutions

Earned degrees at all levels conferred by Colorado's six four-year, state-supported institutions of higher education totaled 20,275 during the years 1950-55. The 3,644 degrees conferred in 1955 number 1,198 less than the total conferred in 1951; the latter year was one of the peak years for total number of degrees granted since it marked one of the "bulge" years for number of veterans completing their schooling under Public Law 346. From 1951 until 1955, the number of degrees conferred continued to decline; examination of enrollment figures will show noticeable decrease in enrollments for the years 1951-1953 inclusive. Regardless of the 11 per cent decrease in enrollments in 1951, the number of degrees conferred in 1955 was "holding its own" for the first time in recent years. This seems to indicate increased holding power on the part of the senior colleges, and it can be expected that in the future larger numbers of students will probably complete work toward a degree than has been the case heretofore. (Tables, pp. 26-31.)

SUMMARY: DEGREES CONFERRED

Colorado State-Supported Four-Year Colleges
1950-55

	1951			1952			1953			1954			1955			Total			Grand Total
	B	M	D	B	M	D	B	M	D	B	M	D	B	M	D	B	M	D	
Adams State	104			98			98			97	3		100	8		497	11		508
Colorado A & M	707	101		645	101		658	112		572	103		589	112	1	3,171	529	1	3,701
Colo. St. Col. of Educ.	487	462	13	501	479	9	475	452	20	474	420	20	502	350	25	2,439	2,163	87	4,689
School of Mines	214	47	12	218	17	11	185	16	7	174	11	8	119	11	2	910	102	40	1,052
University of Colorado	2,160	332	55	1,623	296	71	1,368	312	57	1,251	260	64	1,270	307	55	7,672	1,507	302	9,481
Western State College	126	22		108	53		113	64		111	54		122	71		580	264		844
Totals	3,798	964	80	3,193	946	91	2,897	956	84	2,679	851	92	2,702	859	83	15,269	4,576	430	20,275

Bachelor's Degrees, Univ. of Colo., include: Law-LL.B. 1951--57; 1952--44; 1953--45; 1954--41; 1955--52.

Master's Degrees, C.S.C.E., include: Adv. Dip. Spec. 1951--4; 1952--4; 1953--5; 1954--2; 1955--1.

Fiscal Year Data--Univ. of Colo., Adams State Col.
Calendar Year Data--C.S.C.E., School of Mines, Colo. A & M, Western State Col.

B -- Bachelor's Degree
M -- Master's Degree
D -- Doctorate Degree

DEGREES CONFERRED

University of Colorado
(Fiscal Year)

	'50-51	'51-52	'52-53	'53-54	'54-55	Grand
	Total	Total	Total	Total	Total	Total
Bachelor's Degrees						
Arts & Sciences	908	721	611	580	54	3,364
Engineering	578	377	269	215	222	1,661
Business	331	230	201	213	256*	1,231
Music	47	42	51	22	36	198
Nursing	132	112	116	107	83	550
Pharmacy	107	97	75	73	77	429
Law (LL.B)**	57	44	45	41	52	239
Total	2,160	1,623	1,368	1,251	1,270	7,672
Master's Degrees						
Arts	79	71	71	51	74	346
Science	136	99	107	97	124	563
Education	67	70	79	63	56	335
Music	2	7	3	4	2	18
Music Education	19	20	20	23	16	98
Fine Arts	2	9	2	7	4	24
Business Education	6	9	11	3	8	37
Personnel Service	21	11	19	12	23	86
Totals	332	296	312	260	307	1,507
Doctor's Degrees						
Doctor of Philosophy	27	39	42	50	36	194
Doctor of Education	24	31	12	11	19	97
Aeronautical Engineer			1			1
Chemical Engineer	1					1
Civil Engineer		1	1	2		4
Electrical Engineer	3			1		4
Mechanical Engineer			1			1
Totals	55	71	57	64	55	302
Grand Totals	2,547	1,990	1,737	1,575	1,632	9,481

* 6 Women received B.S. degree in Medical Records

** The Ll.B. degree requires a minimum of 6 years of academic work.

DEGREES CONFERRED

Colorado A & M College
(Calendar Year)

	1951 Total	1952 Total	1953 Total	1954 Total	1955 Total	Grand Total
Bachelor's Degrees						
Agriculture	182	160	174	137	131	784
Engineering	136	75	76	58	73	418
Forest & Range Mngmt.	56	43	42	50	49	242
Home Economics	45	48	67	50	57	267
Science & Arts	225	252	232	213	204	1,126
Veterinary Medicine	63	65	67	64	75	334
Totals	707	645	658	572	589	3,171
Master's Degrees						
Agriculture	12	15	12	4	11	54
Engineering	18	20	28	24	21	111
Forest & Range Mngmt.**	7	7	4	7	12	37
Home Economics	0	2	1	3	4	10
Science & Arts*	61	56	62	59	61	299
Veterinary Medicine	3	1	5	6	3	18
Totals	101	101	112	103	112	529
Doctor's Degrees					1	1
Grand Totals	808	746	770	675	702	3,701

* Includes Vocational Education.

** Fifth year training, leading to professional degree, but not on Master's level, is included with Bachelor's figure.

DEGREES CONFERRED

Colorado State College of Education
(Calendar Year)

	1951 Total	1952 Total	1953 Total	1954 Total	1955 Total	Grand Total
Bachelor's Degrees						
Major and Minor Plan	272	271	220	204	263*	1,230
General Secondary	22	23	16	22	14	97
Elementary Education	157	182	214	225	225	1,003
A.B. Liberal Arts	36	25	25	23	___	109
Totals	487	501	475	474	502	2,439
Master's Degrees						
Industrial Arts	73	84	74	63	38	332
Fine Arts Education	25	19	9	9	7	69
Home Economics	6	4	2	5	6	23
Elementary Education	85	93	100	86	92	456
Education Administration	60	86	76	63	36	321
Secondary Education	35	23	33	24	26	141
Educ. Psyc. & Guidance	7	8	9	10	14	48
Business Education	13	25	19	19	23	99
Health & Physical Ed.	47	36	35	33	34	185
Music Education	16	24	24	25	21	110
English	17	16	18	20	12	83
Speech	4	4	2	11	5	26
Biological Sciences	15	10	4	10	9	48
Physical Sciences	8	5	8	5	0	26
Science Education	9	5	7	6	6	33
Mathematics	6	11	11	9	5	42
History & Political Science	23	17	11	10	10	71
Social Science	9	5	5	10	5	34
Totals	468	475	447	418	349	2,147
Advanced Diploma of Specialization	4	4	5	2	1	16
Ed. D. Degree	13	9	20	20	25	87
Grand Totals	962	989	947	914	877	4,689

* Includes Liberal Arts

DEGREES CONFERRED

Colorado School of Mines
(Calendar Year)

	1951	1952	1953	1954	1955	Grand
	Total	Total	Total	Total	Total	Total
Bachelor's Degrees						
Geology	69	57	52	51	40	269
Geophysics	22	36	22	17	14	111
Metallurgy	28	30	38	23	14	133
Mining	41	46	31	35	13	166
Petroleum Engineering	41	24	31	26	20	142
Petroleum Refining	13	25	11	22	18	89
Totals	214	218	185	174	119	910
Master's Degrees						
Geology	18	2	5	4	6	35
Geophysics	7	3	3	2	0	15
Metallurgy	11	3	1	4	4	23
Mining	6	5	3	0	0	14
Petroleum Engineering	0	1	0	1	0	2
Petroleum Refining	5	3	4	0	1	13
Totals	47	17	16	11	11	102
Doctor's Degrees						
Geology	3	4	5	2	0	14
Geophysics	4	3	0	2	1	10
Metallurgy	3	1	1	2	0	7
Mining	0	1	0	1	1	3
Petroleum Engineering	1	0	0	0	0	1
Petroleum Refining	1	2	1	1	0	5
Totals	12	11	7	8	2	40
Grand Totals	273	246	208	193	132	1,052

DEGREES CONFERRED

Western State College
(Calendar Year)

	1951 Total	1952 Total	1953 Total	1954 Total	1955 Total	Grand Total
Bachelor's Degree						
B.A. Liberal Arts	58	38	27	27	19	169
B.A. Teachers Education	68	70	86	84	103	411
Total B.A. Degrees	126	108	113	111	122	580
Master's Degrees						
Education	19	49	58	44	66	236
English			1	4		5
Social Studies	3	4	5	6	5	23
Total	22	53	64	54	71	264
Grand Totals	148	161	177	165	193	844

Adams State College of Colorado
(Fiscal Year)

Bachelor of Arts Degree						
Secondary Education	59	31	31	29	32	182
Elementary Education	18	47	50	51	51	217
Liberal Arts	27	20	17	17	17	98
Totals	104	98	98	97	100	497
Master of Education Degrees						
Educational Administration				1	4	5
Elementary Education					2	2
Secondary School Education				2	2	4
Totals				3	8	11
Grand Totals	104	98	98	100	108	508

The following table shows the number of degrees conferred at all levels by Colorado's public four-year colleges:

Year	Bachelor's or First Level Degrees	Master's or Second Level Degrees	Doctorates	Total
1951	3,798	964	80	4,842
1952	3,193	946	91	4,230
1953	2,897	956	84	3,937
1954	2,679	851	92	3,622
1955	2,702	859	83	3,644
TOTAL	15,269	4,576	430	20,275

During the period July 1, 1954, to June 30, 1955, of the total number of degrees conferred by institutions of higher education in the aggregate United States[6], 81.1 per cent were first level degrees (first degree granted upon completion of a course of study in a given field); 16.4 per cent were second level degrees (Masters' and second professional); and 2.5 per cent were doctorates (does not include degrees in dentistry, medicine, and veterinary medicine).[7] Corresponding percentages for Colorado are 74.1, 23.6, and 2.3 respectively.

During the year 1954-55, 45.4 per cent of all degrees conferred in the United States were in five major fields. Comparative figures for Colorado's state-supported degree-granting institutions are presented with the United States data:

	United States		Colorado	
Subject Fields	No. of Degrees	Per cent of Total	No. of Degrees	Per cent of Total
Education	70,408	19.9	554	15.2
Business & Comm. excl. of Accounting	36,673	10.3	219	6.0
Engineering	27,672	7.8	476	13.1
English	15,109	4.3	98	2.7
History	11,049	3.1	85	2.3

[6] United States and its Possessions.

[7] Earned Degrees Conferred by Higher Education Institutions, 1954-55. U.S. Office of Education, 1956. (All national-level statistics quoted in this section are taken from this source.)

The 554 degrees recorded under Education represent bachelor's degrees in elementary education and advanced degrees in education, in order to make the total comparable to data used in the U.S. Office of Education report. However, including elementary, secondary, and education administration degree totals, the number of education degrees conferred by Colorado institutions represents 21.5 per cent of the total for Colorado. If there are added to this total such categories as home economics education, business education, etc., total education degrees conferred by Colorado's public senior colleges constitute approximately 40 per cent of all degrees conferred. The 219 degrees listed as Business and Commerce do not include degrees in Business Education.

Financing the Program of Higher Education in Colorado

Until 1940, Colorado's state-supported institutions of higher education depended upon the property tax levy and tuition and miscellaneous fees as their major sources of revenue for maintenance and operation purposes. Beginning with 1941, the General Assembly, from the General Fund, appropriated amounts to each institution based on individual budget requests, thus making the major sources of general and educational income three-fold.

The state appropriation for the biennium 1945-47 for the state supported institutions of higher education totaled $778,000, or $389,000 per year. The 1955 appropriation came to $5,493,463 (one year's appropriation), an increase of $5,104,463 over the 1945 appropriation. Enrollments at the seven schools were 9,870 in 1945, as compared with 18,874 in 1955.

To make a fair comparison of state appropriation per student, it is necessary, in the light of inflationary developments, to view the dollar amounts of the two appropriations in terms of 1947-49 constant dollars. By using the 1947-49 Consumer's Index, the following equivalents are established:

1947-49 is equal to 100
1945 is equal to 76.9
1955 is equal to 114.4

$389,000 divided by 76.9 is equal to $515,852
$5,493,463 divided by 114.4 is equal to $4,801,978

These figures show that the state appropriation per student in 1945 was $51.28, as compared with the 1955 per capita appropriation of $248.57, in terms of 1947-49 dollars.

$515,852 divided by 9,870 is equal to $51.28
$4,801,978 divided by 18,874 is equal to $248.57.

Thus, it is apparent that increased educational and general costs in state-supported schools are being met with larger appropriations from the state general fund. The state appropriation for higher education for the 1956-57 fiscal year was $6,536,420.

Relation of State-supported Institutions to State Agencies

On or before October 1 of each year (Chapter 3-3-3, CRS, 1953), each institution of higher education is required to prepare, on blanks furnished by the Divison of Accounts and Control an estimate of its expenditure requirements, together will all anticipated income from fees and all other sources for the ensuing year, compared with the corresponding figures of the last completed fiscal year and the estimated figures for the current fiscal year. The controller reviews these estimates, altering, revising, increasing or decreasing the items he deems necessary in view of the needs of the institutions and the total anticipated income of the state government. He then prepares a budget, which is delivered to the governor prior to the fifth day of the legislative session, and the governor transmits the budget to the General Assembly not later than the tenth day of the regular session.

It has been the practice for a number of years for the Joint Subcommittee on Appropriations to conduct hearings on budget requests prior to introduction of the appropriation bill. The subcommittee makes adjustments which it deems appropriate after weighing the justifications as presented by the heads of the institutions, and then draws up the appropriation bill in accordance with its findings.

All state supported institutions of higher education, with the exception of the University of Colorado, must clear requests for expenditures through the Division of Accounts and Controls; the University is granted its appropriation is a lump sum, to be controlled as directed by the constitutionally elected Board of Regents.

The first use of the state mill levy on property to finance construction of buildings at the institutions of higher education dates to 1881, but the practice did not apply to all of the institutions. In order to establish a satisfactory method which would enable the state to meets its obligations to all institutions, the State Planning Commission, in 1937, developed a program whereby a specific state mill levy on property was set for each institution. Legislation was enacted to extend these mill levies over a ten-year period, which accounts for the program being known as the "Ten-year Building Mill Levy Program." A second ten-year program was enacted in 1947 as a result of thorough studies conducted by the individual institutions, relative to long-range building needs. Legislation passed by the 1955 session of the General Assembly extended this program through 1964. All construction at each of the state-supported schools must be "in conformity with the plan for public works within the state of Colorado, prepared and published by the State Planning Commission...." (Chapter 124, CRS 1953).

The following table shows revenue realized from the 1954 and 1955 building mill levies for each of Colorado's state supported institutions of higher education.

	1954 Levy	1954 Revenue	1955 Levy	1955 Revenue
Adams State College	.01902	$ 51,313.57	.06503	$ 186,587.70
Colorado A & M	.06441	173,770.09	.28087	805,945.25
Colorado School of Mines	.06087	164,219.61	.09306	267,012.94
Colo. State College of Educ.	.05071	136,809.21	.13934	399,802.10
University of Colorado	.12426	335,237.87	.42283	1,213,207.41
Western State College	.02030	54,766.85	.08962	257,142.70
Fort Lewis A & M	.01775	47,887.27	.05263	151,008.93
Totals		$964,044.47		$3,280,707.03

Total revenue collected from the building mill levies for the state supported schools since inception of the plan appears in the next table:

Jan. 1, 1938 to Dec. 31, 1947[8]		$ 4,954,922
Jan. 1, 1948 to Dec. 31, 1953[8]		3,779,471
	1954[9]	964,044
	1955[9]	3,280,707
Total Jan. 1, 1938 to Dec. 31, 1955		$12,979,144

Relation of Junior Colleges to State Agencies

The Public School Finance Law, passed by the Colorado General Assembly in 1952, includes a section which provides for state aid to junior colleges on the basis of student credit hours. (Chapter 123-6-17.) Under this act, any junior college district already organized is entitled to a direct grant of $900 from the state public school fund for each seven students carrying an average of 45 quarter hours or 30 semester hours of credit during the preceding academic year.

On or before September 1 of each year, the junior college committee reports to the State Board of Education the number of students and the quarter or semester hours credited to such students for the preceding regular academic year. In computing the amounts to be paid to each junior college district, the

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[8] Building Funds for Colorado's State Distributions. State Planning Commission, 1954.

[9] Forty-fourth Annual Report of the Colorado Tax Commission. 1955.

total number of quarter or semester hours is divided by 45 if quarter hours, and by 30 if semester hours; either quotient, divided by seven, will give the number of direct grants to which the junior college district is entitled.

Junior colleges organized subsequent to 1952 are entitled to a direct grant of $900 for each seven students enrolled and taking full-time work as of October 1 of the calendar year in which the junior college is organized; thereafter, such junior colleges are entitled to direct grants as provided in the preceding paragraph.

On or before September 15 of each year, the State Board of Education certifies to the State Treasurer the amounts from the state public school fund to be paid to junior college districts, and the state treasurer distributed the moneys to the county treasurers of the counties in which the college buildings are located, to be credited to the junior college district funds. These funds are to be used for current operating costs of the junior colleges.

Summary of Expenditures and Income, State-supported Institutions

Colleges and universities receive funds from many sources, to be expended for a number of purposes. These funds include gifts to the institutions for endowment and other non-expendable purposes; funds for auxiliary enterprises, such as dormitories, bookstores and, sometimes, athletics; funds for other non-educational purposes, such as student aid, contribution to employee pension programs, etc., as well as certain "agency funds" which are handled by the institutions for student organizations and other groups. Of greater significance to legislators and taxpayers, however, are the funds which most immediately influence the scope and excellence of the institution's educational, research, and extension services. These are funds for (1) educational and general purposes, and (2) funds for capital outlay or expansion of physical plant facilities.

There is usually a general pattern which is followed by institutions of higher education in the classification of accounts. Such a general pattern, outlined herein, must be adapted to the use of the particular institution:

Current Income

I. Educational and General

- A. Student Fees and Tuition
- B. Government Funds
  - 1. Federal government
  - 2. State, county, and local
- C. Endowment Income
- D. Sales and Services of Educational Departments
- E. Organized Activities Relating to Educational Department
- F. Private Gifts and Grants
- G. All Other Sources

II. Auxiliary Enterprises and Activities[10]

A. Residence Halls
B. Dining Halls
C. Book Stores

III. Other Non-Educational and Agency Funds

IV. Student Aid

V. Plant Funds

Current Expenditures

I. Educational and General

A. General Administration (Governing board, President's office, Business office)
B. General Expense
1. Student services
2. Faculty and staff benefits
3. General institutional expense
C. Instruction and Departmental Research
D. Organized Activities Relating to Educational Departments
E. Organized Research
F. Extension and Public Services
G. Libraries
H. Operation and Maintenance of Physical Plant

II. Auxiliary Enterprises

A. Residence Halls
B. Dining Halls
C. Bookstores

III. Other Non-Educational and Agency Funds

IV. Student Aid, Loans, and Scholarships

V. Plant Funds.

Tables showing the pattern of income and expenditured for Colorado's seven state supported institutions of higher education appear on the following pages. They will vary in makeup since the institutions do not all follow the same classification of accounts. The University of Colorado and Colorado A & M have adopted the classification utilized in most national and state surveys which deal with financing of higher education.

[10]All dormitories, residence halls, dining halls, and other enterprises of an auxiliary nature at Colorado's state suppprted institutions of higher education are financed through issues of self-liquidating revenue bonds.

SUMMARY OF EDUCATIONAL AND GENERAL EXPENDITURES
Total, by College, 1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Adams State	$ 289,591.71	$ 305,868.79	$ 348,627.97	$ 379,696.62	$ 388,549.83
Colo. A & M	3,378,848.41	3,786,521.40	4,167,526.18	4,402,916.95	4,893,653.63
Colo. State	1,246,464.38	1,291,591.99	1,282,409.35	1,387,396.77	1,442,722.11
School of Mines	1,185,058.57	1,196,555.80	1,186,837.10	1,282,846.76	1,350,022.50
Univ. of Colo.	5,423,950.00	5,409,652.18	5,979,049.92	6,235,203.51	6,822,287.05
Western State	473,952.06	482,042.47	538,999.93	570,964.75	615,485.61
Ft. Lewis A & M	214,702.69	216,395.86	189,336.65	194,311.17	184,685.31
State Total	$12,212,567.82	$12,688,628.49	$13,692,787.10	$14,453,336.53	$15,697,406.06

SUMMARY OF EDUCATIONAL AND GENERAL INCOMES
Total, by College, 1950-51 to 1954-55

Adams State	$ 312,058.95	$ 331,791.25	$ 376,578.17	$ 390,601.40	$ 414,602.96
Colo. A & M	3,366,816.19	3,811,770.34	4,353,825.83	4,666,597.15	5,153,573.44
Colo. State	1,351,537.53	1,303,922.80	1,361,462.13	1,371,333.53	1,467,406.13
School of Mines	1,404,580.60	1,310,556.57	1,366,379.01	1,359,941.04	1,419,730.59
Univ. of Colo.	5,336,152.00	5,632,534.06	5,880,702.68	6,208,927.27	6,897,070.47
Western State	501,299.24	541,506.97	566,865.92	577,468.45	618,790.38
Ft. Lewis A & M	239,823.33	269,275.00	223,912.54	223,665.40	235,640.83
State Total	$12,512,267.84	$13,201,356.99	$14,129,726.28	$14,798,534.24	$16,206,814.80

SOURCE: Summaries of Educational and General Expenditures and Incomes in this report as indicated on the individual tables for each of the seven state supported institutions of higher education in Colorado.

UNIVERSITY OF COLORADO
Boulder Campus

Summary of Educational and General Expenditures
1950-51 to 1954-55

	1950-51*	1951-52	1952-53	1953-54	1954-55
Gen. Admin.	$ 342,204.00	$ 163,084.85	$ 177,877.49	$ 194,527.52	$ 200,625.86
Gen. Exp.	354,821.00	584,048.35	636,527.23	655,539.67	736,613.27
Instruc. & Dept. Research	3,354,609.00[a]	2,549,322.15	2,803,994.08	2,841,179.27	3,039,144.13
Org. Activities Re. to Instruc. Depts.	714,464.00	758,954.06	902,138.20	889,571.36	1,032,614.00
Org. Research	[a]	277,970.24	239,890.94	316,593.42	408,078.29
Ext. & Pub. Services	[a]	380,825.36	412,060.16	455,196.17	507,814.35
Libraries		216,890.20	250,941.68	255,847.63	277,785.75
Museum	224,750.00	20,634.35	23,279.94	22,889.73	24,892.55
Op. & Main. of Physical Plant	442,102.00	457,922.62	532,340.20	603,858.74	594,718.85
Total Educ. & Gen.	$5,423,950.00	$5,409,652.18	$5,979,049.92	$6,235,203.51	$6,822,287.05

Summary of Educational and General Income
1950-51 to 1954-55

Stu. Fees (Net)	$2,351,471.00	$2,124,417.98	$2,087,569.00	$2,243,541.55	$2,588,939.03
State of Colo.		2,218,140.84	2,445,807.82	2,481,819.95	2,610,766.75
a. Gen. Mill Levy	893,941.00[b]	898,031.04	900,502.98	936,629.39	972,808.88
b. Motor Vehicle Ownership Tax	[b]	60,109.80	60,304.84	60,190.56	62,957.87
c. Spec. Appro.	782,033.00	1,260,000.00	1,485,000.00	1,485,000.00	1,575,000.00
Endowment Income		8,902.06	10,060.93	8,033.29	5,658.72
Gifts & Grants	563,460.00	336,787.96	298,643.84	345,984.30	426,012.84
Sales & Services of Educ. Dept.	[c]	147,138.76	173,787.64	216,388.36	221,840.61
Org. Activities Re. to Educ. Depts.	745,247.00	797,146.46	864,833.45	913,159.82	1,043,852.52
Total Educ. & Gen.	$5,336,152.00	$5,632,534.06	$5,880,702.68	$6,208,927.27	$6,897,070.47

SOURCE: Annual Financial Reports, University of Colorado, 1950-51 through 1954-55

*Financial Report of 1950-51 is not comparable in all respects with later reports. Thus, the entries have been rearranged to a certain extent.

a/Included are "Instruction and Departmental Research", "Organized Research", and "Extension and Public Services".

b/Included are (a) General Mill Levy, and (b) Motor Vehicle Ownership Tax

c/Not shown specifically in 1950-51 Annual Report

COLORADO A & M COLLEGE

Summary of Educational and General Expenditures
1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Gen. Admin.	$ 206,255.62	$ 206,330.80	$ 116,126.47	$ 124,169.90	$ 131,501.35
Gen. Exp.	89,128.21	82,710.48	258,533.95	268,543.98	282,405.65
Instruc. Depts.	1,384,943.34[a]	1,323,986.80	1,369,048.63	1,364,000.87	1,511,115.48
Org. Activities Re. to Instruc. Depts.		348,644.20[c]	382,329.97	423,714.34	395,803.70
Org. Research (Ag.)	724,131.84	788,724.54	922,098.67	1,074,990.46	1,280,036.71
Ext. Service (Ag.)	642,962.67	727,656.17	772,251.07	770,002.24	864,376.81
Library	75,341.41	83,862.92	85,183.29	87,229.68	92,425.54
Op. & Main. of Physical Plant	256,085.32	225,105.49	261,954.13	290,265.48	335,988.39
Total Educ. & Gen.	$3,378,848.41	$3,786,521.40	$4,167,526.18	$4,402,916.95	$4,893,653.63

Summary of Educational and General Income
1950-51 to 1954-55

Stu. Fees & Tuition	$ 817,724.56	$ 519,830.68	$ 699,878.13	$ 722,883.15	$ 613,006.15
Fed. Gov't. Appro.	645,006.74	639,015.29	642,637.21	666,795.36	808,830.10
State Gov't.					
a. Tax Levies	571,091.04	612,107.84	613,830.12	636,806.54	661,692.25
b. Appropriation	847,208.76	1,318,663.96	1,590,000.00	1,617,022.89	1,765,663.40
Sales & Services, Ext. Services & Ext. Sta.	189,822.85[b]	140,290.44	156,039.95	192,021.58	236,254.52
Org. Activities Re. to Instruc. Depts.	153,584.64	362,668.60	389,573.97	452,407.11	649,632.42
Endowment Income	35,292.79	32,233.13	35,518.80	36,027.66	40,869.02
Grants & Donations	107,084.83	171,895.42	206,760.91	313,731.18	340,046.72
Miscellaneous Inc.		15,064.98	19,586.74	28,901.68	37,578.86
Total Educ. & Gen.	$3,366,816.19	$3,811,770.34	$4,353,825.83	$4,666,597.15	$5,153,573.44

SOURCE: Annual Financial Reports, Colorado A & M College, 1950-51 through 1954-55

[a]Recorded as "Resident Instruction" in 1950-51 Report.

[b]Recorded as "Total sales & services, Education Departments" in 1950-51 Report.

[c]Reported as "Revolving Fund" in 1951-52 Report.

COLORADO SCHOOL OF MINES

Summary of Educational and General Expenditures 1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Personnel Services	$ 834,798.84	$ 884,037.13	$ 886,760.59	$ 959,027.33	$1,011,640.49
Main. and Operation	304,353.73	284,611.38	281,478.90	309,752.67	324,350.11
Refunds	8,323.69	7,551.48	8,018.38	8,414.95	11,005.71
Veterans Admin.	37,582.31	20,355.81	10,579.23	5,651.84	3,026.19
Total Educ. & Gen.	$1,185,058.57	$1,196,555.80	$1,186,837.10	$1,282,846.76	$1,350,022.50

Summary of Educational and General Incomes 1950-51 to 1954-55

C.S.M. Tax Fund	$ 255,615.37	$ 274,959.25	$ 275,716.25	$ 286,777.23	$ 297,861.16
Exper. Plant Fund	25,950.13	27,913.88	27,987.29	32,771.79	
Student Receipts	526,569.32	332,270.40	318,810.14	297,965.35	328,953.57
U.S. Min. Leas. Act Fund*	200,000.00	200,000.00	200,000.00	395,042.98	
Misc. Receipts	84,342.66	59,440.19	50,526.97	49,125.92	58,638.93
Motor Vehicle Act	19,928.12	20,272.85	20,338.36	20,299.75	19,276.93
Spec. Appropriation	292,175.00	395,700.00	473,000.00	277,958.02	715,000.00
Total Educ. & Gen.	$1,404,580.60	$1,310,556.57	$1,366,379.01	$1,359,941.04	$1,419,730.59

SOURCE: Summary of Budget Appropriation and Disbursements, Colorado School of Mines, 1950-51 through 1954-55

* The statute which granted to the Colorado School of Mines royalties under the Federal Oil Leasing Act of 1920, was repealed by Chapter 5, Session Laws of Colorado, Extraordinary Session, 1953.

COLORADO STATE COLLEGE OF EDUCATION

Summary* of Educational and General Expenditures 1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Gen. Control	$ 218,198.57	$ 234,752.74	$ 239,531.01	$ 258,926.24	$ 263,458.65
Instruction	733,670.89	776,659.73	785,391.37	813,658.33	858,424.27
Library	50,083.82	52,427.24	54,339.57	54,442.89	53,839.12
Main. and Operation	244,511.10	227,752.28	203,147.40	260,369.31	267,000.07
Total Educ. & Gen.	$1,246,464.38	$1,291,591.99	$1,282,409.35	$1,387,396.77	$1,442,722.11

Summary* of Educational and General Incomes 1950-51 to 1954-55

Gen. Assem. Appro	$ 276,825.00	$ 330,750.00	$ 423,000.00	$ 426,915.14	$ 450,000.00
Tax Rev. Mill & Motor Vehicle Own. Tax	447,787.11	479,945.80	481,284.51	499,324.39	518,846.37
Student Fees & Cash Collections	626,925.42	493,227.00	457,177.62	445,094.00	498,559.76
Total Educ. & Gen.	$1,351,537.53	$1,303,922.80	$1,361,462.13	$1,371,333.53	$1,467,406.13

SOURCE: Office of the Controller, Colorado State College of Education at Greeley, October 14, 1955

WESTERN STATE COLLEGE

Summary# of Educational and General Expenditures 1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Gen. Exp.	$ 88,629.04	$ 78,572.69	$ 97,019.99	$101,745.92	$111,956.83
Instruction	264,465.25	265,123.59	296,557.76	319,911.55	348,980.34
Library	16,588.32	16,389.45	20,482.00	18,841.84	18,587.67
Main. and Operation	104,269.45	121,956.74	124,940.18	130,465.44	135,960.77
Total Educ. & Gen.	$473,952.06	$482,042.47	$538,999.93	$570,964.75	$615,485.61

Summary# of Educational and General Incomes 1950-51 to 1954-55

Gen. Assem. Appro.	$210,833.00	$252,550.00	$299,994.28	$300,000.00	$320,000.00
Mill Levy & Motor Vehicle Own. Tax	172,704.60	185,107.75	185,629.41	192,589.95	200,115.90
Student Fees & Tuition	117,761.64	103,849.22	81,242.23	84,878.50	98,674.48
Total Educ. & Gen.	$501,299.24	$541,506.97	$566,865.92	$577,468.45	$618,790.38

SOURCE: Office of the Business Manager, Western State College, October 12, 1955

ADAMS STATE COLLEGE

Summary* of Educational and General Expenditures 1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Gen. Exp.	$ 49,405.98	$ 53,262.82	$ 61,373.64	$ 73,853.42	$ 75,561.49
Instruction	166,518.14	168,275.84	190,160.64	194,806.54	206,799.29
Library	11,282.07	11,475.27	12,452.00	12,898.51	15,101.62
Main. and Operation	62,385.52	73,184.86	84,639.69	96,138.15	91,087.43
Total Educ. & Gen.	$289,591.71	$306,868.79	$348,627.97	$379,696.62	$388,549.83

Summary* of Educational and General Income 1950-51 to 1954-55

Gen. Assem. Appro.	$167,500.00	$190,495.00	$240,000.00	$240,000.00	$255,000.00
Mill Levy & Motor Vehicle Own. Tax	85,974.01	92,148.41	92,397.91	95,858.11	99,602.96
Student Fees & Tuition	58,584.94	49,147.84	44,180.26	54,743.29	60,000.00
Total Educ. & Gen.	$312,058.95	$331,791.25	$376,578.17	$390,601.40	$414,602.96

SOURCE: Office of the President, Adams State College, October 17, 1955

FORT LEWIS A & M COLLEGE

Summary* of Educational and General Expenditures 1950-51 to 1954-55

	1950-51	1951-52	1952-53	1953-54	1954-55
Admin. & Gen.	$ 56,522.71	$ 48,441.71	$ 49,414.12	$ 65,389.39	$ 62,369.90
Resident Instruc.	64,991.77	66,136.09	73,047.29	65,372.32	63,427.39
Libraries	5,756.01	5,547.10	5,769.53	5,735.95	6,097.93
Main. & Op. of Plant**	87,432.20	96,270.96	61,105.71	57,813.51	52,790.09
Total Educ. & Gen.	$214,702.69	$216,395.86	$189,336.65	$194,311.17	$184,685.31

Summary* of Educational and General Incomes 1950-51 to 1954-55

Tuition & Fees**	$ 69,502.07	$ 74,509.50	$ 14,055.48	$ 10,405.04	$ 12,658.82
Gen. Rev. Appro.	85,750.00	104,110.00	118,958.00	118,958.00	125,000.00
Mill Levy & Motor Vehicle Own. Tax	84,581.26	90,655.50	90,899.06	94,302.36	97,982.01
Total Educ. & Gen.	$239,823.33	$269,275.00	$223,912.54	$223,665.40	$235,640.83

SOURCE: Office of the Business Manager, Fort Lewis A & M College, September, 1955

** Figures for Maintainence and Operation of Plant, and Tuition and Fees were taken from the Annual Budget Reports of the State of Colorado

The following table has been prepared to indicate the relationship of the three major sources of income to the total. Educational and general income for Colorado's publicly controlled institutions of higher education for the years 1950-51 through 1954-55:

RELATION OF TAX REVENUES, GENERAL FUND APPROPRIATION, TUITION AND FEES TO TOTAL EDUCATIONAL AND GENERAL INCOME

Colorado's State-Supported Institutions of Higher Education
1950 - 51 to 1954 - 55

Year	Total Educ. & Gen. Inc.	Tax Revenue Amount	Pct.	Gen. Fund Approp. Amount	Pct.	Tuition and Fees Amount	Pct.
1950-51	$12,512,268	$2,408,318	19.2	$2,280,712	18.2	$4,658,539	36.5
1951-52	13,201,357	2,581,179	19.0	3,333,355	25.3	3,697,253	28.0
1952-53	14,129,726	2,588,359	18.3	3,974,952	28.1	3,702,911	26.2
1953-54	14,798,534	2,685,295	18.1	3,792,366	25.1	3,859,511	26.1
1954-55	16,206,814	2,768,752	17.6	4,515,000	27.9	4,200,792	25.9

It can be seen that tax revenue has changed but little over the five-year period and consequently accounted for a declining percentage of the total educational and general income with each succeeding year. Percentage of income realized from tuition and fees dropped rather sharply from 1950-51 to 1951-52 because of cutbacks on number of veterans attending college and the resultant loss of the windfall of veterans' tuition and fees, cost of which was assumed by the federal government. From 1952-53 through 1954-55, tuition and fees played a slightly decreasing part in total educational and general income. During those same years, general fund appropriations had to be increased to make up for the decreased income from other sources. One cannot conclude from these data that this early trend of the 1950's will grow stronger in future years; however, with tax revenue remaining more or less static, and tuition and fees continuing at the present rates, mounting costs of operating educational plants will likely require increasing appropriations from the general fund, unless some factor not yet noted enters in to change the picture.

Instructional costs over the same five-year period rose from $5,847,670 for 1950-51 to $6,707,126 for 1954-55, an increase of 14.7 per cent. This, again, is not indicative of what lies ahead. Student enrollments in 1954 were but 3.4 per cent over those of 1950; by Fall of 1956, as has already been noted, enrollments were up 28 per cent over the 1950 total. Therefore, greater demands must be made upon state moneys to increase the budgets which will be necessary not only to augment to present instructional staffs, but also to increase salaries of faculties to a level which is commensurate with salaries in other institutions of higher education throughout the country.

Summary of Income, Junior Colleges

The pattern for financing of junior or community college programs usually provides for a three-way source of revenue--local taxation, tuition and fees, and state aid. The proportion of these amounts varies in the several states which follow this formula; In New York, state aid amounts to about one-third of the receipts; the state of California provides about 30 per cent of the cost of operating junior colleges, and in Texas, it is slightly under 20 per cent.

In the next table, there are shown the amounts of revenue realized from the three major sources in the four larger Colorado junior colleges, together with the proportion each source represents of the total receipts for the year 1954-55:

	Mesa College		Northeastern		Pueblo College		Trinidad Coll.	
	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.
Tax Levy	$271,337	64.0	$ 90,701	66.3	$207,625	51.0	$105,058	41.0
Tuition, Fees	51,000	12.0	8,644	6.3	77,456	19.0	29,565	11.6
State Aid	64,340	15.2	25,521	18.7	96,271	23.7	60,300	23.8
Other	37,508	8.8	11,920	8.7	25,526	6.3	59,784	23.4
Total	$424,185	100.0	$136,786	100.0	$406,878	100.0	$254,707	100.0

The total income for the four junior colleges was $1,222,556. State aid for these colleges amounted to $246,432 and accounted for approximately 20 per cent of the total income.

A second table gives the mill levy, amounts of assessed valuation, and the revenue for each county comprising a junior college district as of January 1, 1955.

College and County	Mill Levy	Assessed Valuation	Revenue
Mesa College (Mesa County)	3.78	$ 55,772,670	$210,820
Trinidad State Junior College (Las Animas County)	3.31	31.631,550	104,700
Pueblo College (Jr. Col.)	1.44		
(Pueblo County) (Post War)	.83	134,796,710	350,471
(Bond & Int.)	.33		
Northeastern Junior College (J.C.)	1.116		
(Post War)	.61	55,845,175	96,388
Lamar College (Prowers County)	2.90	27,045,140	78,430

PART II

A SEARCHING LOOK AT TOMORROW'S PROBLEMS

In the first part of this report, the committee had made an effort to "inventory" briefly the current status of tax supported higher education in Colorado. These data are important insofar as they provide a background with which to prepare for tomorrow. What is ahead for higher education in Colorado? This provocative query can be answer only after many additional questions have been resolved.

In this section of the report, questions are raised regarding issues, which, in the Committee's judgment, compel early consideration. The questions are intended to provoke thought and, in all probability, will raise controversy. However, only through thought, and oftentimes through the ideas developed during controversy, can a constructive program be achieved. Neither the questions asked nor the materials quoted are intended to reflect committee judgments, but rather they are set forth in the desire to generate sufficient and thoughtful reaction which will permit Colorado to properly chart its future course in the field of higher education.

Projection of Enrollments

In 1953, the Association of State-Supported Institutions of Higher Education in Colorado, under the direction of Mr. Jack Bartram of the University of Colorado, prepared a study[11] of enrollments for the purpose of planning higher education facilities in the state. When it appeared that the predictions made at that time were on the conservative side, the college authorities were asked by the Legislative Council Education Committee to make a review of the projected enrollments. This they did in the Fall of 1955, and came up with a 1959 prediction of 23,750 students for the seven state-supported institutions of higher education. This figure is 4,550 in excess of the estimate of 19,200 as projected in The Rising Tide. Comparative statistics of the two studies appear in the next table:

	1953 Study	1955 Review	Per Cent Increase
1955 Projection	16,062	18,874 (actual)	17.2%
1957 Projection	17,910	21,260	18.7
1959 Projection	19,200	23,750	23.7

It should be kept in mind that the revised prediction is also conservative as can be noted in the following excerpts taken from letters to the Legislative Council. Dean Wm. Burger, Dean of Students and Registrar, Colorado School of Mines, in a letter dated October 19, 1955:

[11] The Rising Tide: A Forecast of the Probable Enrollments in Colorado's Seven State-Supported Colleges in the Next Fifteen Years, January, 1954. Association of State-Supported Institutions of Higher Education in Colorado.

"A factor which will tend to limit enrollment at the Colorado School of Mines is the physical facilities of the school. In an all technical school a great deal of special equipment and laboratory space must be provided. Until and unless present facilities are expanded, entering freshman classes will of necessity be limited to 420 students. Before total enrollment of undergraduate and graduate students reaches 1,300, present facilities will be taxed to the limit."

President Wm. E. Morgan, Colorado A & M College wrote, October 19, 1955:

"When you note that the actual enrollment increase we experienced a year ago was 442, and last month was 518, you may wonder why the average increase we forecast for the next fours is just under 400. It is a forecast based on our expectation of 'managing' new student enrollments so as to match facilities. Of course we expect to have more classrooms and office space in 1957 and 1958, but the pressure of enrollment on facilities at that time will be greater than it is now."

It is very apparent from the foregoing that one of the more obvious factors facing planners for higher education is the rising tide of enrollments. However, there are other factors which tend to add to the complexity of the entire problem of preparing for the increased number of students who will be seeking college educations in Colorado:

a. Growth of Interest: While only 4 per cent of the college-age population (18-21 years) in the nation attended college in 1900, and 15.3 per cent in 1940, the current rate is slightly over 30 per cent. The United States Office of Education predicts that 39 per cent of the college-age population will be attending institutions of higher learning in 1960. Percentage of Colorado's college-age population enrolled in 1949-50 was 43 per cent, with Utah and Oregon being the only two states with higher rates.[12]

b. Increase in Colorado's College-Age Population: Estimated per cent of increase of college-age population in Colorado is set at 76 per cent for the period 1953-1970. This is typical for the entire western region where college-age population is increasing more rapidly than in other regions.[13]

c. Migration of College Students: Statistics for 1949-1950 indicate that "out migration" of Colorado students (students from Colorado who attend publicly controlled institutions of higher education outside Colorado), totaled 1,273 but that 8,182 students from other states attended Colorado's public institutions. Thus, there was a net "in migration" of 6,909 students which placed Colorado second in the nation in this respect.[14] "In migration" for Fall, 1955, for Colorado's seven state-supported colleges numbered 7,139. No statistics are currently available on "out migration" but it is unlikely that the proportion has changed considerably from that which prevailed in 1949-50.

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[12] Ronald B. Thompson, The Impending Tidal Wave of Students, October, 1954.

[13] Ibid

[14] Council of State Governments: Higher Education in the 48 States, p. 187. 1952.

d. Public-Private College Enrollments: Nationwide, the percentage of students enrolled in publicly controlled institutions of higher learning in 1955 as compared with private schools was 56.3 per cent and 43.7 per cent. In Colorado 69.4 per cent of college students were in public colleges in 1955 while 30.6 per cent enrolled in privately controlled institutions.[15] Private colleges are not likely to expand greatly during the years ahead; hence it will be necessary for publicly controlled institutions to absorb increasingly greater proportions of college students.

Re-evaluation of the Higher Education Program

The prospect of greatly increased enrollments in our higher educational institutions is cause for deep reflection upon future programming for education beyond the high school. First reaction to the problem which faces Colorado with pyramiding enrollments is that of creating more facilities at the traditional four-year institutions and of adding to the existing staff and faculty. This could go on indefinitely and we would find ourselves with overgrown campuses which "just growed" like Topsy. Careful thought must be given to planning for an ever broadening base of education beyond the high school lest the trend continues toward bigness in our colleges and universities, a trend which poses a major threat to the quality of American education.

Dr. Harold L. Enarson, Executive Director of the Western Interstate Compact for Higher Education, in a speech before the Association of Governing Boards of State Universities and Allied Institutions at Michigan State University on October 21, 1955, had this to say about bigness:

> "The danger is that we will be obsessed with numbers, that we will confuse bigness with greatness, that we will care more for buildings than for teachers, more for good public relations than for the integrity of critical scholarship and bold teaching. The danger is that, in our preoccupation with expansion, we will accommodate everyone and educate no one."[16]

There is considerable speculation in higher education circles on the prospect of decreasing sharply within the next decade the numbers of freshmen and sophomores at our universities, and of making these institutions primarily upper-level, graduate, and professional institutions, with the junior colleges accepting a major responsibility for the education of young people during the first two years of college. This is what is happening in effect in California and in a number of institutions in other states. The question is whether it should be accelerated by much more deliberate planning.

If the lower division enrollments in our universities are to be decreased, it follows that a method must be set up whereby those students are selected who are able to profit from study in universities and professional schools.

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15 United States Office of Education, Fall Enrollment in Higher Educational Institutions, 1955.

16 Higher Education in the West, "Enarson Warns Educators Bigness Threatens Quality", October, 1955.

And this involves a more restrictive admissions policy than exists in most higher education institutions today. But before launching into such a policy, authorities must explore the possibilities of providing educational programs elsewhere for those students who are diverted from the universities and professional schools. These programs must be established on the basis of local needs and the demands made on education beyond the high school by young people in the various geographic areas of the state.

Some states have tried to solve the problem of providing this education on a statewide basis by establishing residence off-campus centers, or extension centers of the university. This plan, however, is not recommended, as courses offered are usually lower-division university arts and science courses and are not tied very closely to the educational needs of the community; technical, vocational, and adult training programs are best handled through the establishment of community colleges.

Other schools have attempted to establish terminal courses on senior college campuses, but these courses, technical in nature, usually do not thrive well in traditional college surroundings. Dr. Hollis, Chief of College Administration, U.S. Office of Education, at a Legislative Council meeting on Higher Education, March 22-23, cited the situation at Purdue University in Indiana where an attempt was made to establish a two-year terminal engineer-technician course on the university campus, in conjunction with the regular engineering course. Socially, this proved to be undesirable because the regular, four-year engineering students refused to accept the terminal students, and the terminal students were unhappy with their lot. Moving the two-year courses to outlying points, such as Gary, Indiana, and other industrial centers, became necessary in order to conduct this type of course successfully.

The role of the junior or community college in the state of Colorado was discussed at some length at the several meetings held to consider problems of higher education. Dr. Hollis, in March, 1956, advised the Legislative Council Education Committee to make an assessment of present programs at the state schools. At that meeting several legislators and professional educators expressed the opinion that there appears to be a gap in the post-secondary area of the state educational system. The general feeling advanced was that expansion of terminal and lower division education through development of junior or community colleges will serve as a partial solution to furnishing education beyond the high school to all who desire such an education and are able to profit therefrom.

Dr. Martorana suggested to the committee during an education meeting held in September, 1956, that the first step in planning for an expanded junior or community college program in Colorado is to provide the means for the existing junior colleges in the state to do adequately what they have set out to do. Then groundwork should be accomplished for statewide planning for additional community colleges. All who participated in the various discussions seemed to agree on the particular and immediate need for post-secondary educational opportunities in the Denver metropolitan area.

Dr. Kenneth Oberholtzer, Superintendent of the Denver Public Schools, and a member of the President's Commission on Higher Education, when he

appeared before the committee on June 15, 1956, stated that the Denver School District is studying the feasibility of using high school plant facilities for conducting junior college or lower-division classes during the late afternoon and evening. Dr. Hollis's reaction to this plan, when queried for an opinion, was that it would be unfortunate if this plan were to be a substitute for the community college concept. He also added that the Denver school system has long been regarded as a model for other communities and that there would be danger of other cities adopting the Denver plan should it be implemented, much to the detriment of community college planning on a national level.

The time has also come, perhaps, to reappraise the entire concept of degrees based upon credit hours and time-serving. The measuring of achievement has surely advanced to where it is possible for us to do some careful experimentation on a national scale with awarding of degrees on some other basis. If we are to continue the present concept of requirements for awarding of a degree, it may be possible to set variable goals of one, two, and three years of college, with proper recognition of such achievement, as well as awarding of the baccalaureate degree for completion of four years of college. Something of this sort is already in effect with the establishment of terminal programs and the awarding of the two-year Associate in Arts Degree, and the three-year program of long standing for registered nurses. But little has been done to provide academic respectability to students who, due to one reason or another, fail to complete the full college course and are regarded as failures both by themselves and in the eyes of the academic community.[17]

Various factors have contributed to the increasing size and complexity of curricula in higher education. Growth in volume has come with expansion of established fields, addition of new fields, and regrouping of established fields. In certain subject fields descriptive and content courses have, through application of tools of analysis, undergone almost complete transformation. Research activities in our colleges and universities have had marked effect on curricula development, with many courses being added to satisfy research interests. Higher Education has had to assume much of the responsibility for college preparatory work, particularly in the fields of mathematics, sciences, and languages because of the changing pattern in high school curricula. Institutional competition both for students and staff results in expansion of the curricula as well as addition of specialized equipment and libraries. Pressures from outside the institution--from professional groups, the armed forces, industry--for research, "upgrading," short courses, institutes and conferences also tend to widen the curricula of an institution.

In these times of rising enrollments and diversification of programs, is it wise to continue competition among our institutions of higher education? Should colleges and universities continue to build programs in all fields of knowledge and view with alarm any well-intentioned outside

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[17] Francis J. Brown, "A Long-Range View of Higher Education". The Annals, September, 1955.

intervention? Or should we explore more boldly the possibilities of state and regional planning, particularly with regard to graduate education, where small enrollment units and comparatively high unit costs call for better coordination, both within the individual state and among the several states of a region?

In the past, states have tended to develop programs of higher education with little reference to the educational facilities of their neighbors. Dr. Harold Enarson,[18] in an address given before the Fifth Annual Work Conference on Southern Regional Education at New Orleans, September 12, 1956, said: "Many colleges and universities are aggressive empires, dedicated to their own exclusive growth and self-aggrandizement. The university tradition is to strive for self-sufficiency, to build ambitious programs of teaching and research in all fields of knowledge."

In an article by Henry Steele Commager,[19] which appeared in the April, 1956, issue of Higher Education in the West, Mr. Commager made these remarks: "University administrators should realize that the vast increase in the range of knowledge makes it quite impossible for any one university to be in fact universal, and that learning is of necessity a cooperative affair. Many of our major universities, nevertheless, persist in acting as if the burden of maintaining the whole corpus of learning rested upon them. Whether through vanity, zeal, or mere habit, they attempt to cover the whole range of learning and scholarship. There might have been some excuse for this ambition when universities were comparatively few in number and travel was slow and difficult; there is no justification for it now."

It is quite unlikely that with the present philosophy of education, restraints will be placed upon curricula expansion. So long as the public makes demands upon institutions of higher education for the many activities and responsibilities now assumed by these institutions, curricula expansion will be encouraged rather than repressed. Education beyond the high school must be as diverse and varied as the clientele it is designed to serve. The state university and four-year colleges are a very important part of the total system of offerings beyond the high school, but it does not necessarily follow that these institutions should attempt to provide all higher education needs, needs which can often be met through establishment of junior-community colleges, technical institutes and continuation programs.

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[18] Dr. Enarson is Executive Director of the Western Interstate Compact for Higher Education. The Western Governors approved the plan in 1950; a central office was established in 1953; by July, 1955 membership included Alaska, Arizona, Colorado, Idaho, Montana, New Mexico, Oregon, Utah and Wyoming (only Hawaii and Nevada remain outside the compact). The compact permits cooperative arrangements across state borders, and is interested not with higher education generally, but with graduate, technical, and professional fields. Purposes are to provide equal educational opportunities, to make full use of existing facilities, and to prevent duplication of expensive programs.

[19] Professor of History, Columbia University; noted lecturer and author.

Shall Colorado Adopt a More Selective Admissions Policy for Senior Colleges?

No sooner does anyone--educator, legislator, or layman--advocate a policy of more selective admissions to our colleges and universities than many who read or hear of it become experts in deciding just who shall go to college. Cries rise up against such "undemocratic" practice and opponents are fearful of the establishment of an "intellectual elite". And when one goes further in advocating that a great many students might better seek education in community colleges, these same antagonists add the slur of "second-rate education". Nothing could be farther from the truth.

Presented herein are the opinions of individuals who have reacted to the question of whether or not the colleges and universities should accept and provide for the vast numbers of students seeking entrance to higher education institutions.

Henry Steele Commager says, "There is no practical alternative to accepting however many students are qualified by current standards, and there is little likelihood that the qualifications will be changed. Nor is there, for that matter anything in our experience to indicate that a limitation on enrollments would substantially improve educational standards; after all the products of our universities today compare favorably with those of a generation ago when total enrollment was less than half of the present time."

Dr. Harold Enarson had this to say in a paper which he prepared for presentation at a panel discussion, October 19, 1956, at the Great Plains Conference on Higher Education:

> "There is a lot of sentimental nonsense about 'democractic methods of selection.' A kind of marshmallowy egalitarianism has crept into our thinking and our laws. In some states, a high school diploma is a legal crowbar for use by any high school student who has frittered or fluttered his or her way through high school. This is not 'democracy'. It is not 'equality of opportunity'. It is just plain nonsense--bad for the student, bad for the institution, and bad for the public. The weak student wastes his time and that of the faculty. The school wastes its time in either carrying or weeding out students it should never have taken in the first place. And the public subsidizes this human waste with money--money better used to build quality instruction.
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> "There is no 'right' to play on the varsity team, enter medical training, or fly a jet plane for the Air Force. Similarly, there should be no right--legal or implied--for a weak student to enter the four-year degree program of his state university.
>
> "It is perfectly evident that publicly-supported colleges and universities are not free agents in deciding who will go to college. The state college or university is joined by an umbilical cord to the state legislature. Without funds, without support and understanding, public higher education cannot be either free or productive. The biggest educational job we have is with our own legislatures--and ourselves.

We need to redefine--in fresh, clear terms--the purposes of a university. And we need to show the legislature that identity of opportunity is not equality of opportunity. Let's stop using the state legislature as a whipping boy for our own sins. We will never be able to apply rigorous standards of admission to four-year programs until we help the legislatures build a total educational plan for their state. . .

"Too many university presidents go to their legislature for buildings and salary increases and continuous institutional expansion. . . Can we really impose selective admission standards in state supported higher education?

"We can if we combine plain talk with good strategy. How can a state university which is hell-bent on expansion, indifferent to development of community colleges, hostile to any over-all state approach to higher education--how can such a university possibly justify selective admission standards? A legislature will not buy a policy of selective admissions if to do so seems to deny equality of opportunity."

John W. Gardner, President of the Carnegie Corporation, in the 1954 Annual Report, agrees that every youngster in this country should be given the opportunity to develop what talents he possesses, but he adds, "On the other hand we send great numbers of our youth to college each year without any clear conviction that they are qualified for it, and without any clear notion as to what they will get out of it, but simply in pursuance of a vague notion that college is an opportunity that should not be denied them. This makes no sense at all."

We quote John D. Millet, President, Miami University, Oxford, Ohio, "Certainly educational leaders must quit talking about enrolling a larger proportion of the college-age population without some qualitative reservations. We need more college students, but what we really need is more good students. There is no point in our increasing the proportion of young people who go to college unless we can first increase the proportion of those of top ability who go to college. This is the crisis which confronts higher education insofar as enrollment is concerned."

President Benjamin F. Wright, of Smith College, said in his annual report, "To talk of a liberal college education for all, or for half, of those 17 to 22 is sentimental and dangerous nonsense. To advocate an education for all in accordance with their capacities is sober sense."

On the other hand, President Lewis W. Jones of Rutgers University told the Conference of Land-Grant Colleges and Universities:

"We can no more deny the expanded generation of young people an opportunity for a good education than we could deny them food, clothing, and housing . . . As a nation we have to spend more and expand our educational facilities to at least double their present size during the next ten to fifteen years. Limitations of

enrollments is not a possible American solution."

As the population increases rapidly and the ranks of those seeking admission to colleges and universities swells, is it not urgent that cogent thought be given to the question, "Who Shall Go To College?" Because of keen student competition for admission, should liberal arts colleges continue to admit marginal students or those who are bad risks? Should admissions offices not weed out prior to matriculation the disinterested students, the loafers and playboys whose places could easily be filled by students who would make better use of an educational opportunity? If the colleges and universities continue to accept all who apply for admission and to carry them through four years, those individuals who are responsible for providing higher education are faced with several possibilities. They can crowd our present facilities to capacity, increase teaching loads, and "water down" and cheapen programs to accommodate the heterogeneous group which will be trooping into the colleges; or they can attempt to maintain certain standards of excellence at a cost which could prove startling. The state can continue to operate senior colleges with quite liberal admissions policy if the taxpayers are willing to "foot the bill".

Should Colorado follow Ohio's plan under which all applicants to any state-supported college are required by law to be admitted, with the result of a high mortality rate among those who are less well-equipped to withstand the rigors of a four-year program? Dr. Hollis warned at the March meeting of the Legislative Council Committee on Education that this practice can prove to be very expensive in terms of time and effort expended on the many young people who will undoubtedly be eliminated during the first year.

The question of the "right" of Colorado taxpayers to send their children to a college of choice was raised by one legislator at the September meeting of the Education Committee. Dr. S. V. Martorana, from the U.S. Office of Education, emphasized that attendance at a college of choice is not necessarily a 'right". He said, "The plan of allowing a student to go where he chooses may be well and good until the total job of education becomes so big that it becomes poor management and business to carry on in this fashion."

What Can Colorado Do To Improve High School-College Relations?

While the state of Colorado has made considerable advancement in the field of high school-college relations through college officials who have devoted much time and effort to encourage capable students to attend one of the several institutions of their choice, much remains to be done if we are to recruit larger numbers of students for our colleges from the upper one-fourth of our senior high school graduating classes. At the present time one-half of these superior students are lost to an education beyond the high school, largely because of lack of motivation; a small number fail to enroll in college due to financial difficulties. Many educators advocate more organized recruiting for college. If football and basketball coaches can recruit promising athletes, why shouldn't the English professor recruit a promising writer, or the engineering department a budding engineer?

What is Colorado doing to seek out these "top brains" among the high

school graduates? What is being done in the way of providing adequate high school curricula which will insure that students who have aptitudes and interests for certain subject fields are able to take the necessary prerequisites? What is being done for the superior high school student who finds time on his hands because the program fails to offer him sufficient incentive to fully utilize his capacity? Is it possible to offer to this student certain college level courses in conjunction with his senior year, and to provide the "articulation" necessary between high schools and colleges so that such courses will be recognized for lower division credit? As it now stands all students are accepted into our colleges as equals, academically, so to speak, and the same basic courses are required for all, regardless of proficiency of individual students. This failure to recognize fully the superior student in high school and to offer him sufficient challenge may be good cause for that student to show indifference to the prospect of education beyond the high school.

In addition to this grave responsibility of seeking out the superior student, there is also the responsibility to determine the specialized aptitudes of our youth along technical and vocational lines. For every graduate engineer, for every medic, for every executive there is a need for a support group of trained technicians. What type of program can be established in order to bring to light not only our "top brains" but also our youth with specific aptitudes for certain fields, a selective system which will provide workers to fill the gap between the planners, thinkers, and policy makers, and the great mass of workers who are neither qualified nor trained for the jobs they are trying to fill?

How can the state educational system effect a closer meeting of minds between the teachers who educate our youth in secondary schools and the instructors who take over where college begins? Criticism of high school's by college officials who decry the lack of preparation among high school graduates for college work has long been a bone of contention between the two groups of educators. What plan of attack could be organized to reduce to a minimum this cause for friction?

Shall Colorado Adopt a Firmer Policy on Nonresident Enrollment

The state-supported institutions of higher education in Colorado enroll large numbers of out-of-state students as has been noted in a previous section of this report. Educators generally agree that the enrollment of superior students from other states tends to enhance the prestige and standards of a college or university. Acceptance of less qualified students, however, acts in reverse. For this reason, many institutions, including some in the Mountain States, have established special scholastic standards for nonresident applicants.

With the impending increased demand for higher education from within the state, would it not be wise for the state-supported institutions of Colorado to consider a policy of restricting nonresident admissions to only superior students? With the ever-increasing competition for state funds among the many state departments, agencies, and institutions, should Colorado continue to accept sizeable enrollments of nonresident students and to

invest in expanded plant and equipment to take care of this heavy influx from other states? Large nonresident graduate enrollments can be justified perhaps during the summer terms when there is a lesser demand for space from Colorado students.

In the fall of 1955 a total of 4,262 out-of-state students were enrolled at the University of Colorado; this was 47.1 of the total enrollment at the university. Of this number 535 were from California. Admission requirements at the University of California (all campuses) and most of the other public four-year schools in that state are much more restrictive than they are in Colorado. For example, a prospective student at the University of California (1) must have a B average in high school, (2) rank in the highest 1/10th of his graduating class, (3) have not less than 12 units of A or B in the last three years of high school, or, (4) have no grade lower than C in high school with not less than 6 units of A or B in the 3rd and 4th years.[20]

The majority of our colleges and universities will continue, in all probability, to enroll student bodies which are national and even international in character. One can readily agree that where a student body is drawn from a variety of economic, social, religious, and racial groups, thus representing a wide range of personalities, interests, and achievements, a much healthier educational climate prevails. A student body with a diversity of background contributes much more to its own education than one make of students from a more restricted area where this diversity is lacking. Recognizing this factor, the question then is, where must the line be drawn on nonresident enrollments in order to insure that the state will be able to take on its own adequately with the funds which will be available for higher education needs? Since there are no accurate figures available on the complete cost of maintaining a student in our institutions of higher education it would be difficult to determine just what the "tab" is for educating nonresidents in Colorado. Even were this figure available it wouldn't be all revealing, as there are certain intangibles which defy measurement in terms of dollars and cents; also, financially speaking, there is the sizeable contribution to the economy of a state by these "outstaters", a compensating factor which evades evaluation in the long-range consideration.

How Can Colorado Effect Improved Coordination Among the Institutions of Higher Education?

Presidents of Colorado's institutions of higher education have met together on a regular basis as far back at 1924, but it has been only in the past five years that this group has made considerable progress toward working together. First efforts at coordination arose from the difficulties encountered periodically when the legislative appropriations committee tried to divide limited funds among the institutions, equitably and on a basis of individual institutional needs. Since there was no quick or simple formula which might be applied, and there was little understanding of one anothers, problems, presidents of the seven institutions decided that it was necessary for each of them to learn more about the institutions of his colleagues. Thus, "The Association of State-Supported Institutions of Higher Education

[20] Higher Education Trend in Utah, Report No. 132, July, 1956. Utah Foundation.

in Colorado" came into active being, and there resulted a whole series of informal comparative studies on tuition and fees, faculty salaries, and fringe benefits, curricula, capital outlay expenditures, etc.

It is readily agreed that this voluntary group has been serving a vital need during a period of urgency. But as the field of higher education in the state becomes more complex with increasing enrollments, and the accompanying need for expanded programs and additional facilities, will this voluntary group be able to function effectively? And as competition for state funds becomes keener, will individual members of this group be able to view impartially the over-all picture of the system of higher education in Colorado? So long as each institution is able to satisfy its demands for what it considers its rightful share of funds available for higher education program, this system may continue to operate acceptably, but as the situation becomes "tighter" and the possibility arises of larger institutions with more persuasive selling ability being able to dominate the scene, will this voluntary organization cooperate smoothly or will the machinery break down because of inner pressures?

When impartial observers decide that certain established fields of study at one school can be more economically and effectively offered at another institution, will it be possible for members of the voluntary association to make, unselfishly, decisions on such changes? If an individual institution is considering the addition of a field of study, expansion of its graduate program, or similar alteration of its curricula, will a voluntary group have the courage to convince that institution of the impracticality of its proposals, if such is the case?

How Can Colorado Meet the Rising Costs of Higher Education?

In a previous section of this report there are outlined the various sources of revenue for support of higher education. Revenue derived from endowments, endowment earnings and private benefactions are relatively minor for publicly supported institutions, since philanthropic giving has generally been reserved for private institutions. This is as it should be for the survival of private education is a necessary ingredient to the free and dynamic society which is our heritage. Therefore, the basic question of finance for publicly supported institutions becomes, "What portion of higher education costs should be borne by the student and what portion by the general public through taxation?"

The pressing need for finances wherewith to maintain institutions of higher education prompts the question, "How much and in what manner should students pay for higher education?" Is it justifiable to think in terms of increased tuition and fee rates in view of the relatively favorable economic conditions which make it possible for more parents to bear a larger portion of their children's education expense? With the significant growth in the number of scholarships and corporate benefits which enable many students from the lower income brackets to attend college, is it not reasonable to expect those students whose parents are financially able, to assume a greater portion of the educational costs of their children? Is it unreasonable

to expect that rates of tuition and fees should advance at the same pace as costs?

Do substantial increases in amounts of tuition and fees tend to keep students out of college or to scare away the gifted students? What effect would increased student costs have on the enrollments and the quality of students in our institutions? What effect would it have on the individual student? Should a system of fees be considered which takes into account the differential costs of varying programs? In those courses which involve lower student-faculty ratios and more expensive laboratory facilities should the student be expected to bear a larger share of the cost than he does under present rates, particularly if the field of study is one in which the future remuneration is more or less guaranteed and in which there is a demand for trained personnel?

One of the major developments of recent years is the growth of alumni support through the successful establishment of annual alumni funds. Although private institutions of higher education have long led the way in alumni support, tax supported universities have made rapid strides in recent years in establishing successful annual funds and operating in an area once considered the province of the private institutions.[21]

As early as 1870, a Yale professor, William Graham Sumner, expressed his views on the obligation which he felt college graduates had toward their alma mater for their education:

> "Many can never pay the debt; a few can become munificent benefactors. There is a very large number, however, between these two, who can, and would cheerfully, give according to their ability in order that the college might hold the same relative position to future generations which it held to their own. The sense of gratitude, the sense of responsibility, the enlightened interest in the cause of education, which are felt by these men, constitute a source which has never yet been tried but which would yield richly."

Has serious effort been made within the state to establish and operate alumni funds? What are the characteristics of a successful alumni fund? A recent leaflet put out by the Council for Financial Aid to Education lists these common denominators of successfully operated funds:

> "Active and effective leadership, informed and enthusiastic volunteer solicitors, a timely and convincing case for alumni contributions, a goal related to the giving potential of the alumni, and competent staff and promotional procedures."

Have we made beneficiaries of higher education fully aware of their financial responsibilities to their colleges?

Money-raising in an institution of higher education is no longer one

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[21] Ernest T. Stewart, Jr., Executive Secretary of the American Alumni Council: "Alumni Support and Annual Giving," The Annals, Sept., 1955

man's burden, that of the multiple-duty president. Hence a development program which wages a continuous campaign to secure funds from all potential sources of support has come to be regarded as an inevitable part of the administrative machinery of a college or university. The basic importance of a development program is that it enables a college or university to chart its growth, to anticipate emergencies, and to meet the legitimate, considered needs of all parts of the institution. Responsibility for raising of funds must be shared by all the institutions' leaders--trustees, faculty administration, alumni, and other friends. Central organization and cooperative responsibility are the twin props of an effective development program.[22]

Should federal funds be considered as a possible means of financing higher education on a continuing basis? Major support with federal funds reached its zenith in the subsidizing of thousands of veterans who have been attending institutions of higher education since World War II under one of the several GI Bills. Federal support of research seems to be fairly well accepted. And the program of federal assistance to land-grant colleges since 1862 for agricultural research and extension activities can be expected to continue. Most recent financial assistance is that given under the College Housing Act of 1950, as amended, whereby loans are made to colleges for construction of housing and other educational facilities of an auxiliary nature. It is pointed out that none of the federal funds are being utilized for strictly educational expenses, such as resident instruction, with the exception of a very small portion of contributions to land-grant colleges and universities.

Few writers on the matter of federal funds as part of the financial foundation for state higher education are enthusiastic about general subvention by the federal government, which, according to Dr. John D. Millet,[23] could lead only to undesirable intervention in educational affairs. Peter Drucker[24] points out that government finance has meant government control of education in every other country and that, in the event of federal government grants, we would have to consider necessary safeguards for administration of the program lest we rush into the worst kind of "Ministry of Education."

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22 "The Importance of College Development Programs", leaflet, No. 14, Council for Financial Aid to Education, January, 1956

23 John D. Millet. "Present Developments in Financing Higher Education," The Annals of the American Academy of Political and Social Science, Sept. 1955, pp. 209-10

24 Peter F. Drucker teaches in the Graduate School of New York University, and has served as a management consultant to large corporations. His article, "Will the Colleges Blow Their Tops?" appeared in Harper's Magazine, July, 1956.

PART III

APPROACHES TO TOMORROW'S PROBLEMS

Preparing for Increased Enrollments

One approach to meeting increased enrollments is to continue to operate traditional, residential four-year institutions for the majority of our youth who pursue education beyond the high school--providing the taxpayers are willing to pay the cost. However, clinging to the traditional system may make it necessary to sacrifice adequate and well-trained instructional staff for "bricks and mortar". Another approach is to transform our college system into a predominantly nonresidential one, particularly in populous centers.

Pressures of increased enrollments have just been making themselves felt in Colorado, (disregarding the post war years when the GI "bulge" resulted in crowding and makeshift arrangements as a matter of expediency). Population growth and coming of college-age for thousands of "war babies" during the next decade should see a marked upswing in the number of young people for whom the state will have to provide post secondary education. There is an immediate need for wise and thoughtful planning in order to develop an overall state plan to guide the expansion of our colleges, universities, and community colleges so that we may avoid having uncoordinated expansion of our larger schools in sheer terms of larger numbers, and a "willy-nilly" system of community colleges.

Mention has been made of the need for enrolling more good students. The real problem, according to Peter F. Drucker[25], is not to get more youngsters into our undergraduate programs; it is not even to get more able students. "The real problem of enrollment is to get more able undergraduates into graduate and professional schools, and to get more able graduates into teaching."

In considering the responsibility for providing education beyond the high school to all who can profit, concentration has been on the material problems--facilities and finances. The most serious problem is intellectual, the difficulty of staffing faculties with competent educators. Where are we going to find the brains required to serve the needs of 6.7 million college students in 1971? If Colorado enrollments are to increase at the national pace there will be approximately 80,000 students attending all Colorado colleges in 1971. And if the present ratio between private and public institutions continues, approximately 56,000 of these students will be in Colorado's publicly controlled colleges.

The state of California, in addition to raising standards for admissions, also implemented regulations which provide: Admission to a state college shall be limited to the number of students for whom facilities and competent instructors are available to provide opportunity for an adequate college education.

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[25]Peter F. Drucker: "Will the Colleges Blow Their Tops?", Harpers Magazine, July, 1956.

The Director of Education, after consultation with the president of a state college, shall determine the number of students for whom there are available facilities and competent instructors at the college.

Toward an Improved Admissions Policy

Selecting the proper approach to the problem of establishing a sound admissions policy is most difficult. The Legislative Council Committee and its staff spent a great deal of time exploring the subject, and as an example of some of the thinking prevalent in higher education circles, the committee quotes from several qualified sources.

For example, Dr. Enarson[26], in expressing his succint approach to admissions policy has stated:

"We know a great deal about probability in human affairs, including chances of success in college. Happily, or unhappily, certain knowledge is denied us. There is no geiger counter, no litmus test for human talent. We have escaped the compelling marginal certainty of the I.Q. test. We should avoid complete faith in any test or series of tests which pretends to measure human potential in all its complexity. The individual human being, thankfully, eludes scientific certainty. Having given the devil his due, let's concede that he is a very efficient devil indeed. Experts in testing can tell us a lot about various dimensions of talent. Add to this a multi-sided evaluation of the student's high school record and his motivations, and you have a very good basis for selecting college material. No school system in recorded history every had a better basis for selection. Does this mean we should turn over the selection process to the experts? Far from it. It does suggest that tools and devices exist for imposing whatever standards of selection the policy-makers of higher education desire. Standards, if you will, which are democratic and practical. We can make real progress in sorting out promising students for college and university training only if restrictive entrance requirements are tied in with a broad, bold program of widening educational opportunity. We must actively seek out that half of the ablest high school graduates who do not go to college. We must actively support community colleges and other approaches which widen educational opportunity even as they relieve the state university of mounting pressures for admission. If we do this in good faith, legislative and public support for the admission standards we want will surely be forthcoming.

"Here is what the Chancellor of the Oregon State System of Higher Education is telling Oregonians:

> 'The foremost obligation of the State Board of Higher Education is to maintain an excellence in collegiate instruction. If the weight of sheer number of students threatens college instructional quality, then it is our clear obligation to control numbers. The time has come

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[26]Panel Discussion: "What Practical and Democratic Methods May Be Evolved for Selecting the Students Who May Enter Upon College Training in the Great Plains?", October 18, 1956, University of Oklahoma, Great Plains Conference.

when the Board must deny admission to those Oregon high school graduates whose record and test scores--and I emphasize a combination of both--indicate that they are poor risks to complete at least two years of satisfactory study.... Out of this, it is hoped that impulsion will be given to movements setting up thirteenth and fourteenth grade opportunities in the various localities.'"

Utah educators recently have expressed concern over the scholastic standards at Utah colleges. For example, the Admissions Committee at the University of Utah reported that last year only about five per cent of the applicants for registration were rejected. The committee recommended that the scholastic standards at the university be raised so as to double this rate. The proposal to raise academic standards at the University of Utah must still be approved by the Faculty Council and by the university administration.[27]

In Part II of this report, in the section devoted to nonresident enrollment policy, there is a discription of the admissions requirements for the University of California and most of the other four-year public colleges in that state. These requirements were put into effect because students were applying for admission to state colleges far in excess of qualified personnel available, and of facilities to accommodate them.

The American Council on Education, at a meeting held in Washington, D.C., in March, 1956, declared: "Opportunity must be given to every American citizen to attain the highest level of education and training of which he is capable." This would mean developing "new educational resources, diverse types of institutions, additional courses of study, new techniques, such as educational television."

Dr. Hollis suggested to the Legislative Council Education Committee at its March, 1956, meeting that it might be helpful for Colorado to establish a uniform policy on admissions for the four-year colleges. While the same examination would be administered to all students requesting admission to colleges, the "cut-off point" for admissions to the various schools and colleges could be different, depending upon the ability necessary to profit from study in the particular school or college. Dr. Hollis stated, "The time is fast approaching when it appears advisable that we select students for admission to our colleges in terms of their ability to profit therefrom. We must decide how to spend our money wisely, keeping in mind, however, that by and large we must do as well by the next generation as they did by us."

Committee members expressed themselves as favoring an admissions policy which would take into consideration the abilities of a prospective student rather than accepting all applicants "just because they live in Colorado." While several legislators felt that establishing of an admissions policy was within the purview of the General Assembly, others were of the opinion that such determination should be made by the several governing boards of the institutions.

Examination of admissions requirements at Colorado's state supported institutions of higher education indicated that rank in high school class

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[27] Higher Education Trend in Utah, Report No. 132, July, 1956. Utah Foundation.

figures rather importantly as one standard of admission, for graduates from accredited high schools. A resident applicant to the School of Mines should rank in the upper one-third; to the University of Colorado in the upper two-thirds; to Adams State College, in the upper three-fourths; Colorado A & M, Colorado State College of Education, Western State College, and Fort Lewis A & M specify no such requirement. Students applying for admission to the first two institutions, who do not occupy proper rank in their respective high school classes, may be admitted by making satisfactory scores on the College Entrance Board examinations; Adams State will admit the lower one-fourth conditionally. All colleges, with the exception of the Colorado State College of Education, specify that graduates from accredited high schools may be admitted upon presentation of at least 15 units of high school credit.

Rank in high school class may have considerable significance if the student comes from a large high school where competition is keen and grade requirements are fairly rigid. It has little or no meaning in many cases. While high school record should be one of the deciding factors, rank in class does not appear to be a particularly valid measure unless scrutinized along with ratings made on a test or series of test administered to all high school seniors.

Students applying from unaccredited high schools must meet varying requirements:

University of Colorado	Applicant is admitted only on basis of pre-admission examinations.
Colorado School of Mines	Applicant must make satisfactory score on college entrance tests and pass examinations in one or more subjects.
Colorado A & M College	Applicant's eligibility determined on results of placement tests.
Adams State College	Applicant is treated as individual; is given special examinations if this appears advisable.
Western State College	Applicants are admitted on probation.
Fort Lewis A & M	Applicants are handled on individual merit.
Colo. State College of Education	High school transcript must show ability to do college work.

Last year, 30 unaccredited Colorado high schools, with graduating classes ranging in size from one to 19 students, graduated 283 young people. To these students, the required college entrance examination serves as the first barrier to college entrance, a barrier which individual students may not choose to hurdle. It has been suggested that we may eliminate a potential genius as a result of using tests, but by the same token, we may also lose one by overlooking the opportunity to discover him through failure to administer statewide tests for all high school seniors.

The University of Colorado and the Colorado School of Mines have both indicated that entrance requirement for nonresidents became more restrictive for Fall, 1956. The following table includes nonresident requirements for each of the seven state supported schools:

Admissions Qualifications for Nonresidents

University of Colorado	Must qualify through satisfactory scores on Scholastic Aptitude test of College Entrance Examinations Board and is accepted on selective basis; must be a graduate of an accredited high school and rank in the upper two-thirds of graduating class.
Colorado School of Mines	Must qualify through satisfactory scores on Scholastic Aptitude Test (Morning Section) of CEEB; must be a graduate of an accredited high school and rank in the upper one-third of graduating class.
Colorado A & M College	In addition to resident requirements, nonresidents will be held for nonresident admission requirements of the land-grant institution in the state where the high school work was taken.
Colo. State College of Education	No distinction between resident and nonresident.
Adams State College	No distinction between resident and nonresident.
Western State College	No distinction between resident and nonresident.
Fort Lewis A & M	No distinction between resident and nonresident.

If Colorado were to initiate a uniform policy of highly selective admissions standards for out-of-state students, the influx of nonresidents to state supported colleges would undoubtedly resolve itself appreciably.

The committee does not wish to create the impression that it regards a scholastic record or achievement in a testing program as the prime qualifications for admission to college. It realizes that substantial weight should be given to personal qualities, such as honesty, social adaptability, conscientious application, willingness to work, and community spirit. However, it is believed that a state-wide testing program would be a step in the direction of establishing a more uniform admissions policy, and would provide one measure which would place all graduating seniors on equal footing.

Toward Better High School-College Relations

Significant efforts toward achieving good high school-college relations are being made in this state through the Colorado Council on High School-College Relations. The initial purpose of the Council, which met informally during the middle and late 1940's, was to correct irregularities in the administration of the Joint Honor Scholarship Program; however, its membership visualized this voluntary group as an effective organ in approaching other problems common to institutions of higher education, and, thus, the activities were expanded to include guidance and counseling of high school students in the selection of a college career. The organization, as it exists today, was established in 1949. Its membership consists of:

Number	Group Represented
28	High school representatives--highly recommended counselors.
18	Official college representatives, one each from private and public institutions in the state.
2	State Department of Education, including Director of Counseling and Guidance.
2	High School Activities Association.
1	Selective Service.
6	Senior college representatives (non-voting).

Since 1927, the Colorado state institutions of higher learning have provided from one to seven scholarships each year to graduates of each accredited high school in Colorado. The selection of recipients is based primarily on scholarship achievement and promise of collegiate success, financial need being a possible consideration. The scholarships are honored by any of the participating institutions. A scholarship holder may transfer from one of the participating institutions to another without invalidating the award. Eligibility includes rank in the highest one-fourth of the graduating class, attainment of at least the minimum score on the qualifying examination[28], and the recommendations of the high school faculty or a committee thereof.

The Joint-Honor Scholarship program is currently administered by the Presidents' Association, through an appointive executive committee composed of administrators from three of the institutions concerned (the seven state supported institutions and the six public junior colleges). Chairmanship is vested in the Office of Admissions at the University of Colorado, and the clerical work is performed there.

One of the functions of the Council is to encourage high school students to select the college best fitted to their needs. According to some Council officials, the practice of "bidding" for students by the institutions of higher

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[28]Examinations are administered to interested students only.

education in Colorado has almost been eliminated. The Council also attempts to make "Career Day" (day on which representatives from various colleges meet with high school seniors at a centrally located high school in the area) a more constructive experience, rather than having it a "day of entertainment with no classes." The day's program is arranged to provide adequate orientation of the students on higher educational opportunities in Colorado and to give those who are interested an opportunity to contact personally college representatives who are present. The Council also keeps students informed of their service obligations.

Opinions expressed by educators attending the June 15, 1956 meeting of the Education Committee, regarding the effectiveness of the Council ranged from one of "just skirted the problem", to those who feel that the Council is performing in a very efficient manner, considering the budget and personnel limitations which are faced by a voluntary group of this type. It was generally agreed that, except in the larger school systems of the state, there is little actual counseling going on, but the Education Committee feels that a great deal of credit is due individuals who are devoting themselves to this project, since it has laid the groundwork for what can eventually be a highly successful high school-college relations program.

Expenses of the Council are defrayed through membership fees of the participating schools, and the budget is nominal. Disclosure of this fact prompted committee members to inquire into the possibility of state financing for the High School-College Relations program as one method of improving this approach to a knotty problem. Dr. H. Grant Vest, Colorado Commissioner of Education, suggested that the state might provide credit based on a classroom unit or part-time unit, to enable a district to employ a part-time or full-time counselor as needed. Dr. Wubben, President of Mesa College, proposed that the state might subsidize high school counseling and guidance personnel in the same manner as homemaking teachers are subsidized.

The committee, in its examination of approaches to this matter, also discussed the feasibility of the state's establishing a commission of personnel, representing both the colleges and the high schools, and authorizing that commission to devise testing machinery whereby high school students would be administered general intelligence and aptitude tests for admission to liberal arts courses, and in addition, would be given such technical tests as might be necessary to determine abilities for admission to technical, engineering, and professional schools. When asked about the relative organizational position of such a commission, Dr. Hollis advised that it be placed neither under sole supervision of the colleges nor under the State Department of Education lest it lose autonomy. He continued to say that this type of program need not require legislation and could be administered under the joint administration of the State Department of Education, the local high school officials, and the college officials, with legislative appropriations probably necessary to facilitate the arrangement.

Individual institutions have augmented the high school-college relations program with activities designed to promote better understanding between higher education and high school officials. Dr. Darley, in his budget request presentation, (December, 1955), stated that relationships between the University and the high schools are improving steadily as a result of inter-visits. He added that high school teachers are doing a much better job of counseling, and

that principals and counselors are often discouraging the poorer student from going to the University. Of the applicants for admission in the fall of 1955, 1,000 were advised by the University that they were unqualified academically.

Special high school-college raltions activities or services carried on at the University are:

Principal-Student Conference: Inaugurated by the university five years ago, this conference is scheduled during the fall. Every high school principal attends this meeting with his high school counselor. They meet with former high school students who are now attending the University, to find out how well the student has adapted himself to college. A series of group meetings is held, followed with a generalization and a report from the counselors.

English Teachers' Conference: This was held for the first time in the fall of 1955 high school English teachers conferred with the University's English Department.

Admissions Office: Three of the staff spend almost all of their time counseling high school students. Approximately 150 of the 200 high schools in the state are visited each year. Several visits per year are made to the major high schools to meet with interested students. All freshmen who desire may take the placement test during the summer during a thirty-day period set aside for that purpose.

Remedial Courses: During the summer of 1956, remedial courses were offered to those prospective freshmen who felt a need for them. One hundred students were enrolled; each could enroll for two courses.

Recruitment of Students for Special Courses: There is no organized plan for the recruitment of students for special fields of study, such as engineering, law, etc. However, the faculties of the individual schools and colleges carry on an incidental type of recruiting when students with particular ability for a specialized field are noted among the arts and science enrollees. Members of the engineering department make special visits to the high schools to interview prospective students. During the 1955-56 academic year, the Department of Chemistry held open house for 150 high school students.

The Director of Admissions at the Colorado School of Mines, H. Dean Burdick, visits each of the high schools in the state once each year and, in the course of his visits, interviews prospective Mines students. Along with high school counselors, Mr. Burdick will attempt to discourage graduates from attending Mines if it appears that they lack the proper background or aptitude for following a career in mining engineering. During the past year, ten to twelve Colorado students were thus advised and 200 outside students were discouraged from enrolling.

It is evident that Colorado does not have a "real program" for recruiting the superior student with whom we are all very much concerned. There is no aggressive plan whereby these "top brains" are singled out and motivated toward higher education portals. As an improved approach to this phase of the problem, it is quite conceivable that state-wide testing, accompanied by an adequate counseling system under the central direction of professional counselors, could draw into our colleges capabilities that are being overlooked under the present system. An "adequate counseling system", is meant to be one

which would make of every teacher a counselor and a system which would convince all superintendents, principals, and member of school boards that the area of guidance and counseling is not a fad or frill but a very necessary ingredient to intelligent selection of college students.

Having identified the student who possesses both high potential and sincere intent, a high school-college relations group should then attempt to remove economic barriers which might stand between the student and a college education. Such a group could perform a liaison function between graduating seniors and individuals or corporations which offer scholarships, so that the interested and talented youth from the entire state could be channeled into higher educational institutions. A "Clearinghouse of Information" on scholarships could be established. Many an excellent student is undoubtedly lost to a promising career because he has been denied encouragement from parents or proper motivation by school officials.

The Denver school system[29] appears to be leading the way toward discovering and fostering this superior student for whom there is much concern. Although still in the formative stages, plans are underway for offering college work to superior high school seniors.[30] Also, a testing program is in the process of establishment, whereby the potential for education beyond the high school will be measured among tenth grade students. The student's expected level of attainment will be determined; the, if the student fails to maintain this expected level, the counselor will take over, attempting to inspire the student to higher proficiency. The system hopes to be able to do a better job of counseling through personal contact with the parents, many of whom are either unaware of their children's potential or who are indifferent. A statistic which speaks very well for counseling in one of Denver's large high schools is the 72 per cent of the East High School seniors who "got their foot into the front door" of a college for Fall, 1956. The over-all percentage for Denver is 50 per cent.

Establishment of a Policy on Nonresident Enrollments

There has been much controversy in Colorado over the large number of nonresidents who attend Colorado's publicly supported institutions of higher education. Several members of the Legislative Council Committee on Education expressed concern over the high proportion of out-of-state students who are admitted and suggested that a particular study be devoted to nonresident enrollments, in an attempt to determine to what extent nonresidents are being subsidized by the Colorado taxpayer.

There are those who argue that out-of-state students are "paying their own way." The current general and educational expense per student, nationally, according to Dr. Hollis, is in the neighborhood of $790. It is difficult to arrive at a highly accurate total per-student-cost figure because capital investment is not easily apportioned, but it is reasonable to assume that

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[29]Dr. Oberholtzer noted at the Education Committee meeting on June 15, 1956, that Stanford University will accept 15 credits of high school work toward the 180 required for a bachelor's degree.

[30]Telephone conversation, James D. Leake, Director, Department of Evaluation and Guidance, Denver Public Schools. November 13, 1956.

accomodations for 7,139 nonresidents who enrolled in Colorado's state supported colleges in 1955 represent a sizeable capital investment. It will be possible to make a more thorough analysis of student costs upon completion of the cost data being compiled by the Presidents' Association through the University of Colorado.

Colorado School of Mines, because of its international reputation in mining engineering, has led consistently in proportion of out-of-state students; however, the proportion has declined steadily since 1950 from approximately 72 per cent to 63 per cent. Over-all proportion of nonresidents has varied from 40.9 per cent in 1950 to 37.8 in 1955. Other out-of-state percentages for 1955 are: (Table, p. 72; graph, p. 73; map, p. 74.)

University of Colorado	47.1%	Fort Lewis A & M	24.4%
Colorado A & M College	28.3%	Adams State College	12.1%
Colorado State College of Education	27.0%	Western State College	10.6%

In a study made recently by the American Association of Collegiate Registrars and Admissions Officers, for the year 1949-50, the following net in-migration and net out-migration rates for the western states were revealed:

State	Per cent	State	Per cent
Colorado	33.0	Kansas	-0.6
Utah	17.0	Nebraska	-1.0
Arizona	6.0	Montana	-15.0
New Mexico	2.0	Nevada	-20.0
Oregon	2.0	Wyoming	-23.0
Washington	0.6	Idaho	-26.0
California	0.4		

These data show that Colorado provided higher education facilities for 33 per cent more students than the number of students living within the state.

The 4,262 nonresident students enrolled at the University of Colorado in Fall, 1955, represented approximately 60 per cent of the total out-of-state enrollees in Colorado's state supported institutions of higher education for that year. Therefore, use of University statistics for illustrative purposes will be more significant than would be use of statistics from the other schools. Further, the University will undoubtedly be the first institution to exercise greater control over nonresident admissions.

Those individuals who are opposed to increases in nonresident tuition and fee rates emphasize the already high charges made by the University of Colorado, as compared with other state universities, and cite Colorado as charging the highest nonresident rate for any state university west of Ohio. The table seems to indicate that, with the exception of Utah, Colorado is the only state in the entire region which has good cause to charge what some consider "high" rates.

As a part of the over-all cost of a college education, tuition and fee rates do not figure nearly as importantly as other costs; the greatest burden on parents is bearing the cost of living expenses away from home. Contrary to some opinion, increases in tuition and fee rates do not act particularly

as a deterrent to students who enroll in Colorado schools. Within the past several years, resident and nonresident rates at the University of Colorado were raised from approximately $90 amd $245, respectively, to $172 and $528. Nonresident enrollment at the University increased from 3,595 in 1952 to 4,262 in 1955, a gain of 667 students. More than doubling rates did not seem to discourage large numbers of out-of-state students from enrolling at the University.

The University of Colorado, in a recent message to counselors in high schools outside the state of Colorado, gave the following data on entering freshmen in the Fall of 1955:

Number of Colorado Freshmen	1,174
Number of Out-of-State Freshmen	1,204
Total	2,378

* * * *

Rank in High School Class by Thirds

	Upper Third	Middle Third	Lower Third
Colorado Residents	665	401	108
Out-of-State	681	437	86
Total	1,346	838	194
Per cent	57%	35%	8%

A total of 523, or 43.4 per cent of the out-of-state students ranked in the lower two-thirds of their high school graduating classes. If the state wishes to adopt a more selective admissions policy for nonresidents, it appears that, in keeping with recommendations of leading educators who feel that universities should concentrate on upper division and graduate work, the University might scrutinize more closely applications from entering nonresident freshmen.

During the academic year 1954-55, withdrawals and drop-outs at the University of Colorado totalled 1,016 students. This included 567, or 13.3 per cent, of the 4,264 resident students and 449, or 11.3 per cent, of the 3,956 nonresident students enrolled. It cannot be definitely ascertained what the "real" reasons are for a student's withdrawal or drop-out, but a far greater percentage is undoubtedly due to scholastic difficulties and failure to adjust than the statistics[31] indicate. With improved selection of nonresidents, it appears that the percentage of withdrawals and drop-outs among that group could probably be reduced.

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[31]Information on Withdrawals During Fall Semester, 1954-55, During Spring Semester, 1954-55 and on Drop-outs Between Fall Semester, 1954-55, and Spring Semester, 1954-55, University of Colorado.

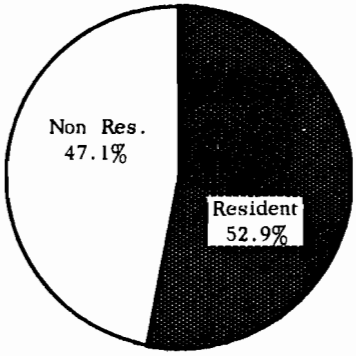
RELATIONSHIP--RESIDENT, NONRESIDENT ENROLLMENT
COLORADO'S STATE SUPPORTED COLLEGES
Fall, 1950-1955

Year	Adams State		Colo. A & M		Colo. State		Colo. Sch. Min.		Univ. of Colo.		Western State		Ft. Lewis A & M		Total		Grand Total
	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	
1950	391	49	2713	964	1493	681	284	728	4015	4046	564	100	100	49	9560	6617	16177
1951	335	35	2704	798	1230	526	259	593	3415	3671	537	127	101	37	8581	5787	14368
1952	326	40	2609	1017	1234	527	290	623	3518	3595	562	70	126	44	8665	5916	14581
1953	345	36	2593	952	1290	573	290	586	3677	3585	618	73	116	37	8929	5842	14771
1954	362	45	2921	1066	1581	620	339	657	4264	3956	654	93	123	44	10244	6481	16725
1955	451	62	3228	1277	1968	727	396	668	4778	4262	744	88	170*	55*	11735	7139	18874
							Per Cent of Total Enrollment										
1950	88.9	11.1	73.8	26.2	68.7	31.3	28.1	71.9	49.8	50.2	84.9	15.1	67.1	32.9	59.1	40.9	
1951	90.5	9.5	77.2	22.8	70.0	30.0	30.4	69.6	48.2	51.8	80.9	19.1	73.2	26.2	59.7	40.3	
1952	89.1	10.9	72.0	28.0	70.0	30.0	31.8	68.2	49.5	50.5	88.9	11.1	74.1	25.9	59.4	40.6	
1953	90.6	9.4	73.1	26.9	69.2	30.8	33.1	66.9	50.6	49.4	89.4	10.6	75.8	24.2	60.4	39.6	
1954	88.9	11.1	73.3	26.7	71.8	28.2	34.0	66.0	51.9	48.1	87.6	12.4	73.7	26.3	61.2	38.8	
1955	87.9	12.1	71.7	28.3	73.0	27.0	37.2	62.8	52.9	47.1	89.4	10.6	75.6	24.4	62.2	37.8	

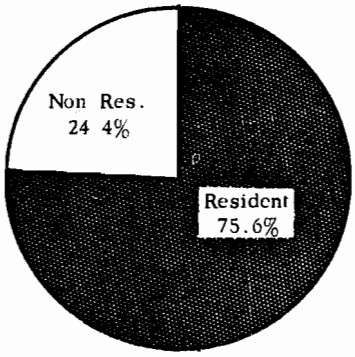
* estimated

RELATIONSHIP--RESIDENT, NONRESIDENT ENROLLMENT
Colorado's Seven State Supported Institutions
of Higher Education
Fall, 1955

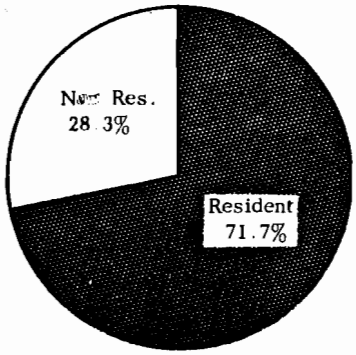
University of Colorado



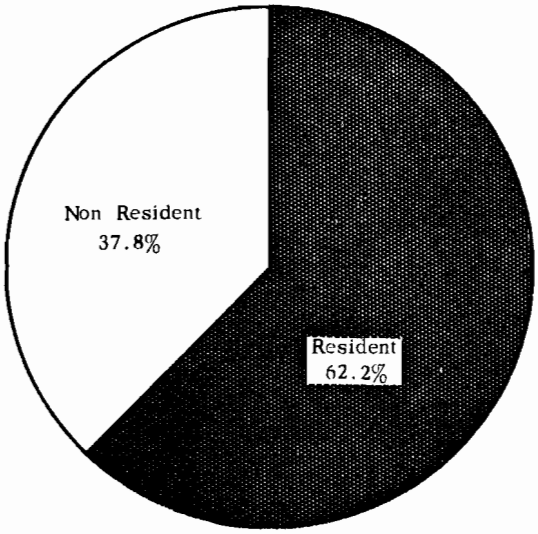
Fort Lewis A & M College



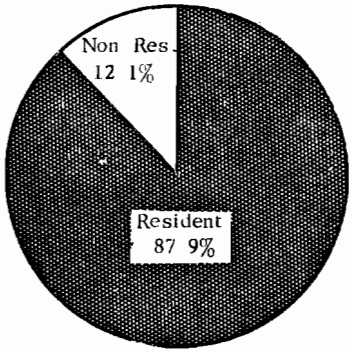
Colorado A & M College



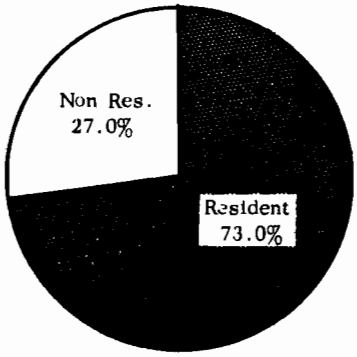
Colorado's Seven State Supported Institutions
of Higher Education



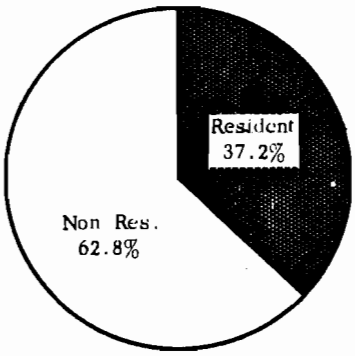
Adams State College



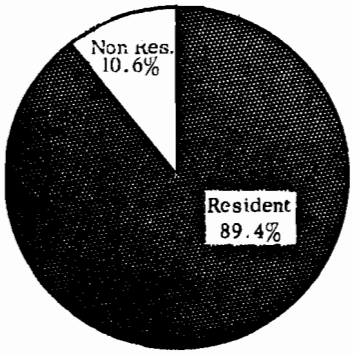
Colorado State College of Education

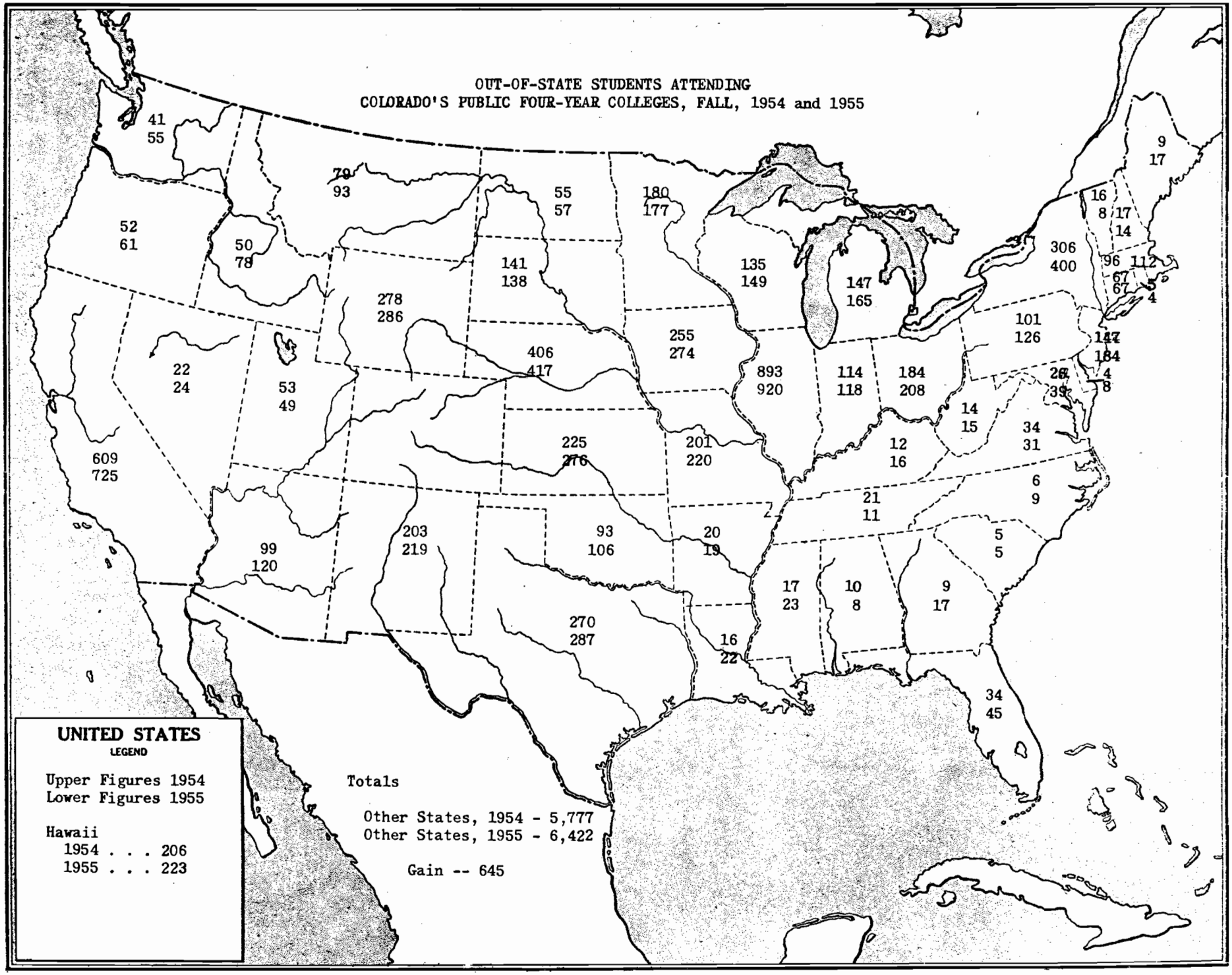


School of Mines



Western State College




OUT-OF-STATE STUDENTS ATTENDING
COLORADO'S PUBLIC FOUR-YEAR COLLEGES, FALL, 1954 and 1955
41
55
52
61
50
78
79
93
55
57
180
177
141
138
135
149
147
165
278
286
255
274
406
417
22
24
53
49
893
920
114
118
184
208
306
400
96
67
67
112
5
4
101
126
14
15
34
31
609
725
225
276
201
220
12
16
6
9
21
11
2
203
219
93
106
20
19
99
120
5
5
17
23
10
8
9
17
270
287
16
22
34
45
UNITED STATES
LEGEND
Upper Figures 1954
Lower Figures 1955
Hawaii
1954 . . . 206
1955 . . . 223
Totals
Other States, 1954 - 5,777
Other States, 1955 - 6,422
Gain -- 645
HOTCHKISS MAPPING CO., DENVER

The University of Colorado and the Colorado School of Mines have both indicated that they have initiated a more selective admissions policy for nonresidents, and Colorado A & M College has also signified intention of curtailing nonresident enrollments.

Overall Coordinating Machinery for Higher Education

During the early development of American higher education, as each new institution was created, a separate governing board was established to supervise its operation. In more recent years the scope of responsibility of many boards has been enlarged to include two or more separate institutions. The Board of Trustees of the State Normal Schools in Colorado is an example of such a board, as is the State Board of Agriculture which supervises Colorado A & M and Fort Lewis A & M.

There are, today four types of higher education organization in the forty-eight states, as indicated in the table on page 76. Briefly described, they are:

1. Centralized Single Governing Board: Under this plan, a single governing board is responsible for the management, control, and operation of all state higher education institutions. There are fifteen states which use this type organization, if we include Wyoming and Nevada which have but one state institution of higher education.

2. Decentralized Supervisory or Coordinating Board: This type of board is a comparatively recent development, five states having adopted this plan since 1941. The decentralized plan of overall control calls for a regulatory or coordinating board which is responsible for the general supervision and guidance of a unified system of higher education whose components are administered by individual governing boards. These boards assume varying degrees of responsibility and authority depending upon the legal position of the educational institutions with respect to state administrative control. Two states, Texas and Wisconsin, saw fit to establish this type coordinating board during the 1955 legislative session.

3. Individual Governing Boards for Each Institution: About one-fifth of the states operate each institution of higher education with an individual governing board.

4. Boards of Single and Multiple Jurisdiction: Nineteen states, including Colorado employ partial grouping of institutions under governing boards. The primary purpose of partial grouping of institutions appears to be coordination of institutions which emphasize teacher education.

Overall coordination of higher education in Colorado was first discussed by the Legislative Council Committee on Education at its March, 1955 meeting, when organizational patterns of other states were examined. The plans which have been established in several of these states will be described briefly to familiarize the reader with the nature of central coordination.

ORGANIZATION OF HIGHER EDUCATION IN THE FORTY-EIGHT STATES

	Centralized Sing. Gov. Bd.	Decentralized Coord. Board	Indiv. Bds. Each Inst.	Bds. of Sing. & Mult. Juris.	No. Bds.	No. of Institutions
Alabama				X	4	9
Arizona	X				1	3
Arkansas			X		9	9
California				X	3	12
Colorado				X	4	7
Connecticut				X	2	5
Delaware			X		2	2
Florida	X				1	3
Georgia	X				1	15
Idaho	X				1	2
Illinois				X	3	6
Indiana				X	3	4
Iowa	X				1	3
Kansas	X				1	5
Kentucky			X		6	6
Louisiana				X	2	10
Maine				X	3	8
Maryland				X	4	8
Massachusetts				X	6	13
Michigan				X	5	8
Minnesota				X	2	6
Mississippi	X				1	8
Missouri			X		7	7
Montana	X				1	6
Nebraska				X	2	5
Nevada	X				1	1
New Hampshire				X	2	3
New Jersey	X				1	6
New Mexico		X			7	7
New York		X			27	33
North Carolina			X		10	10
North Dakota	X				1	9
Ohio			X		6	6
Oklahoma		X			6	18
Oregon	X				1	6
Pennsylvania		X			14	14
Rhode Island	X				1	2
South Carolina			X		6	6
South Dakota	X				1	7
Tennessee				X	2	7
Texas		X			9	22
Utah				X	3	5
Vermont				X	2	4
Virginia				X	6	10
Washington			X		5	5
West Virginia				X	2	11
Wisconsin		X			4	12
Wyoming	X				1	1
Total	15	6	8	19		

New York: In New York, the state legislature created the State University in 1948 as a corporation within the state education department. The trustees of the State University of New York operate the state colleges and have general supervision over contract colleges. The local institutional boards in New York are governing boards of the separate institutions but act in an advisory capacity on certain matters. The central board has the power to establish new schools, both four-year and community colleges (junior colleges), in accordance with a master plan. It also appoints administrative heads of the state operated institutions, based on recommendations of the local boards. The central board controls admission of students, tuition charges, and like matters.

Oklahoma: The Oklahoma State Regents of Higher Education, established by constitutional amendment in 1941, is a state-wide coordinating agency, which possesses broad authority over Oklahoma's eighteen institutions of higher education. The regents prescribe functions and standards of higher education applicable to each institution. From a lump sum appropriation made by the legislature, the regents allocate funds to each institution on basis of the needs and functions. They also establish fees at the various institutions under its jurisdiction, subject to authority vested in the central board.

Oregon: A Board of Higher Curricula was created by the state legislature in 1909 for the purpose of eliminating duplications in courses of study or departments in the state institutions of higher education. This board and the governing boards for the institutions were abolished in 1929 by the act creating the State Board of Higher Education. The State Board of Higher Education, whose professional staff is headed by a chancellor, is responsible for the operation of the university and the colleges in Oregon. All of the institutional presidents report, through the chancellor, to this Board, and the board has final jurisdiction in all matters; no local governing boards exist.

New Mexico: The New Mexico Board of Educational Finance, established by statute in 1951, exercises no direct powers of supervision, but has the authority to review and coordinate budget requests of the several institutions. By statute it is required to be concerned with the adequate financing of each institution, and with the equitable distribution of available funds among them. Each of New Mexico's state controlled higher education institutions has its own board with complete authority for control and management.

The Board of Educational Finance in New Mexico, in its first year of operation studied the budgets of the institutions prior to their submission to the legislature, made analyses of the enrollment and financial data for each institution, and surveyed the curriculum fields of specialization and teaching loads of each institution. In its 1953 session the New Mexico legislature followed exactly the distribution pattern recommended by the board except that funds were not available to permit full amounts recommended by the board. The New Mexico plan seems to provide for effective review of institutional budget requests for long-range coordination of institutional programs, while at the same time assuring that the control and management of each institution remain with its Board of Regents, administrative officers and faculty who are close to the local scene.[32] Dr. Hollis told the committee

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[32]"Actions of the 1953 Legislature of New Mexico", Higher Education, 10:7 September, 1953.

that the New Mexico legislature feels that it is getting its "money's" worth" from the Board of Educational Finance and also that the success of the board is undoubtedly due to its rather loosely knit pattern which has none of the earmarkings of dictatorship.

It will be noted that Oregon was the only state to abolish local governing boards, a move which could lead to a type of dictatorship, depending upon the chancellor who is selected to head the central board. The success of any coordinating board of higher education will depend upon the personality and ability of the chancellor, executive secretary, or whatever his title. This individual should serve on a commensurate basis (from the standpoint of both position and salary) with the college presidents so that the college presidents will not view him apprehensively as a competitor for their particular positions.

The committee, in studying approaches toward achieving coordination for higher education in Colorado, discussed the voluntary association of presidents in Colorado and expressed concern as to whether or not this group under its organizational pattern could produce a real, overall "state program for higher education". Dr. Hollis was not enthusiastic about the ultimate success of a voluntary group--he feels that voluntary coordination of higher education is not especially effective and does not recommend legalizing such a group. There appears to be no problem in establishing a coordinating board for higher education even though one or more institutional governing boards in a state have been established by the constitution. Dr. Hollis commented, "A coordinating board legislatively established is a tool of the legislature, and can be very effective."

As a result of its discussion of possibilities of coordinating higher education in Colorado on a more formal basis than heretofore, the committee decided to request the voluntary association of presidents to conduct a cooperative study on several immediate problems: i.e., high school-college relationships; faculty salaries at the various institutions; uniform financial reporting; extension and adult education; and tuition and fees. Currently in progress as a result of the committee's suggestion is a study of student credit hours and cost analyses for the seven state supported institutions of higher education, patterned after the studies accomplished in New Mexico under the Board of Educational Finance.

Meeting the Costs of Higher Education

Several approaches have been suggested to meet the problem of increased revenue needed for higher education. One approach is to raise student tuition and fees, resident as well as nonresident. Many questions were raised in Part II relative to the position of tuition and fees as one of the major sources of financial support for higher education. Resident tuition and fee charges range from a low of $126.50 per year at Adams State College to a high of $183.00 at Colorado A & M College. Nonresident rates start at $150.75 at Colorado State College of Education, with the high of $528 being charged at the University of Colorado. (This is excluding the $1,383.00 nonresident Veterinary Medicine Fee at Colorado A & M).

It appears that the rates for residents are very much in line with the nationally accepted "rule of thumb", whereby, according to Dr. Hollis, residents should be expected to pay at least one-fifth of the educational and

general cost per student. At the same time, he stated that rates for nonresident students should be commensurate with tuition and fees charged by private institutions in the state. Here is a table showing nonresident tuition and fee rates at the publicly controlled institutions of higher education in Colorado as compared with rates at private schools.

Publicly Controlled		Privately Controlled	
University of Colo.	$528.00	Denver University	$630.00
Colo. School of Mines	527.00	Colo. College	625.00
Colo. A & M College	423.00	Loretta Heights Col.	480.00
Colo. State Col. of Education	225.75	Regis College	450.00
Western State College	217.50		
Adams State College	151.50		

A study made by the University of New York[33] in 1955 indicates that for the academic year 1955-56, the University of Colorado ranked tenth in the nation in amounts charged for annual nonresident tuition and fees. Charging more were the universities in Delaware, Maine, New Hampshire, Rutgers (New Jersey), North Carolina, Ohio State University, Rhode Island, Vermont, and Virginia. Highest charge was $720 at the University of Vermont, the only state in the nation which had a higher rate of inmigration than Colorado in 1949-50. Thus it appears that the University of Vermont may be making use of relatively high nonresident tuition rates to build up a battery against out-of-state enrollments, and also to raise nonresident fees closer to the actual cost of educating these students. Dr. Hollis suggested this very measure at the March committee meeting.

Factors present today which tend to relieve the student's burden of meeting increased charges are: the general economic well-being of the nation which has increased the number of families able to send their children to college (students also have much better opportunities to meet a portion of their expenses through remunerative employment both during the academic year and during summer vacations); the sharp upturn in scholarship and other financial aid programs; and the possibility of tax relief as a result of proposed federal legislation which will allow credit against federal income tax for a portion of tuition costs, for taxpayers with children in college. A more intangible factor is the aspect of the lifetime income of a college graduate as compared with that of a noncollege graduate.

The Commission on Financing Higher Education, in a staff study, has estimated that a 25 per cent increase in student charges might be expected to result in a decrease of only five per cent in student enrollments. As 1970 with its prospective larger number of students seeking higher education draws nearer, the liklihood of further increases in student charges having adverse effect on enrollment diminishes further. On the other hand, excessive reliance on student fees as a source of income presents the danger that educational standards and objectives may be compromised in order to maintain a profitable volume of student enrollment. Admission standards at some institutions might

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[33]Tables supplement to New York University Report on College Fees, prepared by Edith Baikic, November, 1955.

conceivably be lowered in order to take in a sufficient number of students able to pay the fee, and the type of courses offered may tend to be determined primarily on the basis of their "sales appeal".

The proposal to charge tuition and fees on actual costs of varying programs might have adverse effect in that some students, due to their limited finances, would select lower cost courses and others, in more favorable financial position, would enroll in higher cost courses because of future earning possibilities. High student charges for certain professional and technical courses would not be advisable without offsetting financial aid programs.

The establishment of student tuition and fees is a matter for each individual institution to study. Rates will have to be decided in terms of the sources from which it draws its students, its sources of income and the policies of its competitors.

Another approach to the finance problem is through alumni support. In recent years the American Alumni Council Fund Survey has been making a determined effort to uncover and publicize the figures for total alumni support. In 1954, 791,008 alumni, or 20 per cent of those solicited, contributed $21,619,035 to annual funds; however, the report indicates that the total alumni contributions to 352 institutions amounted to about $63 million. The 352 institutions represent about one-fourth of the degree granting institutions in the country. John A. Pollard in his book How to Raise Money for Higher Education, cites the $21 million figure and observes: "If this annual giving were capitalized at 5 per cent it would represent roughly $430 million or about one-fourth of the aggregate endowments now possessed by all of America's colleges and universities."

Most of the colleges and universities which have achieved effective results with alumni contributions have used five means or methods of solicitation: central mailings, class agents, local clubs, geographical teams, and personal approaches. The plan at Dartmouth is for alumni to contribute each year the equivalent of the school's income from endowment. In 1954 these contributions produced the equivalent of the income on $17 million, about half the total endowment of the college, with which the college was able to meet 13 per cent of its operating expenses. In the ten-year period from 1944-1954, annual contributions at Dartmouth rose from $284,565 to $700,365.

Active alumni support of an institution will usually attract support from other private sources, even in the case of tax supported institutions. The Ohio State University Development Fund organized in 1938 has brought in more than $4 million to the university, and alumni support has encouraged the Ohio legislature to make increasingly liberal appropriations for the university.

Another approach is to obtain direct financial assistance from the business community. The concept of corporate aid for higher education as a supplement to alumni giving appears to have great appeal to companies, which, in considering how they may help, are asking what the alumni are doing for their institutions. The General Electric Company has offered to match, up to a $1,000 maximum, the annual gifts made by its college-graduate employees to their respective alumni funds. The Scott Paper Company has initiated a similar program, as has the Walter Kidde & Company.

The Colorado School of Mines disclosed early this year the blueprint for a 20-year development plan, to cost $20 million in capital outlays and $450,000 in additional annual spending. According to Dr. Vanderwilt, president of Mines, the school's "Horizon Plan" calls for financing by private gifts and endowments to supplement state appropriations. In a statement regarding the plan Dr. Vanderwilt said, "In the past the state of Colorado has supplied most of the money to build Mines into one of the world's outstanding educational institutions. We have confidence that the state will continue to support the college with fairness to the limit of its ability. It is obvious, however, that to maintain its position at the forefront of our nation's engineering colleges, Mines will need continued supplementary support from nonstate sources in the future. The "Horizon Plan" will save the state money and actually will increase the valuation of a state-owned asset."

The plan which will stress quality of education rather than quantity, emphasizes faculty improvement through research, professional growth, stronger salary scales, faculty additions and graduate fellowships. Major items of cost would include $2.5 for land acquisition, $3.15 for new equipment, and $2.225 million for establishment of new acreas of study during the next 20 years. Dr. Vanderwilt commented, "The school makes no apology for inviting its friends to assist. There is no nobler use for money than investing it in a college dedicated to the education of young men."

Committees assisting with the plan are made up of corporation executives, alumni, parents of Mines students, the Golden community, a group seeking assistance from various national foundations, state leaders, individuals, and others.

Literally hundreds of citizens have assisted in development of the "Horizon Plan" since Dr. Vanderwilt became president in 1950. One of the first steps was to hire in 1951 an assistant to the president who spent four years revitalizing the school's public relations and organizing for long-term development.

Another success story is that of the University of Denver, which the Council for Financial Aid to Education hails as "a stirring chronicle of what trustees can do when asked to accept specific duties." A program of corporate giving which was instituted at the university in 1951 shows the following progress:

Year	No. of Firms Contributing	Amount Contributed
1951-52	38	$ 76,400
1952-53	91	193,741
1953-54	116	211,682
1954-55	134	230,725

Initial soliciting was done by four members of the board of trustees who either owned their own businesses or were chief executives of the firms for which they worked. They decided to request each corporation or business concern with a Dun and Bradstreet rating of AAA1 to support one professor a year at an arbitrary base of $5,000. All other prospects were to be evaluated on

a proportionate basis. Ultimately other trustees volunteered as solicitors, and in several instances donors themselves offered to make calls on prospects. The results of the Industry Support Program have surpassed every original hope of the University of Denver. An effort to mobilize potential as the University of Denver has might well bring widespread benefits to the nation's financially hard-pressed colleges and universities.

In citing examples of solicitation of private funds for higher education the committee does not necessarily advocate this avenue of financial support to any degree. However, it is recognized that a far greater proportion of college students attend publicly controlled institutions in Colorado than is generally the case in the region to the east of the Mountain States. Consequently, it is felt that in instances where publicly supported institutions would not be invading the domain of private institutions, it is both proper and ethical to solicit actively financial support from business and industry which owes much of its success story to the colleges and universities which trained their employees.

Community-Junior College Development

The Legislative Council Education Committee initiated its survey of higher education in Colorado with no preconceived notions as to any particular area or areas of study on which it intended to concentrate. Decisions on any specific approach to higher education needs in the state were deferred pending examination of data which had been collected. Nevertheless, several members proposed, at one of the earlier meetings, that the committee turn its attention to the community-junior college as a partial solution to higher education needs in Colorado. As the work of the committee progressed, additional members, supported by educational leaders in the state, devoted more thought and discussion to the topic of the community of junior college and its place in the educational system of the state.

In a discussion of the reevaluation of the system of higher education in Colorado, at the March meeting of the Committee, Dr. Hollis advised the members to make an assessment of the present programs at the state colleges, and then in terms of forseeable goals, to take steps to fill the apparent gaps. The gap, members agreed, is in the post-secondary area, and the committee sees expansion of that area as one of the approaches to meeting educational requirements and accommodating increased enrollments. The proposal of establishing additional extension centers out of the state university received little support, as such centers usually take on the coloration of the parent school in supplying lower division arts and science courses, thereby not fully serving the real need, that of providing a technical-vocational type of training to meet the indigenous needs of a particular community. It was also brought out, at a later meeting, that there is a tendency on the part of the university to "treat the home campus better" than the extension center and to operate a center as a "break-even" venture.

Both Dr. Hollis and Dr. Martorana pointed out the excellence of the Colorado Junior College Act of 1937, and proclaimed it one of the better acts of its kind in the United States, a factor which in their estimation, accounts for the healthy status of the junior college in Colorado. Dr. Martorana added that the three-way formula for financing operating expenses of the public junior colleges--local taxation, tuition and fees, and state aid--is basically sound. The committee decided that the time has arrived for Colorado to

develop a state-wide plan for community colleges, a plan which would continue to be operated in conformity with the present pattern, local support and control, supplemented by state aid.

At the September meeting, Dr. Martorana outlined some of the criteria which should be met in a district that is considering the establishment of a community college:

1. Population centers should be identified, and industrial and geographic areas surveyed to determine the nature and extent of post-high school needs in the community in question.

2. The minimum number of collegiate level daytime students (full time equivalent) which will enable operation of a reasonably good program is 200 students. A minimum of 300 is desirable if the relatively expensive equipment associated with some vocational programs is to be used.

3. Approximately 500 high school students will be needed in a district as a base from which to draw a junior college enrollment of 200 students.

Dr. Hollis in tracing the history of educational movements in the United States cited the community college movement as part of the broadening base of education in this country. Up to the time of World War I the base of universal education was the eighth grade; between World War I and World War II the base was widened to include completion of high school. In another generation, 30 years, Dr. Hollis forsees completion of junior college to be as common as completion of high school is today. There is a new cross section of our population, socially and economically, entering the junior college type of training, differing from the students who formerly enrolled in our senior colleges. More money will be spent on youth who formerly terminated their education at the high school level; more money must be spent to sustain the automotive and technological age in which we find ourselves. The appointment of the President's Committee on Education beyond the High School recognized this need; Congress has authorized $650,000 for state conferences on education beyond the high school. Dr. Hollis concluded his remarks by saying, "It appears that the legislative group in Colorado is a jump ahead of the national scene."

In planning for the expansion and development of the community college in Colorado there are several pitfalls to be avoided. One is the pressure brought to bear by a community for converting an established first-rate junior college into what might prove to be a mediocre four-year institution, thus defeating the original and primary purpose of a community college. Another is to establish a community college which is nothing more than a continuation of high school, or a school which offers only lower division college courses; such a program would be a poor substitute for the community college concept. A third step in the wrong direction would be to allow districts to establish, indiscriminately, community colleges with no overall state plan. To avoid the latter, it is felt that legislation should be passed to require that plans for the establishment of a new community college be cleared through the State Department of Education.

Closeness of facilities has a great influence on who goes to college. A community which couples low-cost post-secondary education with proximity of facilities makes it possible for many more youngsters to continue their

educations than is possible under the system of traditional four-year colleges which places on parents the burden of transportation and living costs away from home. Of the 1,807 full time students reported to be attending the six public junior colleges in Colorado, in Fall, 1955, a total of 1,314 or 72.7 per cent live in the six counties in which the colleges are located. Preliminary findings compiled on the state supported institutions show that there is a high correlation between location of colleges in areas and the number of students attending the colleges from those immediate geographic areas.

The committee discussed the several types of plant facilities for housing of community colleges. The college might utilize high school plant facilities on an "after-four" basis; the college could be housed in a separate wing of the high school building with separate identity of the community college program; or the community college can be given complete self-identity with separate plant facilities. The latter arrangement is the most successful, as few high school plants are geared to communtiy college activities.

Elbert K. Fretwell, in the 1956 Yearbook on The Public Junior College observes, "Use of high-school buildings on a late-afternoon and evening basis has been employed in some instances, but this has been a deterrent to rapid development. However attractive a building may be, sharing it with high school pupils may make difficult the development of a mature college spirit or atmosphere." Dr. Marvin Knudson, president of Pueblo College, who has had experience with the integrated type high school-junior college program said there is no comparision between a system under which the junior college has its own identity and the program which makes use of high school facilities.

Expansion of present facilities poses one of the more serious problems for the existing junior colleges in Colorado. Dr. Dwight Baird, President of Trinidad State Junior College, called attention to the inadequacy of the tax base in junior college districts (one county in the case of each of the six junior college districts in the state) which is too small to raise sufficient funds for plant expansion. Several committee members stated that it might be advisable to enlarge the present districts by including additional counties, or to explore the possibility of statewide junior college districting. It was pointed out that students from adjoining counties take advantage of a nearby junior college with no expense involved by the county of residence. Education of these students should rightfully be considered a state responsibility.

The six junior college presidents, having been requested to present their ideas on a local-state partnership plan for financing of capital outlay at the junior colleges, drew up the following six-point plan:

1. Statewide Study of the Junior College Situation

That a comprehensive statewide study of the junior college situation in Colorado be initiated by the Legislative Council.

2. Matching Funds for Capital Outlay

It is recommended that a study be made of the feasibility of state assistance for capital outlay on a matching basis, these funds to be used for new buildings and equipment for the various Junior Colleges as approved by the

State Board of Education (excludes Athletic Stadia). Any funds allocated in this manner would be outright grants from the Legislature to the institution involved.

3. Matching Capital Funds for Past Performance

Since the communities presently supporting junior colleges have carried the total load for capital outlay since their organization, it is suggested that: The Council study the practicability of matching capital funds that have been incurred since 1937 (date of Junior College Organization Act) and that such allocations be made available for future approved building programs or for the payment of outstanding bonded indebtedness. There was considerable discussion on this suggestion; the general feeling was that it would be quite difficult to work out a satisfactory formula.

4. Equalization (no automatic equalization recommended)

The Junior College Presidents by majority vote recommended that the Council study the idea of providing additional help to junior college districts which are unable to meet their state approved capital needs. One possible manner of working this out would be as follows: If by a maximum levy of 1 mill for capital outlay the district cannot meet its 50% share of the approved building program, by 20-year bond issue of otherwise, the state will make up the difference to that district. Dr. Martorana commented that this idea has much merit.

5. Charge Back Law for Current Operation

A majority of the Junior College Presidents, with some dissenting, recommend that a study be made of the idea used in some other states of charging the counties which do not maintain junior colleges, a pre-determined amount for students from that county attending a junior college in a district that does support a junior college. This program would be state administered and the funds realized in this manner would revert to the junior college districts educating such students. Dr. Martorana feels that this arrangement makes sense, and too, it could contribute to sound junior college district reorganization.

6. Post War Fund

The group endorses the idea that the presently named Post War Fund Act be re-enacted as a permanent feature of the Colorado School Law and that it be given a more suitable title. The reaction to this endorsement appeared to be unanimous.

In a previous section of this report it was mentioned that the Denver School System is considering the possibility of using three new high schools, now in the planning stage, for offering junior college work in the late afternoons and evenings. No immediate action is contemplated since the buildings are scheduled for completion about 1959 or 1960. But Dr. Oberholtzer feels that establishment of a community college in the Denver metropolitan area is a probability in the not too far distant future.

Dr. Louis T. Benezet, president of Colorado College in Colorado Springs, said that the answer to mass-education is not "our present system of rather

isolated, small four-year institutions of higher learning," but instead that, "it seems safe to predict that the community college will grow into a nation-wide capstone of the public school system." He added, "I should be surprised if Colorado Springs does not have a community college within five years."[34]

At a recent meeting of the Colorado Association of Colorado School Boards it was revealed that at least four other localities in Colorado are planning to establish tax supported junior colleges. Cities suggested as sites for junior or community colleges are Longmont, Walsenburg, Glenwood Springs, and Steamboat Springs. The latter two communities are in the five-county area of Moffat, Rio Blanco, Garfield, Routt, and Eagle; representatives from these counties met during the last week in November, 1956, to discuss the formation of a junior college district.

In this report members of the Legislative Council Committee on Education hope that they have relayed to the members of the Colorado General Assembly and to the people of Colorado a message which strikes home. There is no panacea, there is no composite answer to the many complex and thought-provoking questions which have been raised. The problems are not unsurmountable; they will best be solved through mobilization of the unified efforts of the people of Colorado working through their duly elected and appointed officials. Much time and effort will have to be devoted to wise and thorough planning for the total educational system best suited to the state of Colorado.

The committee wishes to conclude this message with thoughtful comments borrowed from Dr. James B. Conant's The Citadel of Learning.

> "The unique features of the American pattern are not to be found by examining our professional education. They are found by noting first that there is no separation of pre-college or pre-university students at an early age (except for a very few who attend private boarding schools or country day schools), and second, that a large fraction of the youth eighteen to twenty years of age is enrolled in some college or university. That both characteristics are firmly embedded in the American tradition, I have no doubt. They will not be altered in the future; talk about limiting college enrollment to a relatively small elite is quite beside the point. A larger rather than a smaller fraction of the youth will in the future enroll in post-high school institutions. But it by no means follows that almost all these students should be accommodated in four-year colleges or universities. There would be no inconsistency with our educational ideals if local two-year colleges were to enroll as many as a half of the boys and girls who wished to engage in formal studies beyond the high school. At present the number of two-year colleges is relatively few and their total enrollment small. But if they were vigorously supported and expanded as the wave of increased numbers hit the universities, the distribution of youth among the various types of educational institutions might be radically altered without diminution of the percentage of youths

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[34]"Community College Due, Benezet Says," Colorado Springs Free Press, November 9, 1955.

receiving an advanced education. If this were done, the composition of the student bodies in the universities would change without any reduction in size; the emphasis would shift toward professional education. That such a shift would be beneficial for those universities now aiming as becoming first rate scholarly institutions few would question. On the other hand, if some such development does not occur, the pressure of applicants on the tax supported universities will force a rapid and enormous increase in the teaching staff. The quality of the faculty is bound to deteriorate and more than one promising center of research and professional education will become a training institution.

"There would seem to be great advantages, therefore, in preparing now for the time, only a few years hence, when the flood of college students will be at hand. And those preparations, to my mind, should consist primarily in the establishment of many local two-year colleges. They should be planned to attract the large majority of the youths who now enter a four-year college or university with little intention of completing a four-year course of study. The fact is often overlooked that about one-half of the students who enter our colleges and universities drop out during the first two years.

"As the size of the graduating classes of the high schools increases, more and more graduates should be induced to stay at home and attend the local college. I use the word induce because in order to accomplish the change here advocated it will be necessary to develop strong attractive forces in the two-year colleges. It will be necessary also for our universities to be content with keeping their present size and aim not at a larger student body but at a somewhat different distribution of aptitudes and interests in the freshmen class. For all this to be accomplished, the American public must be convinced that the proposed changes are in the best interest of the nation. This, I believe, can be demonstrated to the citizens primarily interested in the education of those young people who are <u>not</u> going to become professional men or women (some 95 per cent of our youth). It can also be demonstrated to those who are primarily concerned with the relatively few who will enter the professions. And finally, it can be demonstrated to those who wish this nation to play an important role in scientific research and the advancement of learning.

"For those who regard universities as first of all institutions for research, scholarly work, and professional education, the advantages in changing the composition of the entering classes are obvious. So, too are the advantages of eliminating the large number who now drop out after one or two years of study. The dangers of swamping our universities with a sudden influx of numbers are equally apparent. There is no need to argue for a course of action that would make the publicly supported universities more scholarly and more professional without any decrease in their present size. That is to say, there is no need to argue the case to those who understand the significance of having the leaders of the free world educated professionally on campuses where the scholarly spirit of free inquiry is dominant.

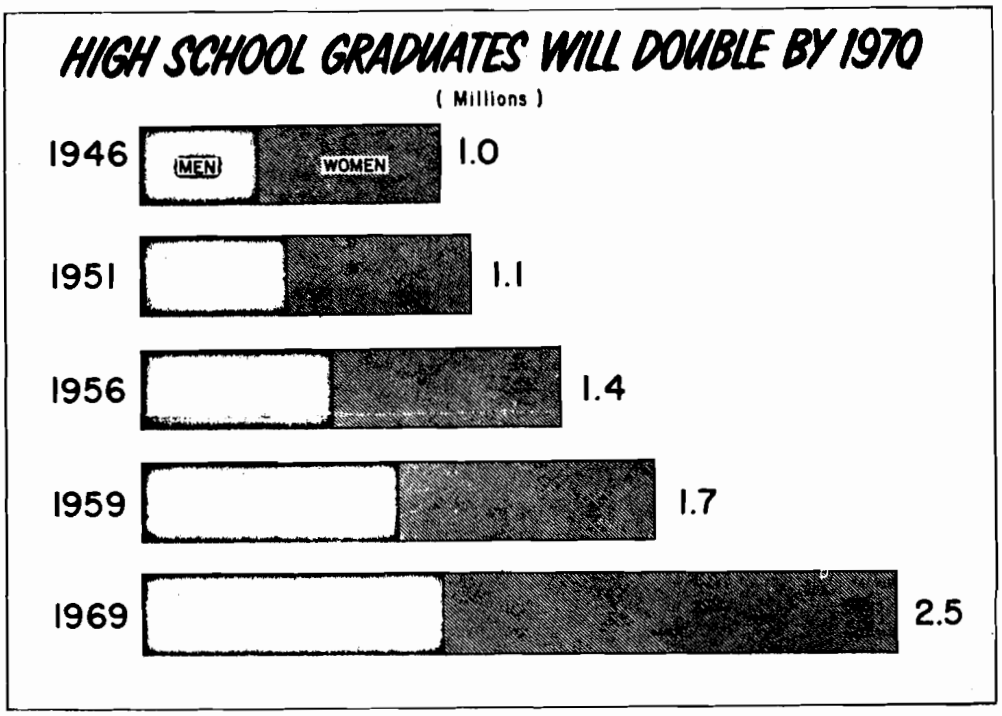
"For those whose interests are focused on the education of all our future citizens, irrespective of their vocations, the proposal to channel a large proportion of high school graduates into local colleges instead of publicly supported universities also has much to recommend it. First, because a local two-year college can often take care of a boy or girl looking for a short general education better than can a university. The combination of vocational training and general studies offered may yield results more lasting than exposure to instruction in enormous classes at a university. Psychologically, there are often great advantages in being in a smaller and more familiar group. Second, because there is a certain relation between the expansion of our state universities and the type of education offered to all the youth of the state in the high schools. The taxpayers' money supports public education at all levels. At a time of forced expansion, as at present, there is under the best of circumstances not enough money to do what should be done to handle the problems of increased numbers in the high schools. With the exception of a few fortunate localities, teachers' salaries are far too low. The effects of this inadequate salary scale are to be seen particularly in the high schools and in the failure to recruit enough first rate teachers of science and mathematics. Now the more expensive it is to finance the publicly supported colleges, the less likely it is that the high schools will be adequately financed. And it is clear that local two year colleges are a far less expensive form of advanced education than that provided by a university, unless the university is doing a wretched job for its freshmen and sophomore classes.

"The educational as well as the economic and sociological advantages of an expansion of our two-year colleges have been set forth by a number of authors (including the present writer) in the last few years. I do not propose to repeat these arguments in this book. I would like to repeat, however, a recommendation that may be regarded as heretical but in the light of a realistic analysis of American colleges is not so heretical as it sounds. This is that two-year colleges regularly accord a bachelor's degree (with some appropriate designation) to their graduates. I am well aware of the distress that such a proposal arouses in four-year colleges and universities. 'Lowering of standards' is the cry. But if any study were ever made of the standards now prevailing for the awarding of a bachelor's degree by four-year institutions, it would be evident that no standards (other than tuition paid and years of exposure) are in fact in existence. We have long since, in the United States, abandoned the ideal which still holds in other nations, that a degree is equally valid no matter what institution may award it. Such being the case, the completion of a good two-year course would more than equal in educational value the finishing of four-year courses of study in certain institutions.

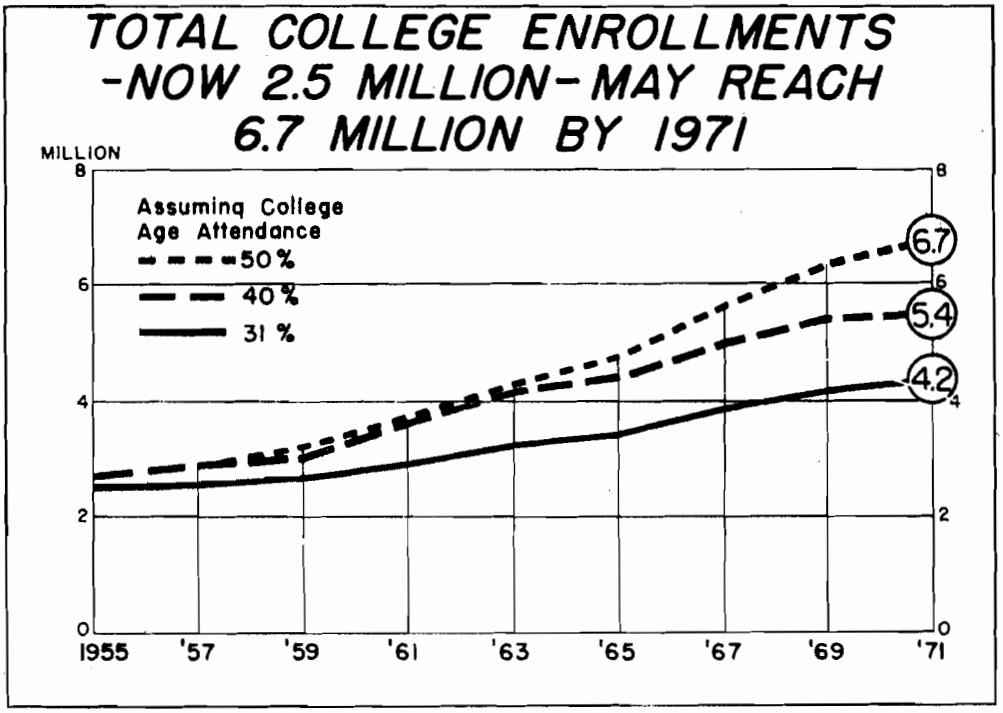
".....It is the future size and goal of our tax supported universities and the future expansion of our two-year tax supported colleges that confront the American taxpayer with a basic choice. State by state, the citizens must reappraise the publicly supported educational system from top to bottom and decide what adjustment must be made to handle the vast increase in the numbers of our youth.

"But more important still than a decision about two-year colleges is the answer to the fundamental question: Are we ready to support our schools, colleges, and universities so that the promise implicit in our educational ideals may be realized in the coming years? What is at stake is both the American educational tradition and the welfare of our citadels of learning. The desperate state of the tax supported schools in many localities is so well known that no words are required here to underline the urgency of their needs. The recruiting and training of the teachers for our elementary and secondary schools require a new and imaginative approach in order to meet the exigencies of the sudden expansion of our schools. But unless the educational budgets can be very much expanded, all efforts to improve the quality of the staffs of our public schools will come to nothing. The level of teachers' salaries must be greatly raised.

"Do we Americans realize how extraordinary an instrument of democracy we have forged in the last hundred years? Are we ready to place high on our list of priorities not only the expansion but the improvement of our public schools? Are we anxious to find ways, even if they are more expensive, to do far more than now for the education of the talented? Are we ready to support a considerable number of universities as centers for research and professional education where the spiritual inheritance of the free world may be preserved and fostered? And not only to support them financially but guard them against the traditional enemies of learning; that is to say, mobilize public opinion to beat off sttacks by the forces of ignorance, prejudice, and intolerance? These are the basic questions, to my mind, that must be answered by the citizens of this nation. It is not too much to say that the future of the free world for the balance of this century depends to a large extent on the answers given."

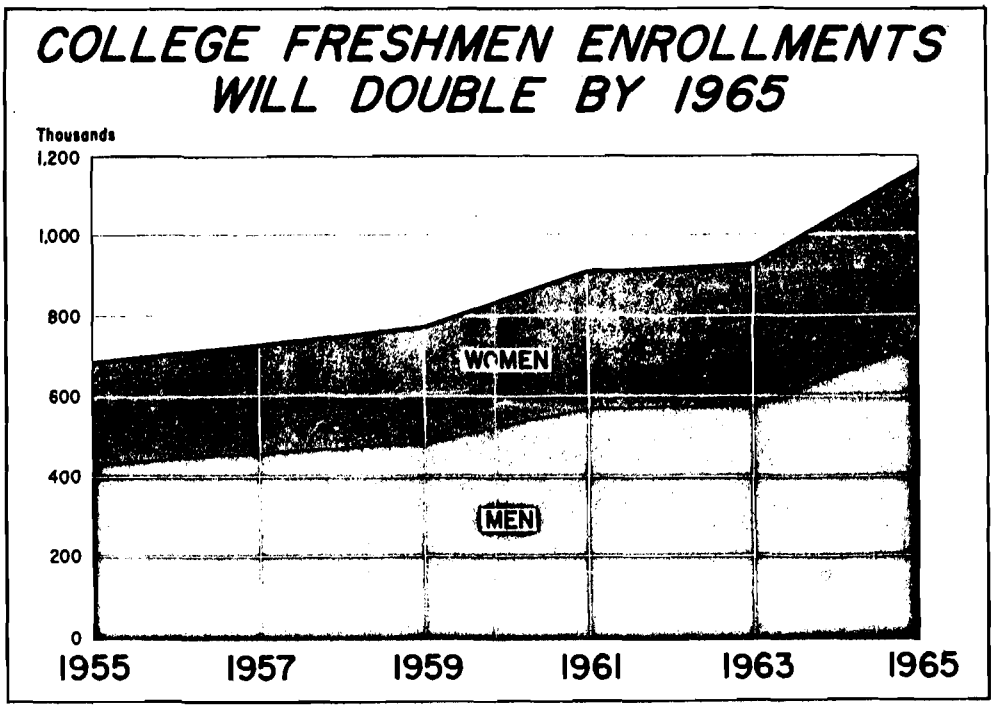


The bumper crop of war babies, now heading toward the high schools, will raise the annual number of high school graduates from 1.4 million in 1956 to 2.5 million in 1969. A larger proportion of these high school graduates will be going on to college

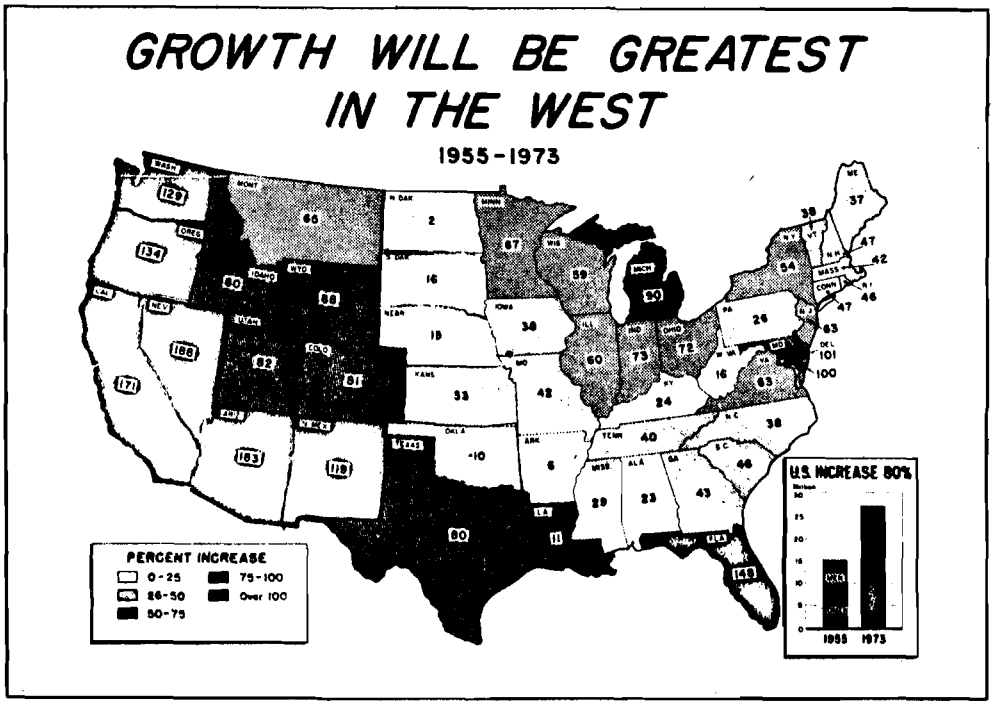


The total enrollment in institutions of higher learning will grow substantially. If only 31 per cent of those in the college age group actually enter the colleges, the growth will be from 2.5 million to 4.2 million in 1971. But if 50 per cent decide to enroll, the college population in 1971 will be 6.7 million.

Source: Higher Education in the West. Western Interstate Commission for Higher Education, October, 1956.

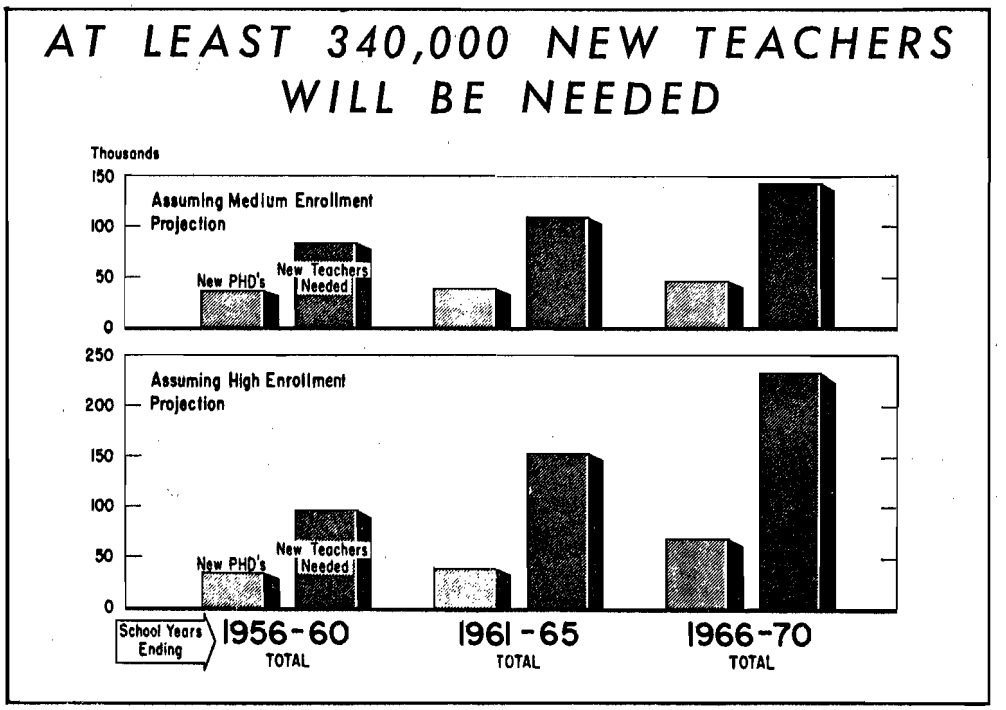


The rising tide of high school graduates will swell freshman classes at the nation's colleges and universities. Freshmen college and university enrollments will grow from about 700,000 in 1955 to about 1,150,000 in 1965.

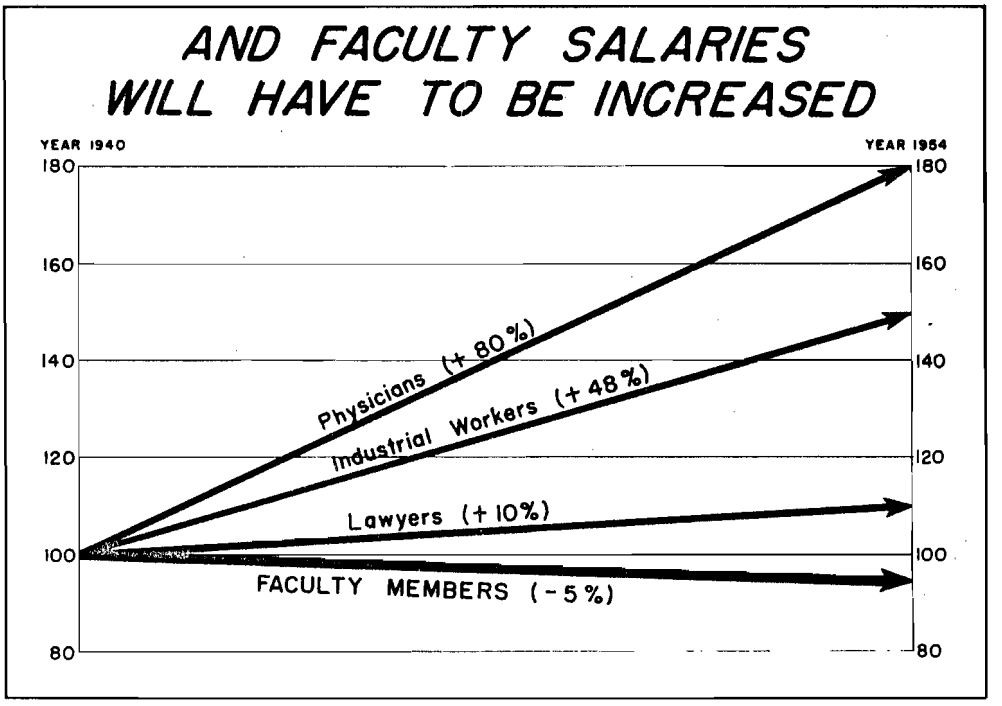


This map shows in striking fashion the West as a unique region in higher education. States in the Western Interstate Compact will experience huge increases in college-age population. Big enrollments also mean big opportunities to offer qualified young people the education they need and deserve.

Source: Higher Education in the West. Western Interstate Commission for Higher Education, October, 1956.



The Nation—and the West—is faced with an acute shortage of college teachers. Even with more favorable student-teacher ratios, the proportion of faculty members with doctoral degrees will certainly decline. In the West, which has a higher than average college enrollment and a lower than average production of Ph.D's, the shortage of teachers will be particularly acute.



Here is one chart that goes down rather than up. It shows that college faculty salaries compared with physicians, industrial workers, and lawyers, declined (in real dollars) from 1940 to 1954. It is difficult to see how the West's pressing need for college faculty will be met without salary scales which bring college salaries closer in line with other professional workers.

Source: Higher Education in the West, Western Interstate Commission for Higher Education, October, 1956.