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1950

FLINT'S FISCAL CAPACITY TO SUPPORT SECONDARY AND ADVANCED EDUCATION

by

Franklin K. Killian

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education in the
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Committee in charge:

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THE FOREWORD

The University of Michigan in cooperation with the City of Flint established the Social Science Research Project with a long-range program of continuing research in the social, economic, and political problems of the Flint metropolitan area. The project was founded on two principal objectives: (1) training of graduate students in research and (2) community service as an outgrowth of that research. Two operating units were organized to promote these objectives. The unit on the University of Michigan campus at Ann Arbor is known as the Metropolitan Community Seminar, while the unit in Flint is known as the Social Science Research Center. The activities of the entire project were vested in the University's Institute for Human Adjustment.

The Metropolitan Community Seminar is attended by faculty representatives of the participating departments, graduate students on the project (fellowship recipients), and the resident director of the project in Flint. Participating departments are all in the social science field and include economics, geography, political science,

public administration, sociology, and the College of Architecture and Design. Although representatives of the various departments constitute the regular membership of the seminar, graduate students from other departments who wish to work on specific problems in the metropolitan field are admitted.

The office in Flint is staffed with a full-time resident director and stenographic assistants. Attached to the Flint project is a local advisory board. The purposes of the Flint unit and the advisory board include direction of the public relations aspects of the project, consultation on problems of research, facilitation of the actual conduct of the field research, and publication and distribution of research reports so that the findings may be of maximum usefulness to the community. The staff at the Flint office conducts additional research aside from that provided by graduate fellows, particularly on the more urgent problems of the community. The project is financed equally between the University and Flint civic groups.

Research under way includes certain basic studies in population, government, community organization, and education. This study, FLINT'S FISCAL CAPACITY TO SUPPORT SECONDARY AND ADVANCED EDUCATION, was initiated at the request of the advisory board because of the

unusually large demands for admission at the Flint Junior College. It was the opinion of the board that any expansion should be directed by an appraisal of the needs and resources of the community. Two fellowships were granted for the purpose and two graduate students selected from the University School of Education. This study represents only the financial phase of the problem pertaining to the Flint Junior College expansion project.

F. K. K.

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Max Burnell, M. D.	Dr. Robert S. Ford
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CHAPTER I

THE INTRODUCTION

The early American college grew from the educational needs of the frontier. It sought to provide training in theology, law, and medicine. In the generally accepted sense of the term, it was a combination of advanced secondary and university work, a distinctive American invention. In other cultures, organized secondary education has always included what are most commonly known in the United States as the thirteenth and fourteenth grades. Even as late as a half century ago the American college curriculum was largely restricted to Latin and Greek and to classical literature. In some respects the new high schools and the older academies were competitors of the colleges rather than preparatory to them.[1] American universities as well as colleges are still hybrid organizations, retaining as a frontier heritage what might properly be considered the last two years of secondary education.[2] Today, though modernized through curriculum

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1 -- Leonard V. Koos, "The Rise of the People's College," School Review, 17: 5: p. 41 (March, 1947).

2 -- Arthur B. Moehlman, "Should the University Build Extensively," The Nation's Schools, 39: 3: p. 19 (March, 1947).

CHAPTER I

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revision to meet present day needs, American colleges and universities retain secondary work in their freshman and sophomore years.

THE PROBLEM

The Flint Advisory Board of the Social Science Research Project, aware of the increased enrollment in the Flint Junior College, considered the feasibility of expanding the junior college into a four-year program. The areas assigned by the Social Science Research Project to be studied were two: the socio-economic and the financial. The latter area forms the basis for this study, FLINT'S FISCAL CAPACITY TO SUPPORT SECONDARY AND ADVANCED EDUCATION.

The problem, FLINT'S FISCAL CAPACITY TO SUPPORT SECONDARY AND ADVANCED EDUCATION, was considered in two phases: (1) the financial development of a complete program of secondary education, and (2) the financial development of a four-year liberal arts college with considerations for advanced professional training. The needs of Flint were studied in relation to these two phases of the problem, and recommendations made in terms of the financial ability of the community to support one or the other, or both.

For purposes of this study, the following definitions are presented: (1) secondary education is general and vocational education, extending through adolescence from the seventh to the fourteenth grades, inclusive,

(2) advanced education includes both general and professional education including all grades above the fourteenth, (3) financial ability is the potential of funds available in the form of taxable property and other sources of revenue, and (4) willingness to support public education is the evidence that finance will be available as required for educational needs.

The descriptive term "higher" education as used by various reports usually does not distinguish between secondary and advanced education as defined in this study. While the President's Commission on Higher Education urges the extension of publicly supported education through the fourteenth grade "in the same way that high school is now available," the Commission apparently considers the thirteenth and fourteenth grades a part of advanced education.[1]

THE NEED

The national trend toward increased upper secondary enrollments is reflected in the Flint Junior College. The college offers work in grades thirteen and fourteen only. Within a year the enrollment, because of increased demands

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1 -- Higher Education for American Democracy. A Report of the President's Commission on Higher Education. Washington: United States Government Printing Office. 1947, Volume I, p. 37.

following the war, increased from 238 to 850.[1] The junior college is housed in the buildings of an old sanitarium, not intended for school purposes, and has a maximum capacity for approximately 722 students.[2] Some classes are held in corridors or rooms not suitable for classroom use. A number of rooms used by the junior college in the north wing of the Central High School had to be relinquished at the end of the 1946-47 school year. The Flint Junior College no longer has the physical capacity or specialized facilities to provide services for the large number of students enrolled or for the new students seeking admission.

Certain national trends have been directing increased attention to the program in upper secondary and advanced education. These trends emphasize the need for further study and preparation for the expansion of educational facilities in other communities as well as Flint. These factors may be listed as: (1) the increase in age of entry into industrial employment, (2) the decrease in age of graduation from high school, (3) the inadequacy of the current curriculums, (4) the changing demands of modern society for trained workers, (5) the changes in rural social organization, (6) the increasing complexity of modern

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1 -- Lawrence D. Lundberg, Classroom and Teacher Needs, Unpublished Report to the United States Office of Education (February 20, 1947), p. 1.

2 -- Ibid., p.1.

society, and (7) the increase in leisure time.[1]

The people of Flint are faced with the need of supplying adequate housing and facilities for their present junior college program, expanding their program of secondary education to meet the demands of the enlarged student body, and possibly making provision for advanced education if their financial situation warrants.

THE METHOD

The techniques used in this study were essentially those required in a survey of current conditions and limited to the collection and description, organization, integration and evaluation of data. The chronological period of time from which the data were selected was largely the current decade.

The collection and description of data involved use of direct observation, use of the questionnaire, and use of the personal interview. The personal interview was used in this study as a method of first contact. School officials and civic leaders gave their assistance and cooperation.

Weekly visits extending over a period of eight months were made to Flint for the collection of local data. Additional trips were made as needed. Visits were also made to state institutions as the study warranted.

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1 -- James A. Starrak and Raymond M. Hughes, The New Junior College. Ames, Iowa: The Iowa State College Press, 1948, pp. 4-19.

In Lean's [1] study questionnaires were used for gathering an expression of opinion on course preferences from seniors in the Flint and neighboring high schools and also from students in the junior college. The quantitative analysis concerning the number of students per grade and the course preferences made by Lean were used as a basis in this study for estimating the capital investment and operation costs required for an expanded junior college and for a conventional four-year liberal arts program. Supplementary questionnaires on budget expenditures and anticipated incomes were sent to Michigan's privately controlled colleges to secure data for comparative purposes.

Data notes were recorded on five by eight inch cards and filed under the proposed chapter headings which comprised the study. These data were evaluated and reorganized as the study progressed in an attempt to distinguish between fact and opinion.

Reference was made to the current literature and research reports which could contribute to the solution of the problem. A certain degree of speculation was apparent at times in formulating judgments because of inflationary trends and financial uncertainity.

Only simple arithmetical procedures were used in handling the data.

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1 -- Arthur E. Lean, The Organization of Post-High School Education in Flint. Unpublished doctoral dissertation, University of Michigan, 1948.

SCOPE OF THE STUDY

The questionnaires used by Lean[1] were submitted to all high school seniors in Genesee County with special reference to those living within a fifteen-mile radius of Flint to determine the number of students that might be expected to attend the junior college from this area. Koos[2] found that students living beyond the fifteen-mile radius were as likely to attend a distant secondary school as the one nearest them.

The growth of the upper secondary years or junior colleges at the community level in this country, the methods of junior college organization, philosophy, and methods of financing were reviewed. Recent surveys concerning the establishment and state support of these institutions were especially considered.

Current financial data were collected from a number of privately controlled Michigan colleges to validate the findings of the out-of-state surveys.

SOURCES OF DATA

National and state surveys were used for the collection of general information pertaining to the problem. The United States Office of Education supplied material

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1 -- Lean, op. cit.

2 -- Leonard V. Koos and Norman Burns, The Junior College in Illinois, pp. 26-27. Report Number 8 (November, 1944) to the Commission to Survey Higher Education Facilities.

from its publications for gross comparisons.

Data pertaining to Flint directly were collected from local sources. The current school enrollment, the school census, and available local studies on population and government were used for analyzing trends and attitudes toward school expenditures. The information filed in the office of the Superintendent of Schools, the County Auditor, the City Director of Finance, and in the office of the County School Superintendent were made available for this study.

Data pertaining to state institutions were sought directly from these institutions or from the Department of Public Instruction.

The libraries of the University of Michigan, Central Michigan College of Education, and the State Library at Lansing were used as needed for reference material.

LIMITATIONS

The portion of the study dealing with current school costs have estimates that will be too conservative if the present inflationary trend continues, or too high if business activity breaks sharply. Cost levels, whether for capital investment or for operation, are in transition.

Even though an established college in Flint would draw students from the surrounding county, the financial responsibility for establishing, maintaining, and operating

a college program will largely belong to the Flint school district. This study, FLINT'S FISCAL CAPACITY TO SUPPORT SECONDARY AND ADVANCED EDUCATION, considered the financial aspects as a concern of the Flint school district and so limited the problem.

However, financing the schools is only one problem of government. The school district is coterminous with the city's corporation limits and must share with other governmental agencies the local financial resources available for all governmental purposes. The problem was related to the needs of other agencies as well as the needs of the lower graded divisions of the school system.

The financial status of Flint was compared to other cities of like size in the United States.

In estimating the sources of income for supporting a college program, funds supplied by local taxation, tuition receipts, student fees, gifts and endowments, and State Aid were considered. Gifts and endowments represent an uncertain amount of income because of their irregularity and low interest rates. Estimates on these items were kept proportionately conservative.

It should be further noted that cost estimates were based primarily on quantitative enrollment figures rather than kinds of curriculums. This is typical of the more recent state surveys in Illinois, Maryland, Michigan, New York, and Washington.

This study is primarily concerned with the financial ability of Flint to support a program of upper secondary and advanced education, not with the socio-economic factors that have been the basis for the estimated enrollments. The estimated enrollments have been made in another study previously prepared.[1] The enrollment data and the curricular findings of the other study will be taken as the basis for estimating the capital outlay required and for estimating the operational costs for a recommended program. Furthermore, the estimates will be made in addition to the program now in operation, not as if a complete reorganization (K-6-4-4) were affected involving grades eleven and twelve.

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1 -- Lean, op. cit.

CHAPTER II

THE DEMANDS FOR PUBLIC EDUCATION IN FLINT

This chapter will consider the current Flint educational organization, the college and university attendance by Flint students, the curriculum of the Flint Junior College, the demands for curriculums as shown by questionnaires, the adult education program in Flint, the population trends, and conclusions with respect to demands for upper secondary and advanced education. The reference to the current organization will be made in brief terms since earlier grade organization is not a part of this study.

THE CURRENT FLINT EDUCATIONAL ORGANIZATION

The Flint Public Schools follow the usual pattern of public school organization. The elementary grades include the kindergarten through grade six. Secondary education is organized on three levels: (1) the junior high school, grades seven to nine, inclusive, (2) the senior high school, grades ten to twelve, inclusive, and (3) the junior college, grades thirteen to fourteen, inclusive.

The Flint Public Schools are under the direction of a superintendent and an assistant superintendent. Control of

the schools is vested in a nine-man board of education, the members of which are elected for three year terms. Three board members are elected each year.[1]

In the public schools there are ninety-six school buildings with three or more rooms.[2] The total school plant is valued currently at $14,000,000.[3]

THE COLLEGE AND UNIVERSITY ATTENDANCE OF FLINT STUDENTS

To aid in determining the potential enrollment of a college program in Flint, data were collected relative to the number of Genesee County students attending institutions in other parts of the state.[4] It was found that a total of 1442 Flint and Genesee County residents attended Michigan four-year colleges during the year 1946-47, with another 230 estimated to be in out-of-state colleges. Of the 1442 students attending Michigan colleges 27 percent were freshmen, 22 percent were sophomores, 17 percent were juniors, 12 percent were seniors, 16 percent were special students, and 6 percent were unclassified. There were 416

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1 -- Flint, Annual Statistical and Financial Report (June 30, 1946), p. 8.

2 -- Ibid., p. 1.

3 -- According to Lawrence Lundberg, Assistant Superintendent, Flint Public Schools.

4 -- Study conducted by the Staff of the Social Science Research Project (May, 1947).

students enrolled in Liberal Arts courses among the undergraduate students surveyed. In addition to the number enrolled in Liberal Arts courses there were 218 enrolled in Engineering, 176 in Business Administration, 94 in Education, 40 in Agriculture and Forestry, 20 in Music and 20 in Architecture.

It is reasonable to assume that a portion of the students attending college away from home would transfer their work to a local college, if it offered equal training.

In addition to the Genesee County residents attending Michigan four-year colleges, and out-of-state colleges, there were approximately 900 students enrolled in the Flint Junior College, about 700 of whom were in the thirteenth grade. Excluding the General Motors Institute, business and nursing schools in Flint, there was a total of about 2600 residents of Genesee County in colleges and universities during the school year 1946-47.

THE CURRICULUM OF THE FLINT JUNIOR COLLEGE [1]

The Flint Junior College offeredLiberal Arts, Predental, Pre-medical, and Engineering courses at the time

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1 -- The remaining part of this chapter is based largely on Leans's findings. A review of this data is pertinent since costs can not be estimated without it.

of its organization. Other courses were added from time to time, especially in commercial subjects such as Secretarial, Business Administration, and Accounting. The Terminal Division was established in 1937. The Terminal Division offered two years of general education or two years of semi-professional training in the Accounting and Secretarial curriculums. The Retailing Division was organized in 1946. In the Retailing Division two-year terminal or four-year transfer courses of the cooperative type under the sponsorship of the Flint Chamber of Commerce are offered.

The Diploma Curriculum in General Studies, inaugurated in 1927-28, has been consistently popular. The degree "Associate in General Studies" was awarded to the student who successfully fulfilled the requirements. A total of 249 such degrees was awarded in the twenty-year period ending in the spring of 1947.

Currently the Flint Junior College offers:

(1) Preparatory Division: Arts, Science, Pre-business Administration, Pre-dental, Pre-medical, Pre-legal, Pre-forestry, Education, Engineering, and Architecture.

(2) Terminal Division: Accounting, Secretarial, Diploma (General Studies).

(3) Retailing Division (terminal and transfer).

A comparison of the number of students enrolled in the various divisions in the two school years 1946-47 and 1947-48 reveals some changes in preferences. Table I indicates a larger enrollment for the year 1947-48, but a smaller

enrollment in the number of preparatory students. The fewer number of veterans in the freshman classes as well as the competition in the schools of professional training may be diverting more students into the Terminal Division.

TABLE I [1]

FLINT JUNIOR COLLEGE ENROLLMENT BY CURRICULAR TYPES

Curriculum	1946-47		1947-48	
	Number	Percentage	Number	Percentage
Preparatory Division	806	88.5	793	84.4
Terminal Division	64	7.0	87	9.3
Retailing Division	32	3.5	42	4.5
Special	9	1.0	17	1.8
Total	911	100.0	939	100.0

The total enrollment in the college is somewhat lower for the school year 1948-49. For the first four months of the current year the enrollment figures were as follows: September, 852; October, 822; November, 808; December, 796.[2]

THE DEMANDS FOR CURRICULUMS AS SHOWN BY QUESTIONNAIRES

Two questionnaire surveys were used as the basis for

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1 -- Lean, op. cit., p. 117.

2 -- According to Lawrence Lundberg, Assistant Superintendent, Flint Public Schools.

another study to gather data relative to the potential enrollment and curricular desires for a four-year college program in Flint. Replies were received from approximately 50 percent of the Flint Junior College students, and nearly 100 percent from the seniors attending the various high schools in Genesee County.

THE JUNIOR COLLEGE DATA

The Junior College students were asked if they would attend a four-year college in Flint in the event such an institution was established. Approximately 65 percent of the group surveyed indicated that they would attend such a college the full four years. The students answering the question in the affirmative were asked to indicate their course preferences. The preferences were definitely occupational in nature. Only 17 percent selected Liberal Arts and Science. Business Administration and Pre-professional courses rated 26.6 and 24.9 percent respectively. Engineering, Social Work, and preparation for Teaching were rated somewhat lower in the occupational choices, than Business Administration.

The trend for occupational preferences is disturbing to some educators. President Dodds of Princeton deplored what he called "a flight from the humanities." Twenty-five years ago, 44 percent of Princeton students were

registered in the humanities. In 1948 only 24 percent were so registered.[1]

In junior colleges terminal courses, occupational in nature, have shown a marked increase since the first World War. Terminal courses were 17.5 percent of the semester-hour offerings in 1917; 28 percent in 1921; 33 percent in 1933, and 32 percent in 1937.[2]

In the Lindsay study quoted by Starrak and Hughes of more than 30,000 students in thirty-five California junior colleges in 1939, 46 percent were enrolled in terminal curriculums.[3] The same authors quote Eells 1944 report on terminal curriculums in states having ten or more junior colleges: Iowa, 8 percent; Oklahoma, 8 percent; Texas, 19 percent; Minnesota, 28 percent; Kansas, 44 percent; Georgia, 46 percent; and California, 50 percent.[4]

Regardless who makes the reports, the findings on a national, regional or state basis should be reviewed critically. Some of the junior colleges are careless in their reports. Some individuals reporting for their colleges do

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1 -- Harold W. Dodds, "Bad Fad," Time: 52:21 (November 22, 1948), p. 87.

2 -- Jesse P. Bogue, American Junior Colleges. Washington: American Council on Education, 1948, p. 14.

3 -- James A. Starrak and Raymond M. Hughes, The New Junior College. Ames, Iowa: The Iowa State College Press, 1948, p. 33.

4 -- Ibid., p. 33.

not bother to define terminal courses, and some terminal courses reported are old traditional subjects regrouped under new names.

The data reported in Table II follow the pattern of choice away from the traditional subjects in the Liberal Arts curriculum toward terminal occupational subjects.

TABLE II [1]

(FLINT JUNIOR COLLEGE STUDENTS)

CURRICULAR DESIRES FOR A FOUR-YEAR COLLEGE IN FLINT

Curriculum	Number	Percentage
Business Administration	72	26.6
Pre-professional	68	24.9
Liberal Arts and Science	46	17.1
Engineering	46	17.1
Social Work	20	7.5
Preparation for Teaching	19	6.8
Total	271	100.0

Lean [2] reported that of the total group surveyed 20.8 percent indicated they would not attend a four-year college in Flint. About one-third of this number (87) wanted the experience of going to college away from home, one-fourth

1 -- Lean, op. cit., p. 119.

2 -- Lean, op. cit., pp. 120-21.

wanted to attend a college with a national reputation, and approximately one-fifth wanted two-year terminal courses only. Twenty-one percent gave other reasons for not attending a local four-year college.

Of greater significance for financial consideration was the attitude of the Junior College students toward the needs of the college. Of the total number mentioning needs. one-third emphasized "improved plant, buildings, equipment, facilities," one-fourth emphasized "improved instruction -- more and better teachers," and the others mentioned "better advisory services, more extra-curricular activities, reduction of tuition and fees," in order.[1]

THE HIGH SCHOOL DATA

Replies to the questionnaire were received from 1978 seniors in the high schools of Genesee County. Forty-eight percent of the students said that they planned to continue their schooling after finishing high school, 22 percent were uncertain, and 30 percent said they planned no further schooling. In reply to the question, "If Flint had a regular college with its own campus, offering a full four-year course and degree, would you attend it?", the responses were rather evenly distributed. Thirty-seven and

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1 -- Lean, op. cit., p. 98.

one half percent answered yes, 32.2 percent were uncertain, and 30.3 percent answered no. The 37.5 percent who gave affirmative replies represents 736 students, a rather large potential group of freshmen.

Among the Genesee County high school seniors indicating a desire to attend a four-year college in Flint, occupational courses ranked highest on the list of curricular preferences. The occupational choices, number replying and percentages are shown in Table III.

TABLE III [1]

HIGH SCHOOL SENIORS' CURRICULAR DESIRES

AT A FOUR-YEAR COLLEGE

Curriculum	Number	Percentage
Occupational (Secretarial, Accounting, Pharmacy, Retailing, Home Economics, etc.)	196	26.9
Business Administration	119	16.3
Engineering	105	14.4
Pre-professional	62	8.5
Liberal Arts	59	8.1
Preparation for Teaching	54	7.4
Social Work	18	2.4
Uncertain	31	4.3
(Another)	85	11.7
Total	729	100.0

1 -- Lean, op. cit., p. 123.

The group of seniors that indicated their intention to continue their schooling beyond high school without necessarily going to a Flint college also ranked occupational courses the highest on the list of curricular preferences as shown in Table IV.

TABLE IV [1]

CURRICULAR DESIRES OF HIGH SCHOOL STUDENTS

Course	Number	Percentage
Occupational (nursing, secretarial, accounting, pharmacy, retailing, etc.	226	24.4
Business Administration	136	14.6
Engineering	131	14.1
Liberal Arts and Science	94	10.1
Pre-professional	93	10.0
Preparation for Teaching	59	6.4
Don't know	49	5.3
(Another)	140	15.1
Total	928	100.0

The miscellaneous choices represented in Tables III and IV by "(Another)" include Music, Beauty Work, Social Work, Ministerial, Agriculture, Physical Education, Radio Work, Commercial Art, Journalism, and Mechanical Work.

The two lists of preferences showed much similarity. The lists apparently indicate special interest in the

1 -- Lean, op. cit., p. 127.

one-year and two-year terminal courses which prepare for making a living. The pre-professional courses and the liberal arts courses are ranked considerably lower.

The percentages representing the various desired courses seem to indicate that occupational courses were the most popular with the potential college students. The high school seniors formed a group more than four times as large as the Junior College group. The responses given by the high School seniors were perhaps more reliable since they were less likely to have been influenced by governmental subsidization through the Veterans' Administration or influenced through pressure of family responsibility. On the other hand they were also less mature and less likely to know what they wanted.

As many as one-third of the total potential enrollment or about one-half of the potential enrollment in the thirteenth and fourteenth grades might consist of terminal occupational students. This would form a body of 700 to 900 students. The relatively small percentage for each choice shown in Tables III and IV would indicate a wide variety of interests and would require a broad program. The remaining 700 to 900 students in the thirteenth and fourteenth grades would be general and preparatory students.

The fifteenth and sixteenth grades, if added, would probably have 700 to 1000 students. In the fifteenth and sixteenth grades there might be 150 to 200 students in

Business Administration, 150 to 200 in Engineering, 100 to 150 in Liberal Arts, 100 to 150 in pre-professional training, and 200 to 300 in preparation for teaching, social work and other miscellaneous courses. The estimates by grade placement and types of curriculums are presented in Table V.

TABLE V [1]

POTENTIAL ENROLLMENT OF FLINT COLLEGE STUDENTS IN GRADES 13-16

Grade Placements and Types of Curriculums	Enrollment Range
Thirteenth and Fourteenth Grades	
Terminal occupational	700 to 900
General and preparatory	700 to 900
Fifteenth and Sixteenth Grades	
Business Administration	150 to 200
Engineering	150 to 200
Liberal Arts	100 to 150
Pre-professional	100 to 150
Teacher preparation, social work, etc.	200 to 300
Total	2100 to 2800

1 -- Adapted from Lean, op. cit., p. 133.

THE ADULT EDUCATION PROGRAM IN FLINT

The adult education program in Flint is one of the many activities sponsored by the Mott Foundation. It is associated with services in child health, individualized services for children, camping and club work, youth services, educational experiments and demonstrations, interracial projects, social recreation, and leadership training.[1]

Adult education provides training in five areas: social-civic, home and family living, cultural and avocational, vocational, and foundational.[2] The greatest numbers attracted to the program seem to be in the social and recreational areas except for the formal classes offered through the University Extension Service and the Flint Junior College.

The courses in the University Extension Service care largely for the in-service training of teachers in the Flint Public Schools. Both undergraduate and graduate courses are offered. Most courses for credit meet throughout the full semester of sixteen weeks. Noncredit courses are offered in such subjects as Speech and Travel. The number enrolled in extension work ranges from 100 to 200. The University Extension Service for Flint has its office

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1 -- List of Activities, p. 1. A bulletin of the Mott Foundation Program. Flint: Board of Education (January, 1947).

2 -- Ibid., p. 5.

in the Junior College Building of the Flint Board of Education.

The adult education courses offered through the Flint Junior College range through Liberal Arts, general and occupational terminal courses. Some courses are taken for credit while others are not. Almost any subject will be offered if a sufficient number of people are interested and a trained instructor can be found. The number of study groups in the college division varies from 75 to 100 or more. The attendance totaled approximately 15,000 in 1948. It was irregular and was recorded as accumulative; that is, each person was reported each time he came.[1]

The adult education program in Flint offers possibilities for future development, and it should contribute a considerable number of students to a community college program.

POPULATION TRENDS

Flint's population is growing. The United States Census reported for the City of Flint a population growth from 91,599 in 1920 to 151,543 in 1940.[2] The population

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1 -- Reported verbally by Mrs. Myrtle Black, Supervisor of Adult Education.

2 -- United States Census reports on Population.

of Genesee County grew from 125,668 in 1920 to 227,944 in 1940.[1] Schmitt[2] estimated the total population of the City of Flint at 154,000, and the total county population at 251,000 in May, 1947. He predicted a probable population of 192,000 in the City of Flint in 1970, and a probable population of 314,000 in Genesee County in 1970.[3]

The steady growth of population in the Flint area probably nullifies the future loss of the veteran enrollment and the fewer number of college age residents caused by the lowered birth rate during the depression years; at least, it is a notable compensating factor.

CONCLUSIONS WITH RESPECT TO DEMANDS FOR GENERAL AND ADVANCED EDUCATION

The City of Flint is highly industrialized for automobile manufacture. Merchandising, wholesaling, retailing, and semi-professional services tend to be neglected in comparison with production in the automobile industry. Proportionately, there are too few retail stores, barbers, beauticians, carpenters, masons, and so on.[4] The surveys

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1 -- United States Census reports on Population.

2 -- Robert C. Schmitt, The Future Population of Metropolitan Flint. Unpublished study, Social Science Research Project, University of Michigan, (July, 1947), p. 1.

3 -- Ibid., p. 2.

4 -- United States Census reports on Population, 1940.

by questionnaires revealed a demand to satisfy this need by the large percentages requesting terminal occupational courses.

The taxpayers have misunderstood or have not been friendly to public education in Flint as shown by the consistent refusal to grant additional millage for local school support. Emphasis on democratizing the lower grades of college work, and emphasis on terminal general and terminal occupational courses may provide the needed support for expanding upper secondary education or for extending upward the educational program.

The large numbers attending colleges and universities in this and other states from the Flint areas, the demand for general and advanced education as shown by questionnaires, the popular adult education program, and the consistent growth in population seem to warrant further expansion of educational plants and facilities.[1]

It seems probable that: (1) the program in the thirteenth and fourteenth grades should be continued, (2) the demands are sufficiently great to warrant consideration of a program in advanced education beyond the fourteenth grade, (3) occupational courses should be emphasized, (4) terminal general courses should be provided, (5) the

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1 -- For a more complete analysis of the potential college enrollment in Flint see Lean's The Organization of Post-High School Education in Flint.

community college plan should be considered, if the cost of providing a program in advanced education appears to be beyond the available resources of the community, and (6) the potential enrollment of a four-year college in Flint would range from 2100 to 2800.

CHAPTER III

METHODS OF FINANCING UPPER SECONDARY AND ADVANCED EDUCATION

Only generalizations can be made concerning cost trends for different types of educational agencies on a national basis. While the distinction between upper secondary and advanced education is clearly recognized, the agencies are usually grouped together under a general classification called "higher" education.[1] Liberal Arts colleges, universities, technical schools and two-year junior colleges are reported as a whole. Reports differ greatly. For example, the directory published by the United States Office of Education for 1947-48 lists only 429 junior colleges, whereas the directory published by the American Association of Junior Colleges lists 652 in 1947.[2] No attempt has been

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1 -- "In America the period of general secondary education extends two years beyond the conventional high school course, to the middle of the four-year undergraduate course in the standard college or university. At the end of his second year in college the American student is at a point approximately analogous to that at which the French or German student completes the lycée or gymnasium." By M. M. Chambers in American Universities and Colleges, 1948, p. 7.

2 -- A. J. Brumbaugh, American Universities and Colleges. Washington: American Council on Education, 1948, p. 15.

made to draw up a complete list of all institutions giving instruction in grades above the twelfth.[1] In terms of money the reports are even more confusing than in terms of number of institutions. Accounting systems differ, agencies report on different items, agencies report late and others do not report at all. However, the gross number of institutions reported and the costs to the country will be analyzed briefly because these figures do have some significance.

This chapter will consider the cost trends in educational finance, methods of financing upper secondary education, the problem of financing advanced education, building construction and operational costs, recent state survey recommendations, and the summary. Consideration will be given to the current costs of educational finance by reference to operational costs reported by the Central Association of College and University Business Officers. The Report of the President's Commission on Higher Education, Volume V, Financing Higher Education, and the reports given at the National Conference on Higher Education held in Chicago, March, 1948, will be used extensively.

COST TRENDS IN EDUCATIONAL FINANCE

The gross expenditures for all reported educational agencies above the twelfth grade in the country may be classified in four general groups: (1) educational and general,

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1 -- Brumbaugh, op. cit., p. 15.

(2) auxiliary enterprises and activities, (3) other non-educational expenditures, and (4) plant fund expenditures (capital outlay).[1]

The United States Office of Education listed 1,702 institutions of which 455 were junior colleges in 1943-44.[2] The total number of institutions actually reporting their expenditures in that year was 1,563.[3]

The total expenditures for all of the institutions reporting are classified in the four fund-groups in Table VI.

TABLE VI [4]

TOTAL EXPENDITURES FOR ALL UNITED STATES SCHOOLS ABOVE GRADE TWELVE, 1943-44

Fund Groups	Amount*
Educational and general	$656,801,819
Auxiliary enterprises and activities	199,344,036
Other non-educational expenditures	20,928,193
Plant fund expenditures (capital outlay)	27,427,134
Total	$904,501,182

* Not including United States Service Schools

1 -- Henry G. Badger, Statistics of Higher Education, 1943-44. Chapter IV of the Biennial Survey of Education in the United States, 1942-44. Washington: United States Office of Education, 1944, p. 30.

2 -- Ibid., p. 2.

3 -- Ibid., p. 30.

4 -- Ibid., p. 30.

An additional $97,043,886 was expended for Federal contract courses not reported through the regular accounting channels. The total amount including that spent for Federal contract courses reached a grand total of $1,001,545,068.

This grand total represented an increase of 29 percent over the corresponding grand total of $777,475,793 for 1941-42; it was 34 percent more than the $747,558,613 reported for 1939-40.[1]

Current Gross Expenditures

The total expenditures for educational and auxiliary enterprises in 1946-47 was estimated at $1,250,000,000. Endowment and other investments totaled $1,750,000,000. The physical plants were valued at $2,750,000,000.[2]

Approximately $500 was spent on a national average for educational and general purposes for each student enrolled in 1946-47. In 1940 the physical plant values represented about $2000 for each student enrolled. Building costs rose so rapidly during the war period that by 1947 it was estimated that $5000 capital outlay was required for each student added to the enrollment of American colleges and universities.[3]

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1 -- Badger, op. cit., p. 31.

2 -- Brumbaugh, op. cit., p. 33.

3 -- Ibid., p. 33.

It should be kept in mind that the above figures are only gross comparisons of the expenditures of all institutions offering instruction above the twelfth grade. They cannot be applied to any one type of institution. The estimates do provide some idea of the financial responsibility required of the country to provide upper secondary and advanced education.

Sources of Income

Prior to World War II, the agencies of upper secondary and advanced education both publicly and privately controlled were supported from three major sources: (1) public funds, (2) student fees, and (3) philanthropy.[1] Not more than 10 percent of the total revenue was derived from other sources. Disregarding the miscellaneous revenue, about 40 percent came from public sources, 40 percent from student fees, and 20 percent from philanthropy.[2] Public agencies received about nine out of ten dollars from public funds and student fees, while private schools received about nine out of ten dollars from philanthropy and student fees.[3-4] The war

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1 -- Harry K. Newburn, "Financing Higher Education in the United States." Address given at the National Conference on Higher Education, Chicago (March 22, 1948), p. 1 (Mim.).

2 -- Ibid., p. 1.

3 -- Ibid., p. 2.

4 -- Higher Education for American Democracy: A Report of the President's Commission on Higher Education, Volume V. Financing Higher Education, 1947, pp. 28-29.

disturbed the pattern thereafter invalidating any conclusions based on more recent data.[1] Changes have occurred in the productiveness of these sources of revenue during the past twenty years.

Public Sources of Income

The states have contributed and will continue to contribute the major portion of the income to upper secondary and advanced education. The states differ widely both in ability and effort to support "higher" education. Louisana contributed proportionately ten times as much as Massachusetts and fifteen times as much as New York in support of its colleges and universities. However, the more wealthy states such as New York and Massachusetts rely on private schools and consequently on fees and philanthropy to support their institutions.[2-3]

Public funds have been steadily rising both in amount and in relation to total income in recent years.[4] A sharp rise occurred in the course of World War II as a result of large allocations of public funds by the Federal Government.[5]

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1 -- Ibid., p. 28.

2 -- Newburn, op. cit., p. 3.

3 -- Higher Education for American Democracy, Volume V, p. 38.

4 -- Ibid., p. 38.

5 -- Ibid., p. 36.

Local government has not been a significant source of income for support of educational agencies above grade twelve.[1]

State, Federal, and local government provided a total of $206,000,000 for the support of current educational expenditures in 1940. This was 36.6 percent of the total current income. The appropriations in that year included about $30,500,000 for the Federal Government, $151,000,000 from state governments, and a little over $24,000,000 from county, city, and district governments.[2]

Student Fees

Tuition and other fees required of students amounted to more than one-third of current expenses in all institutions before World War II. Private agencies charged approximately 60 percent and those under public control 19 percent.[3] Tuition and student fees are flexible. Additional funds for income have been secured by simply increasing the levy on the students. The trend for increasing institutional fees has grown recently although the trend has been apparent for many years. As an example, Albion College announced a tuition increase from $165 to

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1 -- Ibid., p. 37.

2 -- Ibid., p. 36.

3 -- Ibid., p. 33.

$200 per semester effective in September, 1948.[1] The average increase in rates was 28 percent from 1938 to 1946, and the rates have shown a steady increase since 1946.[2]

In a study prepared for The Central Association of College and University Business Officers, Hoff[3] has shown that student fees increased 29.7 percent in 1947-48 over 1946-47; that an average increase of 16.9 percent was anticipated in 1948-49 over 1947-48.

Philanthropy

Nearly $1,750,000,000 was held by colleges and universities in endowment, annuity, and loan funds during the fiscal year 1940.[4] It was estimated that in 1948, these same institutions held close to $2,000,000,000 in such productive funds of which almost 90 percent was owned by private institutions.[5] The private schools vary greatly in their productive holdings. A few years ago

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1 -- "Raise Albion Tuition to $200 per Semester," The State Journal (April 26, 1948), p. 5.

2 -- Newburn, op. cit., p. 2.

3 -- Charles Hoff, Trends of Enrollment, Fees and Salaries in 288 Colleges and Universities. Omaha: The University of Omaha (May 17, 1948), p. 3. (Mim.).

4 --Higher Education for American Democracy, Volume V., pp. 28-30.

5 --Newburn, op. cit., p. 2.

Harvard, Yale, Chicago, and Columbia held more than one-fourth of all such funds available for American schools.[1] These four schools were able to increase their holdings even in the depression years.[2]

Endowment funds for all schools built up rapidly during the first three decades of the century, at an average of $500,000,000 each decade. But for the decade 1930 to 1940, the increase was only $250,000,000.[3] The accumulation of endowment capital has never kept pace with enrollments. Endowment income as a percentage of current income for all institutions declined from 15.4 percent to 12.5 percent from 1920 to 1940.[4]

The declines in income from endowment were occasioned partly by the gradual falling off of the rate of returns on invested funds.[5] Arnett[6] reported on data secured through the American Council on Education on the average

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1 --John Price Jones, Trends in Educational Finance, 1920-38. New York: The John Price Jones Corporation, 1939, pp. 9-10.

2 -- Ibid., p. 10.

3 -- Higher Education for American Democracy, Volume V., p. 31.

4.-- Ibid., p. 31.

5 --Ibid., p. 31.

6 --Trevor Arnett, Observations on the Financial Conditions of Colleges and Universities in the United States. New York: General Education Board, 1937, p. 5.

rate percent of income for 17 small colleges from 1925-26 to 1934-35. The average rate diminished from 5.48 to 3.70.[1]

Private contributions in the form of gifts and grants have not been a major source of income for American schools. These funds constituted only 4.5 percent of the total income in 1920; 5.0 percent in 1930; 7.2 percent in 1940, and only 5.8 percent in 1944.[2]

The current high incomes of many individuals and corporations would indicate that larger amounts may be obtained for educational purposes. Federal and state tax policies provide exemptions from income taxes to educational and nonprofit institutions. Even with the encouragement for giving provided by tax exemptions, it is unlikely that gifts and grants will ever become a proportionately large share of income.[3]

METHODS OF FINANCING UPPER SECONDARY EDUCATION

The term "junior college" was the name given to a new kind of school started about the beginning of the century to meet the needs of youth 16 to 20 years of age. It was not a college and its originators did not intend to make it

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1 -- Arnett, op. cit., p. 5.

2 -- Higher Education for American Democracy, Volume V., p. 31.

3 -- Ibid., p. 32.

ome.[1] The administrators and instructors, trained in the traditional Liberal Arts colleges and universities imitated the schools in which they were taught. The new school gained in numbers and in enrollment, but it was without clear educational purposes or patterns of organization.

Within the last decade more individual educators, state and national reports, and survey recommendations have recognized the junior college as an extension of secondary education.[2-3] Two types of junior colleges have emerged: (1) the community college, and (2) the special junior college. The functions of the community college may be stated as: (1) an extension of education to meet added requirements of life work, (2) preparation for further college study, and (3) continuing education-opportunity for part-time education as the need and interest arise.[4]

The pattern of organization varies widely. There are one-year, two-year, three-year, and four-year schools. Some schools are attached to colleges or universities, and others to high schools. Some junior colleges are organized as separate, distinct units having their own buildings and

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1 -- John A. Sexon and John W. Harbeson, The New American College. New York: Harper and Brothers, 1946, p. 130.

2 -- Ibid., p. 48.

3 -- Brumbaugh, op. cit., p. 7.

4.-- Bogue, op. cit., p. 3.

grounds. Sexon and Harbeson maintain that the four-year junior college constitutes a major operation in school organization:

> It involves a change in educational point of view. It rejects the machinery and organization which tie the thirteenth and fourteenth grades into the standard college, and sets up a machinery or organization which definitely ties them into the secondary span.[1]

Of the 627 junior colleges reported in 1942, 348 were privately controlled and 279 were publicly controlled.[2] Those under public control enrolled 73 percent of the total junior college enrollment. By 1948 the enrollment increased nearly 100 percent over 1942. The publicly controlled schools constituted 49 percent of the total number of institutions and enrolled 75 percent of the students.[3]

Forty-four of the 279 public junior colleges were administered by the state while the remainder were administered as a part of the public education system of the areas in which they were located.[4] There is a growing trend to have the junior college controlled by the same board which administers the local elementary and high schools in their

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1 -- Sexon and Harbeson, op. cit., p. 7.

2 -- Walter C. Eells and P. Winslow, "Junior College Directory, 1941", Junior College Journal, Volume XI January, 1941), pp. 279-300.

3 -- Bogue, op. cit., p. 10.

4 -- James A. Starrak, and Raymond M. Hughes, The New Junior College. Ames, Iowa: The Iowa State College Press, 1948, p. 25.

respective districts.[1]

General Methods of Financing

A few junior and senior colleges are financed by combining public and private funds. For example, Little Rock Junior College in Arkansas is operated in part by private funds derived from an estate, yet by the legal provisions governing the fund, the Junior College is placed under the control of the City Board of Education.[2] Likewise, the public resources of the Stockton Junior College in Stockton, California are combined with private resources of the College of the Pacific. Both operate on the same campus with an interchange of staff, physical facilities, and other resources.[3] This trend of combining public and private funds is not peculiar to the junior college and it has not developed into significant proportions.

The privately controlled junior colleges derive their chief support from student fees, current private gifts, and income from endowments. With few exceptions they do

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1 -- Ibid., p. 25.

2 -- Bogue, op. cit., p. 6.

3 -- Ibid., p. 6.

not receive any public funds.[1]

The methods of supporting publicly controlled junior colleges vary considerably among the states. The chief sources of income are student fees, state appropriations, county, city, and district property taxes, Federal appropriations, private gifts and grants, endowment earnings, and sales of goods and services.[2]

Student fees are collected in every state. However the amount collected varies from approximately 4 percent in Colorado and California to 100 percent in Florida, Indiana, and Washington. Iowa collects about 75 percent of its current operating costs from student fees and Michigan about 50 percent.[3]

Sources of Income for Michigan Junior Colleges

Bogue[4] reported 13 junior colleges in Michigan in 1948. Ten were publicly controlled. The total current income and the amounts from various sources for eight representative Michigan junior colleges are presented in Table VII.

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1 -- Starrak and Hughes, op. cit., p. 25.

2 -- Ibid., p. 25.

3 -- Ibid., pp. 25-26.

4 -- Bogue, op. cit., p. 18.

TABLE VII [1]

SOURCES OF INCOME FOR REPRESENTATIVE MICHIGAN JUNIOR COLLEGES, 1946-47

Name of School	Total Income	Student Fees	Local Gov't	State	Auxiliary Enterprises
Spring Arbor*	$51,300	$2,550			$42,000
Dearborn	105,000	67,000	$24,000	$12,000	1,000
Gogebic	74,000	60,000	4,000	10,000	
Grand Rapids	317,093	226,290	57,593	33,210	
Flint**	117,628	57,648		7,865	
Jackson	118,848	44,467	60,446	13,935	
Bay City***	182,415	84,384	38,384	20,886	14,054
Port Huron	115,565	53,703	19,298	15,414	27,100

* Endowment investments $350; gifts $6,500.
** Federal $108,252; gifts $3,863.
*** Sales and services $24,600.

The majority of Michigan junior colleges relied chiefly on student fees for their current income in 1946-47. Student fees are relatively small at Spring Arbor, a church controlled institution. At Spring Arbor a student work program, endowment earnings, and gifts from the Free Methodist Church provided most of the current funds. Flint was not reported as contributing funds from local governmental sources. Actually the Flint Public School District did contribute a small share of the income from the General School Fund.[2]

1 -- Bogue, passim, pp. 120-405.

2 -- Reported verbally by John Barrett, Business Manager, Flint Public Schools.

Flint also received a large sum from the Federal Government in 1946-47.

The total amount of income reported for the eight schools in Table VII was $1,141,849. Of this amount student fees represented $596,042 or 52 percent.

The eight schools reported their total operating expenditures for all purposes both educational and non-educational as equal to their total income.

In Table VIII is presented the total enrollments and total operating costs for 1946-47 from which are derived the gross per capita costs.

TABLE VIII [1]

GROSS PER CAPITA OPERATING COSTS FOR EIGHT MICHIGAN JUNIOR COLLEGES, 1946-47

Name of School	Regular Enrollment	Summer Session	Adjusted Enrollment	Total Expenditures	Gross Per Capita Costs
Spring Arbor	116	--	116	$51,300	$442
Dearborn	449	--	449	105,000	234
Gogebic	421	55	430	74,000	172
Grand Rapids	1912	258	1955	317,093	162
Flint	942	300	992	177,628	179
Jackson	772	108	790	118,848	150
Bay City	892	196	925	182,415	205
Port Huron	541	126	562	115,565	214
Average Annual Gross Per Capita Cost					$200

1 -- Bogue, passim, pp. 120-405.

Six of the eight schools reported summer sessions. To adjust the enrollment one-sixth of the summer session was added to the regular enrollment to prorate the costs on an annual basis.

The high cost at Spring Arbor bears out the generalization that small schools tend to cost more per student to operate. The locality of the school, the type of program offered, and the items of expenditure reported for a given year cause a variation between schools. The average gross per capita cost compares favorably with the average found in other states for a two-year junior college program. All of the school reported in Tables VII and VIII are two-year co-educational agencies.

The Average Cost of Maintaining a Junior College

Averages are deceptive. If the schools were organized more nearly alike, covered the same years of secondary education and offered similar programs of study, averages could be accepted with some assurance of validity. No such criteria exists, so averages must be accepted cautiously.

Koos[1] was of the opinion in 1947 that $200 was sufficient for providing a reasonably good program.

California has 12 percent of the junior colleges in the United States and 41 percent of all junior college

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1 -- Leonard V. Koos related verbally.

students.[1] The California junior college program in 1941-42 ranged from $165 to $432 per student with a state average of $244 per student.[2] When the cost of capital outlay was deducted, the corresponding amounts became $158, $288, and $226.[3] Teachers' salaries in California were comparatively high and the junior colleges offered a considerable amount of vocational-technical training which further raised the average cost.

Since the California study in 1941-42 and the Michigan reports for 1946-47, inflationary trends have raised costs. A minimum of $250 annually per capita would probably be necessary to operate a two-year junior college program in Michigan in 1949.

THE PROBLEM OF FINANCING ADVANCED EDUCATION

Most educational conferences on "higher" education consider the costs of operation and of expansion of greatest importance. The devaluation of the dollar and the shortage of skilled labor and materials have caused many states to admit their inability to finance adequate plant expansion for their institutions of advanced education. Hollis reported at the 1948 Chicago Conference on Higher Education that

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1 -- Bogue, op. cit., p. 13.

2 -- Starrak and Hughes, op. cit., p. 28.

3 -- Ibid., p. 28.

fourteen southern states considered pooling their financial efforts to provide adequate regional colleges for their white and Negro youth.[1] In the Pacific Northwest, four states considered pooling their financial efforts to create an additional college to care for their veteran enrollment.[2] The House Judiciary Committee of the United States Congress has given approval to legislation which will permit states to join together in providing higher education facilities which many of them could not provide on a statewide basis.[3]

This consideration of costs and trends is based on present conditions and any increase or decrease in price levels would change the findings accordingly. This portion of the study is generalized and based partly on the reports of the chairmen of the various groups at the Chicago Conference. Furthermore, the costs of advanced education are not as distinctly segregated as those for upper secondary education since the latter are more widely being considered by local communities over the whole country.

Personal Service

Personal service expenditures account for 75 to 80 percent of the total cost of "higher" education after excluding

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1 -- Ernest V. Hollis, "Trends in Organization and Coordination of Higher Education," an address at the Chicago National Conference on Higher Education (March 22,1948),p. 3.

2 -- Ibid., p. 3.

3 -- Ibid., p. 4.

expenditures for auxiliary services. Instructional staff accounts for about 50 to 60 percent of the total cost or about two-thirds of the personal service cost. Instructional staff salaries have increased 35 to 40 percent over 1940. [1] If national income remains high and new sources of income are developed, salaries will tend to increase. Should enrollment decrease after staffs have been filled, classes will be smaller and the instructional costs per student will increase. The bulge in enrollment moving up to the junior, senior, and graduate levels will make the cost of instruction higher.[2]

The non-teaching staff represents about 25 percent of the total cost or one-third of the personal service. The per student cost of the non-teaching staff is less than in 1940 because of the high enrollment.

Supplies and Expense

Supplies and expense accounts for 12 to 15 percent of the total operating cost. Since 1940, this item of the budget has increased nearly 100 percent. Institutions have endeavored to do without these materials when possible or to cut the quantity. Deferral of maintenance has sometimes been used to provide funds for supplies.

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1 -- J. A. Franklin, "Cost Trends in Higher Education," Report of the Chairman, Group A, Section on Finance, Chicago National Conference on Higher Education (March, 1948), p. 1, (Mim.).

2 -- Ibid., p. 1.

Maintenance

Equipment, replacement and repairs represent about 10 to 12 percent of the cost. Rehabilitation of equipment and building at present inflated prices will take a long time.

Student Fees

From the point of view of the student, tuition fees have been steadily raised in recent years. In the Central Association of College and University Business Officers' report for May 17, 1948 it was noted that 225 colleges and universities increased their tuition rates since 1940-41; 64 institutions made such increases in 1947-48; 91 planned to charge higher tuition fees in 1948-49. Tuition in the schools which are members of this association was 53.4 percent higher in 1947-48 than in 1936-37; 43.5 percent higher in 1947-48 than in 1940-41; and 29.7 percent higher in 1947-48 than in 1946-47.[1]

Table IX shows the fees charged by public and private institutions in 1946-47 as compared with 1938-39. The fees charged were representative of the various schools of professional training, although junior colleges were also included.

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1 -- Charles Hoff, "Trends of Enrollment, Fees and Salaries in 288 Colleges and Universities," Comments accompanying statistical tables prepared for the Central Association of College and University Business Officers, University of Omaha, 1948, p. 2.

TABLE IX[1]

FEES CHARGED BY PUBLIC AND PRIVATE INSTITUTIONS

IN 1946-47 AS COMPARED WITH 1938-39

Educational Unit	Public Schools				Private Schools	
	Resident		Non-resident			
	Amount in Dollars	As of 1938-39 Percent	Amount in Dollars	As of 1938-39 Percent	Amount in Dollars	As of 1938-39 Percent
Agriculture	84	133	250	116	---	---
Education	89	136	192	149	316	124
Junior Colleges	94	141	183	180	266	132
Liberal Arts	99	122	225	128	297	129
Law	163	156	295	146	371	133
Dentistry	297	117	460	120	529	156
Medicine	331	150	505	107	562	124
Business Administration	122	131	238	125	374	112

Educational and General Purposes

The current expenditure for educational and general purposes per full-time student may be shown by a recent survey in New York State. The number of students, the per capita cost of general administration, resident instruction and research, operation and maintenance, and other costs as well as the total over-all per capita costs are shown by type of institution in Table X.

1 -- Newburn, op. cit., p. 8.

TABLE X[1]

CURRENT EXPENDITURES FOR EDUCATIONAL AND GENERAL PURPOSES PER FULL-TIME STUDENT, COLLEGES AND UNIVERSITIES OF NEW YORK STATE, 1941-42

Type of Institution	For Educational and General Purposes					
	Number of Students	General Administration	Resident Inst. & Research	Oper. and Maint.	All Other	Total
Liberal Arts Colleges						
R. Catholic	7,406	$ 78	$193	$ 78	$38	$ 387
Other Church	1,543	92	211	63	14	380
Non-church	7,576	117	342	104	37	600
Universities	44,266	96	611	109	83	899
Municipal Inst.	25,577	32	243	45	54	374
Junior colleges	590	221	381	276	22	900
State teacher Colleges	5,796	70	259	51	22	402
Separate Prof. Sciences						
Engineering	6,584	39	264	59	14	376
Law	155	248	384	166	24	822
Medical	728	234	706	100	15	1,055
Music	1,174	185	507	79	31	802
Theology	882	248	743	195	65	1,251
All Students	102,293	$ 80	$420	$ 86	$ 59	$ 641

The total per capita cost per full-time student in Table X appears to be greater than would be expected for 1941-42.

1 -- John Dale Russell, Cowen, and John W. Paige, The Financing of Higher Education in New York State. Bulletin Number 1307 (December 15, 1945.) Albany: University of the State of New York, 1945, p. 43.

The costs do run higher in the State of New York than in most states. Many New York youth seek their advanced schooling outside the state. The annual cost per student in the junior colleges with their low enrollment of 590 is exceedingly high -- $900. This finding stimulated the demand for state supported regional institutions.

In New York, except for the teachers' colleges and municipal institutes, the institutions of upper secondary and advanced education are largely under private control. Costs tend to be higher in privately controlled institutions. Costs have arisen sharply since 1941-42. Current expenditures for educational and general purposes per full-time student would be much higher in 1948-49.

Capital Investment Per Student

It has been estimated that for New York State the average per capita capital investment amounts to $6400 per full-time student.[1] However, the different institutions varied markedly in the amounts of funds held as capital investment in the form of plants and endowment. About one-third of the capital assets were in endowment funds, about one-half of which were in physical plants used for instructional purposes. The separate schools of theology had capital averaging $37,080 per full-time student, by far the largest amount of any type of institution. The universities, the

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1 -- Russell, Cowen, and Paige, op. cit., pp. 87-88.

liberal arts colleges and the junior colleges averaged about $9000 in capital per full-time student. At the low end of the scale, the municipal colleges of New York City had only $1431, and the state teachers colleges had only $2113, in funds per full-time student.[1]

The degree-granting institutions had a total current income for educational and general purposes amounting to $68,848,846. In addition they had an income of $11,453,583 from their auxiliary activities such as dormitories, dining halls, bookstores, and so on, and $1,578,972 of current income designated non-educational income.[2] Of the total income for educational and general purposes, 44.9 percent was derived from student tuition fees, 13.4 percent from endowment earnings, 7.5 percent from gifts and grants, 21.9 percent from governmental appropriations, and 12.3 percent from other sources.[3]

The total capital investment held by the institutions in New York State amounted to $650,786,440 in 1941-42. About one half of these assets were invested in physical plants used for institutional purposes, and one-third of the assets in endowments as mentioned earlier. The average income per full-time student for educational and general purposes was $673. The income varied greatly per full-time

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1 -- Ibid. pp. 87-88.

2 -- Ibid. pp. 87-88.

3 -- Ibid. pp. 87-88.

student according to the institution attended; the separate professional schools of theology had an average of $1222, while the municipal colleges of New York City had $367, and the state teachers' colleges had $419.[1]

Costs in Michigan

Table XI presents the estimated plant investment per student enrolled and the gross per capita costs of operation for six privately controlled Michigan colleges in 1947-48. The plant valuations are very conservative. The buildings at these various colleges are largely old structures. Many buildings should be replaced. Estimated replacement costs were not supplied. Current building costs per student would be much higher than indicated.

The average gross per capita cost of operation is also low. The budgets for Alma, Aquinas, Hope and Hillsdale were increased approximately 14 percent in 1948-49 over 1947-48.[2] Since the enrollments at these institutions increased little (Siena Heights and Aquinas reported losses) the average gross per capita cost would be higher in 1948-49.

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1 -- Russell, Cowen, and Paige, op. cit., pp. 87-88.

2 -- See Appendix

TABLE XI[1]

GROSS PER CAPITA PLANT INVESTMENT AND GROSS PER CAPITA OPERATING COSTS FOR SIX PRIVATELY CONTROLLED MICHIGAN COLLEGES, 1947-48

Name of College	Enrollment	Current Valuation of Plant Dollars	Total Expenditures Dollars	Per Capita Plant Investment Dollars	Gross Per Capita Operating Costs Dollars
Alma	644	1,500,000	389,200	2329	604
Aquinas	564	755,553	178,159	1340	316
Calvin	1394	1,000,000	---	718	---
Hillsdale	611	750,000	342,050	1227	560
Hope	1186	1,469,817	674,000	1240	568
Siena Heights	382	800,000	---	2094	---
				Average	$512

The costs to the students for college instruction are shown in Table XII. Emanuel Missionary College at Berrien Springs operates a large industrial establishment as well as homes and dormitories for instructors and students. These activities usually produce a profit which contributes to the support of the total program. Alma and Hillsdale operate dormitories, dining halls, trailer courts, etc. which contribute to college support, although in some instances the activities barely pay for themselves. The

1 -- Information supplied by correspondence with college officials.

students pay for most of the operating costs in tuition and special fees.

TABLE XII[1]

SOURCES OF INCOME FOR THREE PRIVATELY CONTROLLED MICHIGAN COLLEGES, 1948-49

Name of College	Total Income Dollars	Student Fees Dollars	Endowments Gifts Dollars	Auxiliary Miscellaneous Dollars	Industrial
Emanuel* Missionary College	1,036,200	270,000	40,300	269,400	456,500
Hillsdale	383,300	260,000	34,000	89,300	
Alma	501,905	210,000	71,105	220,800	

*College operates industrial enterprises such as store, bindery, dairy, poultry farm, etc.

BUILDING CONSTRUCTION AND OPERATIONAL COSTS

There are various methods of estimating the costs of new buildings and equipment. None are very accurate because of the current fluctuation of prices for materials and labor. The President's Commission chose, upon the recommendation of the Federal works agency, $18 per square foot as a basis for a reasonable estimate of replacement

1 -- Information supplied by correspondence with college officials.

and construction costs for building and equipment, but not for land.[1] This estimate was based on 1946-47 building and construction costs. Space needed per full-time student was estimated to be 155 square feet.[2]

The Detroit Real Estate Board estimated the cost of fire-proof building construction at $.82 per cubic foot as of January 1, 1948.[3] However, this construction cost estimate is generally applied to the construction of elementary and high school buildings in which 250 cubic feet are allotted to each child.

Newburn[4] mentioned a replacement cost of $5,500 per student for the present plant. The study for the State of New York estimated the average amount per student invested in the plant and endowment at $6400.[5]

The Alma College authorities estimated their plant replacement at $2500 per student. The new Harbor Technical Institute at Los Angeles has been planned to accommodate 1500 full-time students at a cost of $2,100,000 or at $1400 per student, including the cost of a 37 acre

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1 -- Higher Education for American Democracy, Volume V, p. 20.

2 -- Ibid., p. 20.

3 -- Revised Schedule of Unit Costs Based on Cubical Contents. Detroit: Detroit Real Estate Board, 1948, p. 2.

4 -- Newburn, op. cit., p. 6.

5 -- Russell, Cowen, and Paige, op. cit., pp. 87-88.

site.[1] The new science building at Drake University will serve from 800 to 900 full-time students at a cost of $1,000,000 or approximately $1100 per student.[2]

These various estimates may serve no other purpose than to illustrate the wide variation in reported costs. Business managers and contractors frequently admit that a reasonable degree of accuracy in predicting current costs is difficult because of a continuation of inflationary trends. Legislative appropriations for current building construction at state institutions are usually short of the funds needed and supplementary appropriations are common.

For purposes of this study the recommendation of the President's Commission will be used, i.e., 155 square feet allotted to each student at $18 per square foot. This gross floor space includes classrooms, laboratories, libraries and equipment, as well as space not available for instructional use, such as corridors, closets, basements, and furnace rooms.[3]

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1 -- Joseph Morici, "Junior College Will Serve Community", School Management, Volume XVII, Number 10 (May 1948), p. 5.

2 -- Saarinen, Saarinen and Associates, "Design for Science and Pharmacy at Drake", College and University Business, Volume IV, Number 5 (May 1948), pp. 11-13.

3 -- Higher Education for American Democracy, Volume V, pp. 20-21.

Current operating costs per full-time student in upper secondary education will be estimated at $250.

Current operating costs per full-time student in advanced education will be estimated at $1000. In the latter instance, work of a professional character, especially in the sciences, is very costly. In advanced education, in grades fifteen, sixteen and so on, the program leads into graduate study and research. The $1000 estimate is conservative for graduate study.

A liberal arts program, which combines upper secondary and advanced education, is less expensive. In years of normal economic stability, an annual expenditure of $600 per full-time student should provide a conventional program. There is little evidence to support or disapprove the estimates for the per capita costs of operating advanced education or a liberal arts program.

These crude measuring instruments will be used because better ones are now lacking. The figures are conservative because institutional investment per student for a college plant and operational program tend to vary inversely with the size of the enrollment.[1]

RECENT STATE SURVEY RECOMMENDATIONS

State of New York. New York has no state university. There are 10 private universities, 38 liberal arts colleges,

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1 -- Russell, Cowen, and Paige, op. cit., p. 21.

22 professional schools, and 8 junior colleges that are not tax supported.[1] Twelve agencies are municipal or state schools.

In recent years New York State experienced a heavy migration of full-time college students to other states. In 1941-42, for every three residents who attended college, one resident migrated to some other state for his college education.[2] The cost per student in private agencies has been too high.[3]

To equalize educational opportunity the regents of the University of the State of New York recommended: (1) state scholarships for college youth, (2) improved facilities in state-supported colleges, and (3) establishment of state institutes of applied arts and sciences.[4]

The institutions in the State of New York have the reputation of offering high quality professional and scholastic training at a high price.[5] Well qualified youth have been denied the opportunity of post-high school training in many instances if they came from lower income families. Twelve thousand scholarships at $350 each were

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1 -- Cayce J. Morrison, "State Supported Vocational Schools," The Nation's Schools, Volume XXXVII, Number 2 (February, 1946,) pp. 41-42.

2 -- John Stuart Allen and John W. Paige, Must Thousands Leave New York State for College? Albany: The State Educational Department, 1946, pp. 6-7.

3 -- Ibid., pp. 18-19.

4 -- Ibid., pp. 22-23.

5 -- Russell, Cowen, and Paige, op. cit., p. 88.

recommended annually.[1]

In addition to an expansion of facilities in tax supported institutions, 22 two-year institutes of applied arts and sciences were to be established on a regional basis. The principal objective was to prepare young men and women for positions of a technical and semi-professional nature.[2]

Besides being organized on a regional basis, according to Morrison,[3] the institutes were to (1) collaborate with other educational institutions, public and private, (2) make the program of an institute available to young persons throughout the state, (3) provide adequate guidance and counseling facilities, (4) establish major curriculums for placement opportunities on a long-trend basis, (5) maintain high standards of proficiency and accomplishment, and (6) provide valuable experience in technical and liberal studies.

Some financial data pertaining to New York State was submitted earlier in this chapter and will not be extended here. However, the New York practice of setting up certain state professional schools within private institutions should be noted. The State College of Agriculture,

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1 -- Allen and Paige, op. cit., pp. 22-23.

2 -- Morrison, op. cit., pp. 41-42.

3 -- Ibid., p. 42.

the State College of Home Economics, and the State College of Veterinary Medicine are all at Cornell University. The State College of Forestry is at Syracuse University. The State College of Ceramic Engineering is at Alfred University. The state has control of these professional schools and makes appropriations for them on a regular budget basis.[1]

Maryland. Maryland ranks low among the states in the percentage of total educational and general income given to publicly controlled institutions from state sources. On the other hand it is exceeded only by Pennsylvania, New York and New Jersey in the percentage of total support given to private institutions from state appropriations.[2]

Maryland may be classified with the group of states that contributes strongly per capita of youth population to the support of privately controlled institutions. The opportunities for youth from the lower income groups to further their education beyond the twelfth grade is limited. The state did not materially increase the per capita for its youth population in 1940 beyond that provided in 1933-34. Its rank among the states in this respect dropped from twenty-ninth place to thirty-sixth place in the period

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1 -- Higher Education in Maryland. A Report of a Survey by the American Council on Education with Recommendations of the Maryland Commission on Higher Education. Washington: American Council on Education, 1947, pp.127-29.

2 -- Ibid., p. 131.

1933-34 to 1939-40.[1]

The income per full-time student for educational and general purposes in state supported institutions in Maryland in 1945-46 ranged from a low of $304.41 to a high of $1,439.27. The average income per full-time student in these institutions was $627.60.[2]

To equalize educational opportunity in Maryland, the Commission on Higher Education recommended:

1. The establishment of a state-wide system of locally controlled junior colleges for both white and colored youth where two years of training will be offered in liberal arts and occupational studies.[3] The state to contribute ultimately a sum of $350,000 per year to the support of these institutions. This would amount to a little over $40 of basic aid per student per year of a required $200 per year. Local units of government (county and city) would be required to raise the remaining portion of $200.[4]

2. The development of a system of scholarships designed to help outstanding students get the education for which they are qualified.[5]

There were other recommendations pertaining to the expansion of the University of Maryland and the abandonment of several colleges, the establishment of an adequate salary schedule, and the start of a building program.

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1 -- Higher Education in Maryland, op. cit., p. 133.

2 -- Ibid., pp. 141-42.

3 -- Ibid., p. 352

4 -- Ibid., p. 311.

5 -- Ibid., pp. 366-69.

State of Washington. The recent survey of Public Education in Washington recommended a program of extended secondary education which should include the public junior college.[1] It was recommended that public junior colleges should be established in all centers where populations and school enrollments could justify suitable curriculums. The recommendation was made on the assumption all existing junior colleges could be merged with the public school districts.

The supervision of the public junior colleges should be vested in the State Board of Education with the local authority delegated to the Board of Directors of the local school district. The superintendent of schools should be the executive officer.[2]

In regard to organization the report stated:

> The survey committee believes that the four-year junior college embracing the eleventh through fourteenth grades of schooling can probably serve more effectively the varied needs, interests, and abilities of youth of more areas than can the two-year institution embracing only the thirteenth and fourteenth grades.[3]

In regard to fees the survey staff recommended:

> Since the public junior college in Washington is now to be recognized as part of the common school system, it is recommended that the philosophy of free

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1 -- Public Education in Washington. A Report of a Survey of Public Education in the State of Washington, 1946, p. 316.

2 -- Ibid., p. 317.

3 -- Ibid., p. 317.

public education apply equally to it as to other units of the common school system. It is recommended that no tuition charges be authorized and such other fees as may be authorized for such purposes as student activities be kept nominal.[1]

Illinois. Only the portion of the report on junior colleges by the Commission to Survey Higher Education will be mentioned here. A state-wide system of junior colleges was recommended. A program of state aid to encourage the early establishment of these institutions and to achieve some degree of equalization of the cost among the districts was recommended on the following basis:

1. For districts with assessed valuations per prospective junior college student of less than $40,000, $75 per junior college student per year.

2. For districts with assessed valuations per prospective junior college student of $40,000 or more, $40 per junior college student.[2]

Junior colleges are cautioned against the temptation to elevate themselves into standard institutions. Koos and Burns[3] point to the danger of the state practice of establishing and maintaining junior colleges and the resulting pressure for higher status that is likely to follow. It is assumed that these pressures may be lessened

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1 -- Public Education in Washington, op. cit., p. 319.

2 -- Leonard V. Koos and Norman Burns, The Junior College in Illinois. Report Number 8 (November 1944) to the Commission to Survey Higher Education Facilities, p. 40.

3 -- Ibid., p. 27.

by making the public junior colleges a part of the local school system. The need for more institutions at the junior college level is recognized and a doubt expressed concerning the increase in the number of institutions on the senior college level.

The report was concluded in the topic "Elements of a Desirable Junior-College Policy for Illinois" as follows:

1. The state should encourage, not merely permit, the establishment and maintenance of a system of local public junior colleges.

2. The policy should be one favorable to local public rather than to state junior colleges (area schools).

3. The policy of encouragement should be extended to districts or areas in which a minimum junior-college enrollment of 175 to 200 students may be expected.

4. The state should continue the policy of encouraging close articulation of junior college with high school.

5. The minimum high school enrollments and populations recommended assume public junior colleges in which tuition is free.

6. A policy of proper encouragement of public junior colleges in Illinois would call for a generous program of state aid for this expansion of school services.

7. The control of public junior colleges should foster development of terminal programs rather than encourage the offerings only of preparatory programs.

8. The agency of state supervision of junior colleges should be a State Board of Education with the State Superintendent of Public Instruction as its executive officer.1

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1 -- Koos and Burns, op. cit., pp. 61-62.

Some individuals and study groups working on the problem of "higher" education take exceptions to certain recommended survey policies. For example, Group E at the Chicago National Conference on Higher Education believed that: (1) students in both publicly and privately controlled institutions of higher education should bear some part of the cost of their education, and (2) tuition and fees are necessary to represent the student's share of responsibility and to provide funds for an effective program. It was believed that the peak in tuition charges would be reached by the autumn of 1948, and that there was no evidence that student charges generally would be decreased in the near future.[1]

From a realistic point of view, tuition charges are likely to be collected for a long time. In upper secondary education an adequate program of state aid should reduce the tuition to a negligible amount or entirely eliminate it in some instances. The California state allowance of $120 per full-time student practically provides tuition-free junior colleges in that state. Illinois and Kansas have achieved similar results by using county, city and district resources.[2]

The cost in advanced education is so much greater per

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1 --F. C. Hockeman. "Tuition and Student Fees," Report of the Chairman, Group E. Section on Finance. Chicago National Conference on Higher Education (March 1948), p. 1. (Mim.).

2 -- Starrak and Hughes, op. cit., p. 26.

full-time student that tuition charges are likely to be collected indefinitely. If the President's Commission report finds wide acceptance, the tuition charges will tend to be reduced and for needy, qualified students, the tuition will be minimized by generous scholarship and fellowship funds.[1]

SUMMARY

This chapter has shown the scope of the national problem of financing "higher" education. It has shown the cost trends from the pre-war period to the current year 1948-49.

An analysis of the costs of financing upper secondary education compared to an analysis of the costs of advanced education has been presented.

A formula for estimating these costs so they may be applied to a local situation in a general way has been attempted. For building construction the formula uses the findings of the President's Commission, i.e., 155 square feet times $18, or $2790 per full-time student. This may be applied to required construction for both upper secondary and advanced education. The annual operating cost in upper secondary education has been

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1 -- Higher Education for American Democracy. Volume V, pp. 3-4.

estimated at $250 per full-time student. The annual operating cost in advanced education which is much greater has been estimated at $1000 per full-time student. The liberal arts program which combines upper secondary and the first two years of advanced education, grades thirteen and fourteen, has been estimated to cost $600 per year for each full-time student.

The cost for building construction in terms of $2790 for each full-time student refers to the cost involved in providing the necessary gross floor space such as classrooms, libraries, laboratories, basements, furnace rooms, corridors, and so one. The costs of construction vary greatly in different localities of a state. In the metropolitan areas of Michigan the estimated cost per unit of space needed per student is probably low.

If we meet the great enrollment demands of the present and future we must provide a sound philosophy of organization which will best serve the great mass of youth seeking admission to our educational institutions. Fifteen years ago in commenting on the multiplicity of courses, curriculums and types of organization in hundreds of colleges and universities, the authors of Economy in Higher Education stated: "Perhaps we are in need of a sound philosophy of education in order to justify our large expenditures of public funds. The philosophy or reasoning

need not deal with metaphysics or nourish the illusion which clothes mere words with majesty."[1] Such a philosophy is partially realized in the increasing recognization given to general and vocational education through grades thirteen and fourteen, and the reservation of professional and research training for grades beyond the fourteenth.

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1 -- David S. Hill, Fred J. Kelley, and Howard J. Savage, Economy in Higher Education. New York: The Carnegie Foundation for the Advancement of Teaching, 1933, p. 39.

CHAPTER IV

ESTIMATED COST OF AN EXPANDED SECONDARY PROGRAM IN FLINT

It was assumed in this study that the curricular and enrollment demands listed by Lean demonstrated the need for new buildings, equipment, and an expanded instructional program in upper secondary education. This study was primarily concerned with the extent of Flint's ability and willingness to support an expanded educational program and Lean's findings were used as the basis for the financial estimates that follow in this and subsequent chapters. Furthermore, it should be restated that the financial estimates were made in addition to the program now in operation, not as if a complete reorganization were effected involving grades eleven through fourteen.

The enrollment and curricula data were gathered on a community basis. All of the high school graduates in Genesee County within commuting distance were considered as potential students and the responses on the questionnaires submitted to these students were used as a basis for the estimated enrollments in grades thirteen through

sixteen.[1] [illegible] for [illegible] (community college or [illegible] and four-year colleges), [illegible]: "[illegible], [illegible] areas of [illegible], [illegible], and [illegible]'s [illegible] and [illegible]."[2]

[illegible] four-year college. [illegible] consider the cost of [illegible], [illegible] operating costs, [illegible], and [illegible] for expanding Flint's secondary [illegible].

[illegible]

Flint's libraries, as reviewed in chapter II, reveal a [illegible] of approximately 1.1 to 1/50 students in the [illegible] four-year college.[3] The present building [illegible] classrooms, laboratories for physics, chemistry, drafting, etc., one [illegible] library of 14,000 volumes, one small library, and one small cafeteria. [illegible] library seats 60 students and the

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1 -- Ibid., p. 2.

2 -- Ibid., p. 168.

3 -- Ibid., p. 104.

smaller one seats 55 students. The two library rooms are adjacent and two doors are located between the two rooms. The building also includes provision for a number of student club rooms as well as the offices of the University extension service and offices for school administration.[1] The cafeteria seating capacity was set at 300 to care for 700 students.[2] Since all students were not originally intended to eat at the same time, a maximum load of 700 students would require [illegible] other quarters were available.

Using the same assumptions as the base figure, approximately 600 students would require additional gross floor space provided for them.[3] At $2740 per student, the needs of 600 students would require a capital outlay of $1,644,000. A different set of assumptions for a consumption estimate of the additional facilities. [illegible] or a 20 per cent increase. Should the other items be required, 180 or more students will have to be provided buildings and facilities. [illegible] students would require a capital outlay of $,760,000 or approximately $2,000,000.

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1 -- Lorraine A. Landers, Classroom and Teacher Needs. Unpublished report to the United States Office of Education (February 10, 1947), p. 1.

2 -- Ibid., p. 1.

3 -- See Table V, p. 72.

[illegible] [illegible] [illegible] [

projects which [illegible] of time, [illegible] annual cost of the [illegible] in cost of borrowing money.[1]

In [illegible] section, [illegible] are not considered [illegible] projects. [illegible] of the [illegible] in the [illegible]; the [illegible] the [illegible] the [illegible] the [illegible] of the [illegible].

Special classroom [illegible]

[illegible] construction costs [illegible] by the [illegible] equipment, but not [illegible]. Because costs have increased since [illegible], the cost of [illegible] classrooms will be added. [illegible] classroom suitable for recitation or [illegible] could be furnished for approximately $2,000 per room. The [illegible] for laboratories [illegible] equipment and furnishings. The [illegible] for [illegible] skills will require [illegible] equipment. The estimated [illegible] of the [illegible] in the [illegible] of [illegible]

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1 -- [illegible], p. [illegible].

2 -- [illegible], p. 2.

ni-n School is [illegible] at $[illegible].[1]

There [illegible] factors [illegible] to [illegible] cost of [illegible] training shops. In the first place, the [illegible] supply certain [illegible] equipment at little [illegible] to the schools. Much of the equipment in Flint [illegible] School was [illegible] by the [illegible] corporation, although this source is [illegible] exhausted. In the second place, the [illegible] equipment [illegible] operations [illegible] for training [illegible] for national [illegible]. In the third place, the [illegible] system [illegible] be [illegible] in Flint for training students in Flint [illegible] plants. The General Motors Institute [illegible] the [illegible] of "Cooperative Programs" in three areas: [illegible] Engineering, Business Administration, and Pre-[illegible].[2] The Institute [illegible] only [illegible] men [illegible] of its [illegible] at the end of the war effort.[3] By [illegible] the "Cooperative Programs" [illegible] experience [illegible] the [illegible] plants of the corporation, the actual investment in plant and equipment

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1 -- [illegible] Wilbur [illegible], and [illegible] Olson, Principal.

2 -- Co-operative Programs, 1940-47, Volume 1, Number 1. Flint: General Motors Institute, p. [illegible].

3 -- Training for Co-operative Jobs and Professional Horizons Tomorrow. Flint: General Motors Institute, 1946-47, p. 12.

at the institute is held to the estimated cost of $1,000,000.[1]

It is also possible to reduce the cost of [illegible] by [illegible] built [illegible].

[illegible] to be more to reduce the cost [illegible] cost of the [illegible]. [illegible] structure [illegible]. At last report, [illegible] cost [illegible]. [illegible] maximum [illegible] cost [illegible], [illegible] cost [illegible] [illegible] cost [illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible] (elementary [illegible] secondary) [illegible] [illegible] [illegible]

Table XIII

[illegible]

Items of expenditure	Estimated current enrollment in service-connected	Estimated current enrollment in non-service-connected	Approximate cost of courses
Subsistence to individual [illegible]	[illegible] to 1750	[illegible] to [illegible]	$1,[illegible] to $[illegible]
Instructional equipment, [illegible]	[illegible] to 1750	[illegible] to [illegible]	$ [illegible] to $ 60,000
Library	--	120 to 250	$ [illegible] to $ [illegible]
Total	--	--	$1,[illegible] to $[illegible]

Possible effect of non-operation.

[illegible] collection [illegible] certainly [illegible] the [illegible] effect by [illegible] [illegible].

[illegible] ... [illegible] ... [illegible] ... [

hundred students at $50 per full-time student would cost $225,000 per year. Seventeen hundred fifty students would cost $437,500 per year. The above figures are gross costs that will be reduced according to the amount of tuition charged, student fees levied, and the state aid received for any given year.

To an institution that has been accustomed to raising 45 to 50 percent of its operating costs from tuition and student fees, these figures may seem beyond future realization. Yet to many youths are denied post-high school education because they are unable financially to meet the expenses, that a real effort should be made to lower these charges as rapidly as possible or to eliminate them entirely. Table XIV calculates the total costs to the district at different enrollment levels with tuition charged at $100 per year, $150 per year, $100 per year and no tuition for each full-time student. The gross operating cost is estimated at 5% annually. The tuition collected from the number of students represented by each enrollment level in each instance is subtracted from the total gross operating costs required for that enrollment level. The resulting figure is the net operating cost. Other sources of revenue are not considered in this table.

TABLE XIV

[illegible]

Enrollment Levels	Total cost with varying rates of tuition			
	Tuition at $60 per yr.	Tuition at $90 per yr.	Tuition at $120 per yr.	No tuition per year
500	$[illegible]	$[illegible]	$[illegible]	$150,000
700	[illegible]	70,[illegible]	105,000	175,000
800	[illegible]	[illegible]	120,000	200,000
[illegible]	[illegible]	[illegible]	135,000	[illegible]
1000	[illegible]	[illegible]	150,000	250,000
1100	[illegible]	11[illegible]	[illegible]	275,000
1200	[illegible]	[illegible]	180,000	300,000
1300	[illegible]	130,000	195,000	325,000
1400	[illegible]	140,000	210,000	350,000
1500	[illegible]	[illegible]	[illegible]	375,000
1600	[illegible]	150,000	240,000	400,000
1700	[illegible]	[illegible]	[illegible]	[illegible]
1750	[illegible]	[illegible]	[illegible]	437,500

The enrollment in the Flint Junior College during the years 1946-47 and 1947-48 is projected at [illegible] students per year. The small number of non-resident students paid tuition at $85 per semester or $140 per year. The non-resident students probably pay the full cost of their education in the junior college. Local students paid tuition at $75 per semester or $120 per year. Additional fees were levied for special services.

As noted in Table XIV, 100% students paying tuition

at ₩150 per year would cost the school district ₩100,000 net with the gross cost estimated at ₩250 per year. If this tuition were lowered to ₩100 per year, the net cost to the school district would approximate ₩150,000. At no tuition per year, and at a gross cost of ₩250 per year, 1000 students would cost the district ₩250,000.

History of Flint Junior College Costs

Tuition charges in the experience of the college have varied with the years. Table XV on page 85 adapted from Bills'[1] study presents the gross and net costs in relation to enrollment and tuition charges for an eighteen-year period beginning in 1927-28.

The lowest gross cost was experienced in the first year of operation; the highest in 1941-42 when ₩74,114.30 was expended. The lowest net cost was reached in 1944-45 and the highest net cost in 1942-43. In the latter year, the war cut the enrollment so that the student-teacher ratio was one teacher to 10 and 11 students. The per capita net cost for that year was ₩211.76.

The totals in Table XV present significant data. The combined resident and non-resident enrollments for the years represented totals of 6,250 students. Dividing the

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1 -- Mark W. Bills, A Survey of Selected Factors Pertaining to the Administration of Flint Junior College. Unpublished Manuscript, (January 7, 1946), pp. 11-14.

$960,585.21 by 5,250 students gives a gross average per capita annual expenditure of $182.97. The net per capita costs (the gross costs minus student fees) for the years represented an average of $79.89. Some residents of Flint believe that tuition and fees collected from students pay the operating costs of the junior college. It is true that in 1940-47 and 1947-48 the costs were largely so paid.

TABLE XV[1]

COSTS OF OPERATING AND RENTAL OF FLINT JUNIOR COLLEGE IN RELATION TO ENROLLMENT AND TUITION CHARGES

Year	Enrollment		Tuition Charges		Gross Costs	Net Costs
	Res.	Non-Res.	Res.	Non-Res.		
1927-28	167	34	$57.50	$65.00	$34,9[illegible]9.62	$18,693.64
1928-29	225	xx	57.50	65.00	44,625.73	27,040.89
1929-30	180	34	37.50	65.00	47,676.05	28,591.04
1930-31	202	48	57.50	65.00	47,121.75	21,643.01
1931-32	200	50	50.00	80.00	53,062.[illegible]0	20,412.34
1932-33	305	xx	50.00	80.00	41,929.85	16,537.39
1933-34	257	42	57.50	65.00	42,505.10	12,371.39
1934-35	263	20	57.50	65.00	44,727.05	18,[illegible]13.22
1935-36	307	53	57.50	65.00	62,712.29	31,121.47
1936-37	238	32	37.50	65.00	59,715.55	30,510.22
1937-38	277	48	57.50	65.00	64,711.[illegible]8	33,042.15
1938-39	364	40	50.00	70.00	63,828.98	16,904.09
1939-40	456	xx	50.00	70.00	67,927.39	14,07[illegible].25
1940-41	340	71	50.00	70.[illegible]0	72,[illegible]20.[illegible]3	21,[illegible]8[illegible].91
1941-42	300	37	50.00	70.00	74,114.20	34,307.[illegible]5
1942-43	184	19	75.00	95.00	60,155.81	42,[illegible]87.74
1943-44	154	15	75.00	95.00	38,[illegible]70.[illegible]1	15,770.24
1944-45	155	25	75.00	95.00	40,209.02	12,101.67
Totals	4722	528			$960,585.21	$416,776.01

xx -- Only total enrollments are available.

1 -- Adapted from Bills, op. cit., pp. 11-14.

From the point of view of the paying district the report on junior college costs during the eighteen year period was favorable. From the point of view of underpaid teachers and financially oppressed students, the report was not favorable.

The annual per capita net costs (annual gross costs minus student fees divided by the enrollment) are further illustrated in Table XVI.

TABLE XVI[1]

ANNUAL PER CAPITA NET COSTS OF THE FLINT JUNIOR COLLEGE

1927-45

(a) Year	(b) Enrollment	Faculty	Tuition Res.	Tuition Non-Res.	(c) Per Capita Net Costs
1927-28	201	(d)	$37.50	$65.00	$93.00
1928-29	225	13	37.50	65.00	120.00
1929-30	214	13	37.50	65.00	133.60
1930-31	310	(d)	37.50	65.00	69.81
1931-32	310	14	50.00	80.00	65.84
1932-33	303	17	50.00	80.00	54.58
1933-34	279	17	37.50	65.00	46.13
1934-35	283	14	37.50	65.00	66.48
1935-36	340	16	37.50	65.00	91.00
1936-37	320	17	37.50	65.00	-95.34
1937-38	325	18	37.50	65.00	101.67
1938-39	404	16	50.00	70.00	41.84
1939-40	456	12	50.00	70.00	30.87 (L)
1940-41	411	17	50.00	70.00	51.79
1941-42	337	18	50.00	70.00	101.83
1942-43	203	19	75.00	95.00	211.76 (H)
1943-44	149	12	75.00	95.00	105.84
1944-45	130	9	75.00	95.00	67.45

a -- Data not available prior to 1927-28.
b -- Average daily membership.
c -- Subject to slight revision, depending upon allocation of "overhead" charges.
d -- Data not available.

1 -- Bills, op. cit., p. 16.

The data on per capita costs, selected from Bills' study, include substantial student fee payments. In regard to the collection of fees and their use Bills reported:

> Since 1927-28, Flint Junior College students have paid a total of $51,321.83 in laboratory fees. Over that same period only $28,047.09 has been spent for all supplies used at the college. In other words, in the eighteen-year period for which records are available, collections from students in laboratory courses have exceeded the costs of all college "supplies" by some $23,774.74.
>
> Collections for laboratory fees are presumed to represent reasonable student responsibilities for the extra costs of this type of instruction. These fees are thus by origin earmarked for laboratory courses. Only by special and highly questionable accounting practices is it possible to justify the allocations of these monies to other than "laboratory courses account". Through the transfer of "surplus" funds, some $23,744.74 in laboratory fees has been lost to these departments and returned to the general fund.
>
> Furthermore, there is no way of knowing what proportion of the $28,047.09 actually spent for "supplies" constituted "supplies" for the courses in which the special fees were originally collected. If the current high laboratory fees are justifiable, and if they are to be retained, such funds belong to the laboratory divisions and should be spent there. Judged by the surplus for the eighteen-year period, the laboratory fees have either been too high or ill-advised economics have prevented expenditures for adequate supplies.[1]

In addition to the laboratory fees an activity fee has been charged. The funds from this source supported eighteen different accounts of which eleven might be considered legitimate; the others are questionable.[2]

A matriculation fee of five dollars is charged a

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1 -- Bills, op. cit., pp. 17-18.

2 -- Ibid., p. 21.

student upon admission to the college. A resident student in the Flint Junior College may find he has paid as much as $225 to $250 in tuition, fees, books and supplies for a college year!

High tuition and student fees deter many students from lower income groups from pursuing college work or from pursuing college work without undue hardship.

State Aid for Junior Colleges

A total of $650,000 in State Aid was distributed to junior colleges in 1947-48, or $.30.14 per capita. The 1948-49 appropriation for this purpose totaled $1,350,000. The Citizens Committee on Educational Legislation recommended a similar amount for 1949-50.[1] In the 1948-49 law the fifteenth and sixteenth grades of Wayne University were excluded from the apportionment. This action raised the per capita allotment for other schools. It was estimated by the Finance Division of the Department of Public Instruction that the per capita State Aid distributed in the second semester of 1948-49 will be $.30.[2]

Table XVII estimates the cost of an expanded junior

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1 -- News of the week. Lansing: Department of Public Instruction, Volume XVI, Number 28 (February 11, 1949), p. 56.

2 -- Personal letter from Harold M. Brown, Consultant, Finance and Child Accounting (January 15, 1949).

college program at different levels of enrollment with tuition at $100, at $50, and at no tuition per year with State Aid fixed at $90 per year. The amounts in columns 1, 2, and 3 of the table are net costs to the district after tuition and State Aid are deducted.

TABLE XVII

NET ENROLLMENT COSTS OF THE PLANT JUNIOR COLLEGE AT DIFFERENT ENROLLMENT LEVELS WITH VARYING TUITION RATES AND STATE AID AT $90

Enrollment Levels	Total Net Costs With Varying Rates of Tuition		
	Column 1	Column 2	Column 3
	Tuition $100 State Aid $90	Tuition $50 State Aid $90	No Tuition State Aid $90
600	$36,000	$60,000	$96,000
700	42,000	77,000	112,000
800	48,000	88,000	128,000
900	54,000	99,000	144,000
1000	60,000	110,000	160,000
1100	66,000	121,000	176,000
1200	72,000	132,000	192,000
1300	78,000	143,000	208,000
1400	84,000	154,000	224,000
1500	90,000	165,000	240,000
1600	96,000	176,000	256,000
1700	102,000	187,000	272,000
1750	105,000	192,000	280,000

State Aid is intended to encourage the local districts to expand their programs in secondary education to relieve the load in the thirteenth and fourteenth grades in state supported institutions and in privately controlled colleges,

and to equalize educational opportunity at the upper secondary level. These objectives will be more nearly realized if the local districts operating junior college programs lower their tuition accordingly.[1] With increased State Aid available, the Flint Junior College should be in a position to offer an expanded program without greatly increasing the cost to the local taxpayers.

At the maximum enrollment level as shown in Column 1 with tuition at $100 and State Aid at $90 the total net operating cost to the district per year would be $10[illegible],000; at the maximum enrollment level with tuition at $50 and State Aid at $90 the cost would be $192,500; at the maximum enrollment level with no tuition and State Aid at $90 the cost would be $2[illegible]0,000. The gross per capita operating cost was estimated at $150 in each instance. Two hundred eighty thousand dollars is not a large amount for a school district already expending over $3,500,000 for educational purposes.

THE DESIRABLE SITES

The desirable sites for a community college campus or for a liberal arts college campus are listed in order

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1 -- The Citizens Committee on Educational Legislation has recommended to Governor G. Mennen Williams and members of the Education and Ways and Means Committees of the House and Finance and Appropriations Committees of the Senate that new legislation should permit junior colleges to become community colleges. News of the Week, op. cit., p. 56.

of preference.

Site 1

Oak Grove, a Corporation, present location of the Flint Junior College is an excellent location. The site was purchased by the Flint Board of Education in 1920. The area is contiguous with the sites of the Flint Central High School and the Whittier Junior High School. It has a total of 57 acres, largely wooded and flanked on the southeast by Gilkey Creek. Across Gilkey Creek to the east is a tract of land of approximately the same area owned by the Mott Estate. Oak Grove and this portion of the Mott Estate form a like-kind landscape of great beauty and utility for campus purposes.

Room for expansion is adequate without infringing on the residential section of the city surrounding the area. The land is well drained. About one-third is level surface highly desirable for athletic playing fields.

The site is for all practical purposes centrally located, especially if further concentration of population occurs across Dort Highway to the east of the city. The "Business Section" or shopping center is only ten blocks distant. Main trunk lines, railroads, and bus lines facilitate transportation.

Site 2

Collingwood Park with Thread Lake as the center of its attraction is in the southeast section of the city. Since the site was first considered a Naval Reserve has been established in Collingwood Park. It would no longer be available for a college campus. Adjacent to Collingwood Park still farther to the southeast is the Flint Country Club, a privately owned golf course. It is unlikely that members of the Flint Country Club would consider releasing their property for educational purposes.

The landed area of Collingwood Park is too limited in extent to provide suitable building space. The land is rolling in contour and too uneven and too limited for athletic playing fields.

The site is quite accessible but not centrally located. The Grand Trunk and Pere Marquette railroads converge to the northwest. Saginaw Street, Flint's main thoroughfare, passes within two blocks of Collingwood Park. Bus service is available on Saginaw Street.

Site 3

The Mott Park across the Flint River from Glenwood Cemetery is not desirable. The low area of this park is flooded at times by the river. Yet the low area is the only portion available for playing fields. The high

ground is scarcely extensive enough to provide adequate building space. The nearness of Glenwood Cemetery also makes the site undesirable for public purposes.

Site 4

The Kearsley Lake section to the northeast of the city is isolated in some respects. Most of the Lake section is outside the city limits and city services would not be available. The lake itself is a reservoir created on Kearsley Creek. The land surface surrounding the lake is not as desirable as in the other sites.

Site 5

The Dewey Woods Park in the northwestern section of the city is not very accessible although new bus routes and bus route extensions pass on either side of the park. Mr. Jack Mosier, city planner, objected to any consideration given to this area for educational purposes. He said acquiring land for recreational purposes was difficult. Releasing such an area for a college campus was unthinkable.[1]

Other possible campus sites were investigated and found wanting in desirable characteristics. They

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1 -- Related verbally.

included; (1) the area between the Michigan School for the Deaf and the feeder line of the Pere Marquette Railroad, South of West Court Street and adjacent to the undeveloped section of the grounds belonging to the Michigan School for the Deaf, (2) the old John Pierce Estate of 45 acres in the southeastern section of the city, (3) old City Cemetery (abandoned), the section south of Burton Street to Avon, between East Bow Drive and Lewis Street - about 10 acres in extent, and (4) the Massebring Property located at the southwest corner of Third Avenue and Garden Street, adjacent to and northwest of the Chevrolet Plant - approximate area of 45 acres.

The present site of the Flint Junior College with the adjacent acreage of the Mott Estate is definitely superior for campus expansion. Using the present plant to full capacity as it is now being used offers the opportunity for gradual and normal institutional growth.

Figure 1, a map of the City of Flint, gives the locations of the various sites suitable for a college campus. The sites that were evaluated are circled on the map and numbered according to rank.

The residential sections of Flint radiate from Site 1, the Oak Grove area. Directly south across East Court Street are fine upper middle class homes. To the east and north are being developed new subdivisions of the middle class

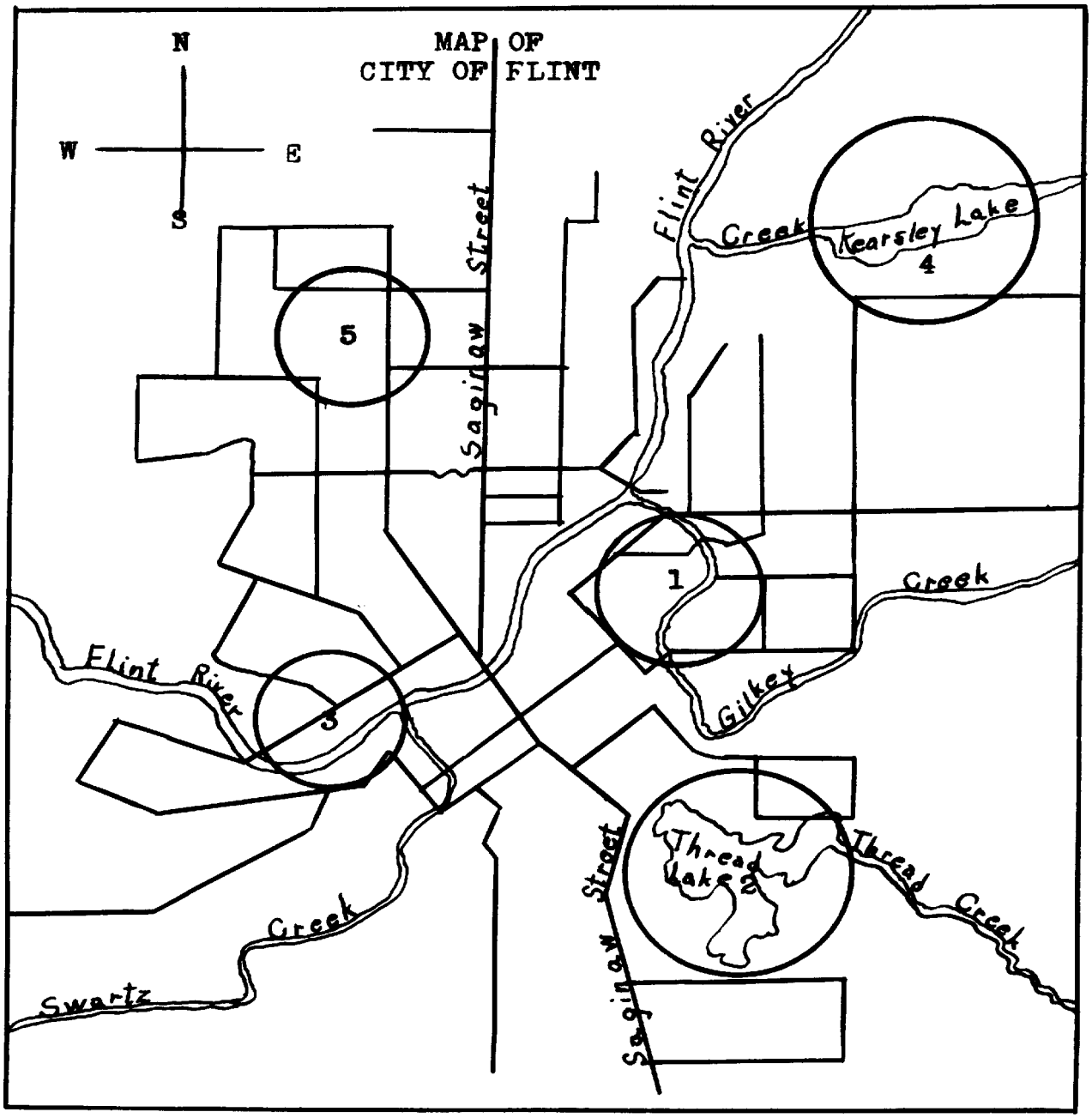


FIGURE 1 - POSSIBLE SITE LOCATIONS FOR A COLLEGE IN FLINT

Site 1 -- Oak Grove, present location of Flint Junior College.

Site 2 -- Collingwood Park.

Site 3 -- Mott Park.

Site 4 -- Kearsley Lake.

Site 5 -- Dewey Woods Park.

residents. South of West Court Street and Corunna Road are the finest residences in the city. The spacious area to the north and west is well blended with average and upper middle class residences. The lower income groups have their homes scattered among the factory districts and in the fringe areas of the city.

SUMMARY

To satisfy the enrollment demands in the thirteenth and fourteenth grades with a range of 1300 to 1750 students would require a plant expansion above present requirements of $1,020,000 to $3,230,000. This plant expansion would include the necessary gross floor space for instructional purposes, the instructional equipment and furniture, and a Library. It would not include the cost of the grounds.

Based on an annual expenditure of $250 per full-time student, the college would cost from $325,000 to $467,500 per year to operate. The latter figures are gross costs. The net costs vary according to the amount of tuition, fees, and state aid received per student. Gifts, bequests, and endowments would proportionally lower the gross costs also. If tuition were lowered to $100 per year per resident student and State Aid amounted to $90 per capita, 1300 resident students would cost the district approximately $78,000 annually; 1750 resident students

would cost approximately $105,000. If no tuition were charged and State Aid remained at $80 per capita, 1300 students would cost the district approximately $104,000; 1750 students would cost approximately $280,000.

The new State Aid allotments for 1946-49 should eliminate student fees. No fees were calculated in the tables.

The estimates for building construction may be somewhat high. Since the formula for estimating the per capita cost was based on 1946-47 figures, instructional equipment and the library were added as special items of expenditure. If the building or buildings house the administrative offices and clerical staffs for the Public Schools additional space will be needed.

The estimated per capita gross cost of $250 per year for operation is $67.06 higher than the average gross cost experienced by the Flint Junior College from 1927-28 to 1944-45. Gross operating costs have increased substantially. Teachers should be paid much more than in the past history of the school. An expenditure of $250 per year per student for operation should not be considered excessive.

The most desirable site for a college campus is the present location in Oak Grove. The adjacent property to the south and east of Oak Grove or a reasonable portion thereof would satisfy high standards for a serviceable, available, and beautiful campus.

CHAPTER V

ESTIMATED COST OF A FOUR-YEAR LIBERAL ARTS COLLEGE WITH CONSIDERATIONS FOR ADVANCED PROFESSIONAL STUDY

> But in this country there is no single generally accepted philosophy of higher education, and colleges and universities differ enormously in their legal and financial status, in history and geography, and above all in their students. In such a situation, differences of opinion are inevitable.[1]

The American liberal arts college has no counterpart in Europe. This fact of itself does not condemn it, but the organizational pattern which it represents has been under increasing attack in recent years. The first two years of training in the liberal arts college is essentially general in character. The surge in junior college enrollments indicates a demand by the public for education beyond the twelfth grade, also a change in the kind of curriculum offered.

The independent liberal arts colleges are neither physically equipped nor traditionally prepared to cope with the large numbers of youth seeking admission and

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1 -- Current Trends in Higher Education, 1948. Official Group Reports of the Third Annual National Conference on Higher Education (March 22-25, 1948), Washington: National Education Association, 1948, p. 85.

training in general and cultural areas as well as in semi-technical and semi-professional skills. Because the liberal arts college is academic in character, it satisfies the needs of a smaller number of students who desire to prepare for professional training.

The per capita cost of operating a liberal arts college is about midway between the costs of operating upper secondary and advanced educational programs.[1] The cost of operation is also related to the locality in which the institution is located. For example, in Michigan some of the privately controlled colleges are located in small communities where living costs tend to be lower, and maintenance and janitorial services cost less.

This chapter will consider the cost of buildings and facilities and the annual operating cost of a four-year liberal arts college in Flint. Additional consideration will be given the cost of providing advanced professional study. The site recommendations given in the preceding chapter would satisfy the needs of such a college.

THE BUILDINGS ANL FACILITIES

According to Lean's findings the potential enrollment in a four-year college in Flint would range from 2050 to 2750 students. This enrollment by class years

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1 -- See Table X, p. 51.

is shown in Table XVIII adapted from Lean's study.

TABLE XVIII[1]

POTENTIAL ENROLLMENT IN A STANDARD FOUR-YEAR COLLEGE IN FLINT, BY CLASS YEARS

Class Years	Enrollment Range
Freshman	750 - 1000
Sophomore	575 - 750
Junior	425 - 575
Senior	300 - 425
Total	2050 - 2750

Lean considered these estimates to be conservative. The enrollment might exceed these estimates within a few years, if the college were established. The present junior college plant would probably continue to house a load of 722 students. Subtracting this number from the minimum and maximum enrollment figures in Table XVIII produces a range of 1338 to 2028 students. At $2790 required expenditure for each full-time student, the minimum enrollment of 1338 students would require a plant expansion for gross instructional purposes of $3,723,020. At the maximum enrollment range of 2028 students, a plant expansion for gross instructional purposes would cost

1 -- Lean, op. cit., p. 109.

$5,658,120.

The per capita cost for expansion was based on 1946-47 construction costs. This estimate would be low for 1948-49. To compensate for the increased cost estimated expenditures for instructional equipment and the library are added as extra items.

Instructional equipment may be estimated on the same basis as for the junior college. Equiping a liberal arts college may even require less than $1000 per room on the average. Larger classrooms would be more feasible for lecture instruction than for technical training for occupational-terminal instruction; that is, more students per classroom could be cared for in a liberal arts program than in a classroom or laboratory designed for technical training. A ratio of 35 students per room is indicated for the average at $1000 per room.

The minimum estimated enrollment of 1338 students would require approximately 38 rooms. The cost of equipment would be approximately $38,000 to $40,000. The maximum enrollment of 2028, above present plant capacity, would require at least 58 classrooms or $58,000 to $60,000 expenditure.

The library should seat from 10 to 20 percent of the school enrollment.[1] Eventually, the library should represent an investment of $250,000 or more.

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1 -- Cook, op. cit., p. 35.

Table XIX presents the estimated costs for building expansion, instructional equipment and library facilities for a liberal arts college in Flint.

TABLE XIX

ESTIMATED COSTS FOR BUILDINGS, INSTRUCTIONAL EQUIPMENT AND LIBRARY FACILITIES FOR A LIBERAL ARTS COLLEGE IN FLINT

Items of Expenditure	Estimated Enrollment Range for a Liberal Arts College	Present Plant Capacity	Approximate Enrollment Above Present Plant Capacity	Approximate Range of Costs
Building to Provide Gross Floor Space	2050 to 2750	722	1338 to 2028	$3,700,000 to 5,600,000
Instructional Equipment	2050 to 2750	722	1338 to 2028	38,000 to 60,000
Library	2050 to 2750	60		125,000 to 250,000
Total				$3,863,000 to $5,910,000

A liberal arts college usually participates in competitive athletics. A gymnasium, field house, and playing field are necessary for these activities. Future consideration would need to be given to these items of expenditure.

Dormitories may be regarded as self-liquidating

projects.

OPERATING COSTS

The cost of operating a liberal arts college annually for each full-time student was determined to be $600.[1] A liberal arts program is more stable through the years in matters of cost and curricular change, although it is less likely to meet local, state or national needs.

Variation from the traditional pattern usually results in increased costs both for plant and operation. Emanuel Missionary College at Berrien Springs, Michigan has a total plant investment of $13,587 per student. The per capita cost of operation, however, because of donations and industrial returns is only $626.[2]

The annual operating expenditure per full-time student must be applied to the total range of estimated enrollment. The minimum enrollment of 2050 students would require an annual gross expenditure of $1,230,000, and the maximum enrollment of 2750 students would require an annual gross expenditure of $1,650,000.

Tuition, endowment, State Aid, fees and services may be expected to reduce the gross per capita cost substantially for a publicly controlled institution. Endowment

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1 -- See Tables X and XI, pp. 51 and 55.

2 -- See Appendix, Tables A I and A II, pp. 150-53.

was estimated to be second in importance to tuition charges. State Aid may be applied to the freshman and sophomore years similar to the state arrangement at Wayne University. Testing materials and supplies may be a service that can be sold or exchanged for services from other agencies of government which help to reduce costs. Such an arrangement was made at the University of Cincinnati with the municipal authorities.[1] College owned and operated dormitories, cafeterias, and bookstores sometimes contribute to income. Income from special services, fees, and miscellaneous sources were estimated at five percent.

In Table XX the gross costs, possible sources of income, and the net costs for operating a standard four-year college in Flint are estimated. Column 1 in the table lists the gross costs for each class year in terms of the enrollment range. Columns 2, 3, 4, and 5 estimate the various sources of income. Column 6 lists the estimated net costs after subtracting the amounts in columns 2, 3, 4, and 5 from column 1.

The endowment income was estimated at 10 percent of the total operating cost needs. With the concentration of manufacturing wealth in the City of Flint an endowment

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1 -- R. H. Eckelberry, The History of the Municipal University in the United States. Bulletin 1932, Number 2. Washington: United States Office of Education, 1932, pp. 187-89.

to produce $60 per year per student should be possible. Since State Aid is available to junior colleges, and to the thirteenth and fourteenth grades of Wayne University, it should be available to a like-controlled institution.

TABLE XX

ESTIMATED GROSS COSTS, POSSIBLE SOURCES OF INCOME, AND NET COSTS FOR A STANDARD FOUR-YEAR COLLEGE IN FLINT

Enrollment Range	1 Total Gross Costs at $600 per Student	Possible Income 2 Tuition $300	3 Endowment $60	4 State Aid $90	5 Fees, Services $30	6 Net Costs (Column 1 minus Columns 2, 3, 4, 5)
Freshman						
750	$450,000	$225,000	$45,000	$67,500	$22,500	$90,000
1000	600,000	300,000	60,000	90,000	30,000	120,000
Sophomore						
575	345,000	172,500	34,500	51,750	17,250	69,000
750	450,000	225,000	45,000	67,500	22,500	90,000
Junior						
425	255,000	127,500	25,500	--	12,750	89,250
575	345,000	172,500	34,500	--	17,250	120,750
Senior						
300	180,000	90,000	18,000	--	9,000	63,000
425	255,000	127,500	25,500	--	12,750	89,250
Totals	$	$	$	$	$	$
2050	1,230,000	615,000	123,000	119,250	61,500	311,250
2750	1,650,000	825,000	165,000	157,500	82,500	420,000

To produce the necessary income at 2½ percent the invested endowment funds should equal the amount invested in new buildings, and equipment or approximately so.

Under the most favorable financial conditions, the annual net operating costs for a four-year standard college would require from $311,250 to $420,000.

ADVANCED PROFESSIONAL STUDY

Urban institutions that have offered work in the standard college are tempted to add graduate work in some specialized field such as law, medicine, engineering, etc. Historically, some municipal institutions had the precedent of professional study already established by the privately controlled colleges which they absorbed.[1] Financial difficulties, experienced by the privately controlled institutions, usually forced the transfer from private to public control.[2] Before the advent of high accrediting standards, tax limitations, and high prices, municipal institutions with their power to secure income from local tax sources were able to maintain a program.

With increased enrollment demands in 1948, municipal institutions could no longer support the kind of program desired without state or national aid.

In New York State, seven Institutes of Applied Arts and Sciences are planned to be added to the municipal agencies or universities already in the City of New York,

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1 -- Wayne University and University of Louisville.

2 -- Eckelberry, op. cit., p. 165.

but the new Institutes are to be state supported and controlled.

Wayne University with the resources of Detroit is unable to bear the full financial burden without state assistance. Provision was made in the 1948-49 State Aid formula, as mentioned earlier, to provide funds for Wayne University for the thirteenth and fourteenth grades. Wayne University may never be able to acquire a satisfactory campus, and the necessary buildings and equipment it needs unless it becomes a state institution as has been advocated from time to time.

The President's Commission recognized "higher" education as a state and national problem too difficult for local units of government to support.

If graduate study were to be added to the standard four-year college a number of nationally recognized scholars should be added to the staff. This will increase the annual operating costs. The $1000 per full-time student suggested in the formula is a modest estimate of the cost, but it will give a partial over-all view of the financial problem involved.

It should be mentioned also that graduate training required additional expenditures in capital investment for buildings and equipment. The physical plant of the Chicago Medical Center was estimated in 1948 at

approximately $50,000 per student.[1] The recent Washington[2] and Maryland[3] surveys have shown the urgent need for additional plant expansion in most of the graduate schools in each of the two states.

Estimated Graduate Enrollment

Advanced education begins with the fifteenth grade. The enrollment for the fifteenth and sixteenth grades in a Flint four-year college was estimated by Lean to range from 725 to 1000 students.[4] No estimate was made for enrollment on the graduate level above grade sixteen. For statistical purposes only, one may assume that in a standard liberal arts college which offered graduate work in a number of professional schools attached to it, one-fourth of the students in the fifteenth and sixteenth grades would continue training for higher degrees. The Master's degree is generally required as the minimum certification standard for all specialization. It will be increasingly demanded.

The estimate for the number to be enrolled in graduate work seems high. Ordinarily the number of graduate students

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1 --Current Trends in Higher Education, op. cit., p. 15.

2 -- Strayer, op. cit., pp. 654-56.

3 -- Higher Education in Maryland, pp. 355-61.

4 -- See Table XVIII, p. 100.

represents a mere fraction of the total enrollment in the traditional college. However, urban universities tend to have proportionately higher enrollments in the graduate divisions than state or private universities.[1] The past can scarcely be used as a criterion for predicting future trends in this instance. As mentioned above, professional training in all fields are advocating higher standards. Moreover, the full impact of the post-war college enrollment has not been felt in the graduate school. In education the Provisional Certificate requires ten additional hours of credit within a five-year period, presumably of graduate work to convert to a Permanent Certificate. The Certification Division of the Michigan Department of Public Instruction plans to require the Master's Degree or equivalent for secondary teaching.[2] The development of community colleges as indicated in California will likely prepare more students for advanced education and graduate work.

By using approximately 25 percent to the estimated enrollment of 725 to 1000 students in the fifteenth and sixteenth grades, the total number of students taking senior college and graduate work would range from approx-

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1 -- For example the University of Cincinnati conferred 430 Bachelor's Degrees, 52 Master's Degrees and 90 Doctor's Degrees in 1946-47. Brumbaugh, op. cit., p. 269.

2 -- Reported verbally by Earl Mosier and Eugene Richardson of the Department of Public Instruction.

imately 900 to 1250 students. This estimate is probably low. Proximity to educational service increases the demand. With the concentration of population in Flint, the nearness of a graduate center would stimulate local attendance.

Estimated Operational Costs

At $1000 per full-time student, the annual gross operating cost would range from $900,000 to $1,250,000. Probably not more than 50 percent of the gross costs could be defrayed by tuition, endowment and fees. Without state or Federal assistance, the local district would be responsible for raising annually by taxation from $450,000 to $625,000 for advanced education.

SUMMARY

A standard four-year or liberal arts college in Flint would probably enroll from 2050 to 2750 students. The buildings required to provide the gross floor space for instructional purposes would cost from $38,000 to $60,000. In addition, from $125,000 to $250,000 should be expended on the library. The total expenditures for buildings, equipment, and library would range from $3,863,000 to $5,910,000.

The annual gross operating costs would range from $1,230,000 to $1,650,000 on a basis of $600 per full-time

student. The net operating costs would range from $311,250 to $420,000 after deducting tuition, endowment, State Aid, and miscellaneous income. To produce sufficient productive funds from endowment, however, would require an investment approximately equal to the amount invested in the school plant.

The gross operating costs for advanced education beyond the fourteenth grade, which includes research, graduate and professional study, would range from $900,000 to $1,250,000 annually for an enrollment of 900 to 1250 students. Probably not more than 50 percent of the annual gross operating cost could be defrayed by tuition, endowment and fees. The net cost would range from $450,000 to $625,000 annually -- too great a cost for a local community to bear for the small number of students served.

CHAPTER VI

FLINT'S RESOURCES

This chapter will consider the various indices of wealth usually studied to determine a communities' ability to support public services. It will include reference to population, wealth, sources of income, scope of resources, current development of public service properties, current development of school properties, current debt obligations, analysis of population as to occupations, current tax rates, and the attitude of the public toward local taxes. Consideration will also be given to the tax restrictions under which local funds are raised for public services.

VITALITY OF THE POPULATION

Flint's population has shown a steady increase during the past thirty years, except for the decade 1930-40. There is no evidence to indicate that population trends will become decadent in the near future. The county population has shown a parallel growth and apparently will continue to increase.1

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1 -- See pp. 25-26.

INDICES OF WEALTH

Per Capita Income

The per capita income of Genesee County, before World War II, was one of the highest in the state, ranking next to Wayne.[1] Wayne County ranked next to New York. Wayne received approximately 50 percent of the state total income, and Genesee County five percent of the state total.[2] The per capita income varied in the state from $607 in Wayne County, and $540 in Genesee County to a low of $[illegible] in Lake County.[3] It is well to emphasize the fact that per capita figures are averages which may conceal large variations within counties.

Sales Tax Collections

Evidence of economic well-being may also be shown by the amount of sales tax collections in recent years. Genesee County ranked fourth in the state among the 83 counties in 1945-46 and 1946-47.[4] Only Wayne, Kent, and Oakland

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1 -- Marvin A. Recon, Income As An Index Of Fiscal Capacity Of Michigan Counties. Michigan Governmental Studies, Number 8. Ann Arbor: University of Michigan Press, 1941, pp. 3-4.

2 -- Ibid., p. 22.

3 -- Ibid., p. 5, 22.

4 -- Annual Report, 1946-47. Lansing: Michigan Department of Revenue, 1947, pp. 56-57.

placed ahead of Genesee.[1] The amount collected in Genesee showed a 40.13 percent increase in 1946-47 over 1945-46.[2] Genesee County collected 4.20 percent of the state total in 1946-47, whereas Wayne collected 44.22 of the state total. Genesee does not compare favorably with Wayne in terms of total population and apparent total wealth, but it does in terms of per capita income.

Sales tax collections in dollars per capita place Genesee County slightly below the state average. Genesee County residents paid $29.49 each in sales tax in 1946-47, while the average state resident paid $29.79.[3] The per capita of sales tax paid is not a good index. Several of the thinly populated resort counties distort the figures because of a heavy influx of tourists in the summer and during the hunting season. For example, Roscommon County paid the highest per capita sales tax ($40.07) in 1946-47, yet the per capita income of the county is low.[4-5] In other words, Roscommon County merchants were credited with the dollars spent by non-residents. Likewise, Washtenaw and Ingham Counties are affected by large numbers of non-resident students who attend the University of Michigan

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1 -- Annual Report, 1946-47, op. cit., pp. 56-57.

2 -- Ibid., p. 56.

3 -- Ibid., p. 29.

4 -- Ibid., p. 29.

5 -- Brown, op. cit., p. 60.

and Michigan State College. Genesee County with Flint as its center draws substantial [illegible] from adjoining counties.

Intangible Tax

The intangible [illegible] in Genesee County in 1946-47 [illegible], principally by banks, dealers, and [illegible].[1] The [illegible] Genesee County [illegible] in excess of $75,000.

Intangible Tax

The [illegible] has varied very greatly by years. Genesee County paid $75,861.54 in 1946-47. It ranked sixth place among the 83 counties.[2]

SOURCES OF WEALTH

Flint is often mentioned as a one-industry city. Most of Flint's occupational effort is concentrated in the manufacture of automobiles. Part of the population of Genesee County may be regarded as belonging to greater Flint. People living in the "fringe area" are largely employed in the city's manufacturing plants. In 1940, 37,000 people lived in the "fringe area". The number had

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1 -- Annual Report, 1946-47, op. cit., p. 60.

2 -- Ibid., p. 58.

increased to an estimated $[illegible],500 in 1947.[1] More than three-fourths of the population of Genesee County live in Flint and its immediate environment. A report on the county's income is therefore a practical report on Flint's income as well.

[illegible] ranked fifth in the urban group in Leonard's study. In 1939 the county received a total income of $114,000,000. Of this total amount paid to producers, employees, proprietors, [illegible] 46,175,000 or 41.5 percent; property owners received $8,671,000 or 7.7 percent; government received $10,400,000 or 9.2 percent; and others received $7,757,000 or 6.9 percent.[2-3] Genesee County received .0407 per cent of the state total income. These statistics were compiled in 1939 income and seem to be the latest figures available.

Cost of Living Index

The cost of living index based on 1935 data with the state average at 100 listed Flint at 105, Port Huron at 100, Jackson at 104, Saginaw at 107, Detroit at 112, and Ann Arbor at 111.[4]

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1 -- Harding Bushnell, Jr., Local Government in the Fringe Area of Flint, Michigan. University of Michigan: Social Science Research Project, 1947, p. 1. (Mim.)

2 -- Bacon, op. cit., p. 58.

3 -- See Appendix, Table A III, p.

4 -- Bacon, op. cit., p. 76.

The Supernumerary Income

The "supernumerary income", that is, the amount of income available per capita over the income needed for the purchase of the necessities of life, gave Genesee County a very favorable rank among the 67 counties. It ranked third, next to Midland and Wayne. The five counties, Wayne, Midland, and Genesee had "supernumerary income" of [illegible], respectively.[1] The [illegible] used in this figure.

SCOPE OF PRODUCTS AND TRADE

As a metropolitan area the district Flint extends into other counties although it has only fifteen from other counties.

The automobile industry which provides employment for Flint workers and many residents in Genesee County sells its products in an international market. As a source of income the automobile industry may be regarded as one of the broadest and most secure bases for support that any community could have, although in normal years of production the industry tends to be seasonal.

CURRENT DEVELOPMENT OF PUBLIC SERVICE FACILITIES

Since the adoption of the 15-mill tax limitation

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1 -- Brown, op. cit., p. 87, cf.

Flint has permitted its public service facilities to deteriorate when these services are compared with the growth and tax resources of the city.

The Mayor's Fact Finding Committee recommended, September 27, 1948, that various civic projects be given "top priority" for construction. The projects were regarded as financially by local tax levies after a court decision declared the Home Rule Bill unconstitutional and the Sales Tax the main instrument available.[1] Because of the constitutional restrictions has occurred, as yet, the projects may be regarded as feasible of achievement in terms of the recommendations. Table XXI presents the Committee's "top priority" list of projects and their estimated costs.

TABLE XXI[2]

FLINT PUBLIC SERVICE PROJECTS GIVEN "TOP PRIORITY" BY THE MAYOR'S FACT FINDING COMMITTEE, 1948

Projects	Estimated Cost
Storm Trunk Sewers	$739,600
Sanitary Trunk Sewers	389,500
Streets and Bridges	996,250
Civic Center Site	1,000,000
Airport and Miscellaneous	150,000
Park Board Projects	594,000
Hurley Hospital Projects	1,000,000
Total	$5,994,350

1 -- Final Report of Mayor's Fact Finding Committee For Flint Civic Improvement. Flint: The Committee, 1948, pp. 1-3. (Mim.)

2 -- Ibid., p. 1.

In addition to the projects listed in Table XIII the Committee recommended two public service projects be given "next most important" consideration. They were a municipal ice building, and a Municipal Stadium, a combination [illegible] and Convalescent Hospital estimated $750,000.[1] Any plant [illegible] for educational purposes must be dealt with [illegible] for the new public service projects.

CURRENT DEVELOPMENT OF SCHOOL FACILITIES

School property development paralleled the development, or lack of development, of public service properties. The last school building was completed in 1929. Flint Technical High School was built in 1917, Central High School in 1920, the Northern High School in 1927.[2]

To modernize the school plant and to serve the elementary attendance areas, a new addition to Northern High School has been proposed, a number of elementary school sites selected, and plant alterations planned. The Mayor's Fact Finding Committee recommended that "top priority" be given to these educational projects. Table XIII presents the list of approved projects and their estimated costs.

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1 -- Final Report, C.P.C., p. 6.

2 -- Information supplied from the office of the Superintendent of Schools.

[illegible]

PLANT AREAS [illegible] ITEM "C" IS [illegible]

BY [illegible] [illegible], [illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible] junior [illegible] an estimated cost of $1,4[illegible], [illegible] [illegible] "[illegible]" [illegible].[2]

[illegible] that the school [illegible] in Table XXII, and the construction of a new junior college building would permit a five [illegible] a new junior high school and elementary school [illegible] Fleming Road area.[3] It was estimated that [illegible] program could be financed by a 20-year bond issue at an annual cost of one [illegible] additional tax levy.[4]

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1 -- Final Report, op. cit., p. [illegible].

2 -- Ibid., p. [illegible].

3 -- Ibid., p. 17.

4 -- Ibid., p. 17.

[illegible] of the [illegible] Department [illegible] Tex, and the Liberalization [illegible] of the [illegible] Act, the Flint Planning Commission [illegible], [illegible] building [illegible] [illegible] revenues.[1] Since the [illegible] was [illegible], and the [illegible] act was [illegible] [illegible].

[illegible]

Flint's [illegible] debt at the end of 1945 was the lowest in the United States for cities comparable to Flint on a population basis. Flint's gross debt was $2,000,000 less than [illegible], the next lowest. Norfolk, Virginia ranked as the highest gross debt in the list of selected cities, but [illegible] obligations more than eleven times as great as Flint's public [illegible].[2]

Table XXIII [illegible] presents the statistical data on [illegible] for cities comparable to Flint.

The [illegible] per capita debt in Flint was approximately $22 in 1945.[3] The per capita debt by October, 1946 was

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1 -- Final Report, [illegible], p. 15.

2 -- The Municipal Year Book, 1946. Chicago: The International City Managers' Association, 1946, pp. 200-201.

3 -- The gross debt for Flint in Table XXIII divided by the estimated population.

[illegible]

City	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

In 1948-49, the current [illegible] for freight carriage on general valuation in the City of Flint for all services was 0.24 mills. The city bills 1.00 mill, the county 20 mills, the state 3.00 mills, and the [illegible] 1.00 mills.[1]

[illegible] service is a reason Flint is in very few possible locations to attract the skilled workers who [illegible] and still have a good better level of efficiency.

[illegible] OF THE CORPORATION

Flint [illegible] any kind of industry. [illegible] established his trading [illegible] the "Big Eastern Mail" on [illegible] the Flint River, the community [illegible] in milling, lumbering, grain manufacturing, and automobile manufacturing in succession.

The latter industry [illegible] wealth and a demand for varied [illegible] products. Mines, ports, and complexes of all [illegible] were required. The location of Flint to provide the necessary building materials for a new industry on the pine [illegible] belt. Complete building gave Flint a source of income other than agriculture which [illegible] to be [illegible].

The transition [illegible] manufacturing [illegible]

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1 -- See Appendix, Table XIV, p.

making of automobiles [illegible] not an easy process. The experience [illegible] Ford, Chevrolet, Durant and the [illegible] financial support [illegible] the small Flint company [illegible].

Durant, [illegible], probably [illegible] financial [illegible] Flint's [illegible]. [illegible] ability [illegible] Flint [illegible] [illegible] Flint [illegible] [illegible] Flint. [illegible] Durant [illegible] from the Weston-Mott Company of Utica, New York [illegible] Flint, and Albert Champion moved his [illegible] factory from [illegible]. Le Fountain acquired such associates as J. W. [illegible], [illegible], and Louis Chevrolet.[1]

An Incentive for Style

In years of normal competition automobile manufacturing is not only seasonal, but eccentric. If the designers fail to create while taste the product does not sell. For example, in 1920 there were 1,200 dealers selling only Buicks - in 1923 there were less than 70 dealers selling

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1 -- Burl Noggle, The Birth of Flint (New York: Appleton-Century-Crofts, Inc., 1965), pp. 21-24.

only Baltimore.[1] By termination of the plant and a reduction of the army, Flint [illegible] 10,000 units in 1944.[2]

[illegible] Flint. It [illegible] Flint at that time [illegible] city.[3] [illegible] in the state from [illegible] only ten [illegible] of the [illegible] the [illegible] the [illegible] the [illegible] Flint [illegible] of its [illegible] size of it, [illegible] it [illegible] many [illegible] cities [illegible].[4] [illegible] built, but only [illegible] for [illegible].[5]

In [illegible] Flint [illegible] the [illegible] of [illegible] cities, in it [illegible] according to [illegible] selected in- [illegible].

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1 -- Ibid., p. 61-30.

2 -- Ibid., p. 27.

3 -- Ibid., p. 70.

4 -- According to the [illegible], the metropolitan district of Flint had 17,000 [illegible].

5 -- Crow, op. cit., p. 7.

6 -- Ibid., p. 11.

TABLE XXIV[1]

FLINT [illegible] AVERAGE [illegible] OF CITIES IN ITS SIZE
[illegible] AND FLINT'S [illegible] RATIOS

Item	Flint	City Average
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible] in [illegible] to [illegible] to Flint's [illegible] number of [illegible] males. This is typical of [illegible] in which [illegible].

[illegible]

[illegible] for [illegible] Flint compared to Average of [illegible] Cities In Its Size Class And [illegible] 54 Selected Indices. Flint: Social Science Research Bureau, 1947, p. 1-8. (Mi..

[illegible] "[illegible] area" [illegible] percent of home-owner-[illegible]. [illegible] in the "[illegible] area" have [illegible].[1]

[illegible] city, [illegible] Flint [illegible] [illegible] [illegible] found in the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]

completed for [illegible] years [illegible] may well be somewhat higher than the [illegible], indicating a high quality [illegible].

[illegible] city [illegible], [illegible] the [illegible] [illegible] 75 city average. [illegible], communication and other utilities; building [illegible]; and government all rated [illegible].

[illegible] IN PLANTS OF THE FUTURE

The [illegible] and probable future [illegible] sources of the Flint [illegible] may be understood by a study of the [illegible] valuations during the past twenty years. [illegible] valuation increased from $[illegible] in [illegible] to $[illegible] in 1931-32. Thereafter, the [illegible] effect forced the [illegible] valuation [illegible] a total of $[illegible] in 1937-38, a decrease of [illegible] from the 1931-32 figure. During the next thirteen years, including the current year 1945-46, assessed valuations increased steadily except for the year 1941-42. The assessed valuations increased from $[illegible] to $[illegible], a total of $133,050,[illegible] or 29 percent above the 1931-32 valuation.[1]

The large increase in assessed valuations in the Flint

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1 -- See Appendix, Table A-1, [illegible].

School District initiated the [illegible] used by municipal and school authorities to increase the tax collections for [illegible] purposes when the attempts to increase the millage failed.

It was the intention of the assessor in the City of Flint in 1947-48 to raise the valuation of the state equalized valuation [illegible] to 50 percent of the sales value.[1] [illegible] the sales value, [illegible] valuation.[2] In spite of the increased valuation [illegible] $85,000,000 [illegible] 50 percent. In 1947-48 and in 1948-49 the assessed valuation exceeded the State equalized valuation by $11,130,411 and $15,040,516, respectively.

Rates in the Area

The tax rates in Flint, before the 15-mill limitation, were high. [illegible] rates for the City, the County, the state, and the School District totaled 33.35 mills in 1928-29. These combined rates for all services, including debt service, reached an all-time high in 1929-30 when 47.3 mills were levied.[3] The total rates for all purposes became successively lower each year with few

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1 -- According to Victor Reuther, Director of the Social Science Research Project.

2 -- See Appendix, Table A V, p.

3 -- See Appendix, Table A IV, p.

reversed until the amount reached its peak when there existed 17.14 mills.[1]

Debt service [illegible] all units of government [illegible] 4.41 mills in 1939-40 to the present rate of 5.25 mills. [illegible] 1939-40 expenditures climbed to [illegible] by the depression, and the level [illegible] mills.[2] The substantial increase [illegible] in the last four years [illegible] 5.25 mills in 1939-40 from the actual requirement of the rate.

The actual tax rate for general purposes attained the highest level in 1932-33 when the rate stood at 14.41 mills. This rate [illegible] 4.75 mills in 1939-40, increased slightly [illegible], and has remained relatively low since 1933.[3] The increase in assessment by [illegible] permitted a reduction of revenue which, with State Aid, [illegible] higher expenditure per capita based on previous assessments.[4] The amount reported in Table XXIV, [illegible] based on a 1937-38 expenditure listed by the United States Office of Education.[5] It

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1 -- See Appendix, Table A IV, p.

2 -- See Appendix, Table A V, p.

3 -- See Appendix, Table A VI, p.

4 -- See p. 125.

5 -- Reterse, op. cit., p. 1.

[illegible]

[illegible]

In [illegible] the [illegible] the [illegible] will [illegible].

[illegible], 1966, the Board of Education held an election to increase the tax rate on two mills for a period of five years for additional purposes. In the mills were to be levied and collected by the City Council of the City of Flint. Of 7,811 votes cast, 10,200 were in favor of the increase and 10,200 were opposed to the increase. A majority of 22,01 citizens were registered and 1 [illegible].[1]

In a [illegible], 1967, the Board of Education held an election to increase the tax rate by two mills for three years. The proposal lost with a vote of 5,117 for and 5,771 against.[2]

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1 -- See Appendix, Table XVI, p.

2 -- Ibid., p.

3 -- Information supplied by Lawrence L. [illegible], Assistant Superintendent of Flint Public Schools.

On June [illegible], [illegible], a [illegible] was held for [illegible] and levy of the [illegible] mill of [illegible]. The [illegible] just [illegible] mill, [illegible] percent [illegible]. [illegible] 1,[illegible] votes [illegible] 2,[illegible] [illegible].[1]

On August 3, [illegible], the [illegible] was held to give [illegible] an [illegible] [illegible]. The [illegible] [illegible]. [illegible] [illegible]. [illegible], [illegible], [illegible] [illegible]. [illegible] [illegible] [illegible] the uncertainty [illegible] [illegible], [illegible] [illegible] [illegible] to [illegible] [illegible]. [illegible] [illegible] would have [illegible] [illegible].[2]

[illegible] [illegible] [illegible] have been [illegible] to [illegible] [illegible] [illegible].[3] The real estate [illegible] [illegible] [illegible] [illegible] the 15-mill [illegible]. [illegible] [illegible] apparently opposed to [illegible] [illegible]. [illegible] it may seem, in the [illegible], 1947 election, one [illegible] precinct [illegible] [illegible] [illegible] (renters, who would have [illegible] [illegible] [illegible] [illegible],

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1 -- [illegible].

2 -- "School Millage Election Set for Sixth Time," Flint Journal (April [illegible], [illegible]), [illegible].

3 -- Ibid., p. 1.

[illegible]

Index of Livelihood in Selected Cities

[illegible]

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1 -- [illegible]

2 -- [illegible], Community Aspects of Trade Unionism in Flint, Michigan. University of Michigan: Abstracts of Doctoral Dissertations by Fall [illegible], [illegible], p. 20. [illegible].

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Finance Commission of the Fiscal Relations between the State of Maine and Municipalities [illegible] to the State of Maine [illegible] ...

[illegible] ... [illegible] ... [illegible] ... [

The Limits of Distortion

[illegible] the [illegible] [illegible] [illegible]

February, 1948.[1] [illegible] appraised [illegible] best room for [illegible] the [illegible] of interest on [illegible] bonds.[2]

[illegible], i.e. [illegible] to protect the [illegible] Fund and the [illegible] Improvement Fund by [illegible] to school districts, which [illegible] [illegible] capital [illegible] bonds.[3]

[illegible] all their [illegible] at a favorable rate of interest.

[illegible] proposed bond issues for civic improvement in Flint are [illegible] in amount in terms of the assessed valuation and current low debt obligations. Flint should [illegible] the [illegible] of the [illegible] bonds in [illegible].

SUMMARY

Flint's [illegible] adequate [illegible] of capital for civic improvement. Local taxes for operating are comparatively low. The debt has been sufficiently retired so that the levy for debt service can [illegible]

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1 -- Stapelli, op. cit.

2 -- "Improvement Necessary to Help Flint Bloom", The Bulletin News (Flint), vol. 17, 1948, p. 27.

3 -- Ibid., p. 27.

[illegible] proposed by the Greater Flint Planning Committee.

[illegible] in the [illegible] Flint [illegible] initial [illegible] [illegible] [illegible]

CHAPTER VII

CONCLUSIONS CONCERNING FLINT'S ABILITY TO FINANCE UPPER SECONDARY AND ADVANCED EDUCATION

This chapter will summarize the findings of the study under the topics: significance of the cost trends in educational finance, the attitude of the state government toward democratizing upper secondary education, the evaluation of a community college, the evaluation of a liberal arts college, and Flint's best opportunity to contribute to post-high school education.

THE SIGNIFICANCE OF THE COST TRENDS IN EDUCATIONAL FINANCE

It has become increasingly clear that to expand the educational facilities in upper secondary and advanced education needed to meet the enrollment demands in the years ahead will require increased appropriations from the three levels of government -- local, state, and Federal. The Federal government should provide funds directly to the states as needed by those states and not for special areas of training except possibly for research and national defense. The funds should be distributed on an equalized basis as a supplement to the poorer states which require

a program beyond their maximum efforts. The funds should go to institutions under public control only. The chief purpose of the Federal government should be to equalize educational opportunity for all citizens in accordance with their innate capacities and interests regardless of race, religion or politics. The granting of public funds and their acceptance by educational institutions generally assumes the right of public agencies to review the policies and programs for which these funds were appropriated. For this reason it would be desirable for government funds to be invested in grounds, buildings, and facilities which are costly, have a more permanent value, and are farther removed from policy formation regarding instruction than costs of operation.

The granting of Federal funds might best be given in three ways: (1) to provide scholarships and fellowships, (2) to match state funds designed to provide capital improvements in publicly supported institutions, and (3) to support research and to purchase essential services.[1]

The recognition of upper secondary and advanced education as a problem of national concern has also clarified the issue whether or not local agencies of government are able financially to support programs of post-high school education without assistance. The consensus of opinion

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1 -- Higher Education for American Democracy, op. cit., pp. 3-6.

indicates that local agencies are not able to initiate or to support such programs alone. The costs have become too burdensome with increased enrollments, higher standards, and inflated prices. Moreover, the trend towards making upper secondary education as free as high school education is now free may open the way for still greater enrollment demands.

However, if the local agency of government, the school district, is to retain local control over the educational policies above the minimum essentials and accrediting standards it must be prepared to support a major share of the costs of operation.

The state may then contribute a sufficiently large enough portion of the costs to assure an adequate program.

THE ATTITUDE OF THE STATE GOVERNMENT TOWARD DEMOCRATIZING UPPER SECONDARY EDUCATION

Since the Report of the Commission, The Improvement of Public Education in Michigan in 1944, bills have been introduced into the Michigan Legislature for aiding the junior colleges in the state. Not until 1947 was such aid granted. The Diversion Amendment to the constitution of the state, at least for a time, impeded and diminished the amount of aid granted in 1947. In 1949, the State Aid for junior colleges became a substantial sum to be distributed on a per capita basis of $90. The Citizens Committee on

School Legislation has recommended that the same amount be appropriated for 1949-50.[1]

The purpose of State Aid to junior colleges is to provide upper secondary education to more youth of college age and to diminish the need for the costly building programs at state institutions now over-enrolled in the thirteenth and fourteenth grades.

The State of Michigan not only has legalized and encouraged the establishment of upper secondary institutions but designates these institutions as Community Colleges in the proposed legislation as recommended by the Citizens Committee, 1948. However, the state did restrict the distribution of these funds to the thirteenth and fourteenth grades in districts of the first class (Detroit). Since there were no other school districts in the state maintaining a university or college other than junior colleges, the funds were definitely allocated to the upper secondary institutions.

Now that a two-year precedent has been established and Michigan has joined other states in broadening the base of free public education, Michigan school districts may proceed with assurance on a program of expanding community colleges.

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1 -- Report of Progress on Educational Legislation as Recommended by the Citizens Committee on School Legislation. Lansing: Department of Public Instruction, 1949, p. 2. (Mim.).

THE EVALUATION OF A COMMUNITY COLLEGE

An expanded community college program in Flint would require a capital investment of approximately $1,620,000 to $3,230,000 excluding the cost of the grounds. Such a capital outlay is well within the means of Flint to provide. Part of this capital investment may be donated if the primary motive is to benefit larger numbers of Flint youth.

No endowment would be necessary to provide funds for current operation. Few junior colleges have such funds. If no tuition were charged, the cost to Flint for the annual operation of an expanded program would range from $208,000 to $280,000. This too appears to be well within the financial reach of the school district. This added cost would not materially increase a total annual budget of approximately $3,500,000. Making upper secondary education free to all youth in the city who could profit from the experience would be in line with the recommendations of the President's Committee, the 1944 Report of the Commission for The Improvement of Public Education in Michigan, and the emerging patterns recommended by recent surveys in other states. The policy would also serve as a stimulus to other cities in the state that now have junior college programs or are thinking of initiating such programs.

It should be kept in mind that the program in upper

secondary education should be well balanced for developing citizens in a democracy. The program should do more than teach the ways of making a living through occupational-terminal courses. It should open the way for every young man and woman in Flint to share the best of our cultural heritage and to understand the American way of life. This means general education of such nature that no youth will be denied the right to better his social and economic status or to contribute to social improvement.

While the law permits the establishment of privately controlled institutions of upper secondary and advanced education the trend is away from the establishment of such schools. The distribution of state funds does not include private institutions and it may be interpreted that the expansion is expected to take place in publicly controlled and supported institutions.

The Kindergarten-Six-Four-Four Plan

This study was not concerned as much with the organization as with the financial aspects of educational support, yet organization is the means of expressing an educational philosophy in terms of purpose. The K-6-4-4 plan recognizes that the thirteenth and fourteenth grades are a continuation of secondary education. Such an organization apparently provides: (1) a better junior high school unit with an enriched curriculum, greater

exploration possibilities, and greater development of extra-curricular activities, (2) better sequences for study and higher retention of students, (3) better instructional services, (4) lower administrative costs, and (5) greater efficiency in the use of school facilities with a corresponding increase in economy.[1] The 6-4-4 plan should be studied carefully with the intention of adopting the plan in Flint as soon as feasible.

EVALUATION OF A LIBERAL ARTS COLLEGE

A four-year liberal arts college would require a capital investment ranging from $3,263,000 to $5,910,000 for buildings, equipment, and library. Other like amounts depending on the enrollment would be required to create endowment funds for assuring adequate income to meet current operating costs.

The net operating costs under the most favorable circumstances would range from $311,250 to $420,000 annually. This is nearly double the net annual operating cost to the community for an expanded program, free to all, in upper secondary education. Considering the fact that a liberal arts program scarcely meets the present-day needs of a large segment of the population, it is

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1 -- Lawrence V. Koos, Integrating High School and College. New York: Harper and Brothers, 1944, pp. 122-30.

difficult to see the justification of such an expenditure. Especially would this be true in an industrial community like Flint where nearly half of the young people who are planning on attending college are requesting terminal-occupational courses. It would seem more advisable to provide a number of scholarships or fellowships for the capable and needy students who wish to pursue a more academic program or enter professional study. These scholarships and fellowships should be made available for use at any of the state supported schools or for use at any of the accredited public institutions outside the state.

There is also the danger that a four-year college program will continue to grow upward into graduate study and require the local community to make undue sacrifice to support this growth. The vertical growth of an institution can soon go beyond the means of any local district.

Graduate Study

The costs for graduate study vary greatly in different schools of professional training. Medicine and theology seem to head the list, the former because of the expensive facilities and cost of instruction, and the latter because of the small numbers enrolled. Because graduate study was considered as an extension of advanced education, the estimate was based on a per capita annual expenditure of $1000 for the student enrollment above the fourteenth

grade. Otherwise the per capita estimate would be much too conservative if applied only to levels above the first two grades of senior college. Since no estimate was made in Lean's study for graduate enrollment, 25 percent of the enrollment in the fifteenth and sixteenth grades was added, thus the total number of students taking senior college and graduate work would range from approximately 900 to 1250 students.

At $1000 per full-time student the annual gross operating cost would range from $900,000 to $1,250,000. Probably not more than 50 percent of the gross costs could be defrayed by tuition, endowment, and fees, therefore the local district would be responsible for raising annually by taxation amounts ranging from $450,000 to $625,000 in addition to the upper secondary program and the costs for capital outlay.

FLINT'S BEST OPPORTUNITY TO CONTRIBUTE TO POST-HIGH SCHOOL EDUCATION

Flint should not attempt to establish a four-year college program. The costs are too great for the small number of students served. Flint has too many obligations for revitalizing the whole school program and for modernizing public service agencies for the city government. Moreover, once established a four-year college program may grow vertically into graduate study adding still more

financial burdens to the community.

Flint should concentrate on a community college program in upper secondary education and integrate this program into the present elementary and secondary schools, reorganizing the system into the K-6-4-4 plan.

The community college should be made free to all resident youth without special fees added. Non-resident students should be charged the full per capita cost of operation, but an effort should be made in terms of the school law to arrange for the sending district to pay the tuition charge.[1] Resident adults should also receive training tuition free.

A number of scholarships and fellowships for advanced professional training should be established to care for the small number of academically and professionally minded youth who do not have sufficient resources to attend senior college or the university.

Flint is financially able to provide one of the finest school programs in the United States and to adapt the program to the needs of its diverse population. Flint is a "melting pot" of many cultural backgrounds where the American faith in free public education for all can be demonstrated.

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1 -- General School Laws, 1946, op. cit., p. 117.

TABLE A I

EVANGEL MISSIONARY COLLEGE BUDGET, 1947-48

Berrien Springs, Michigan

The estimated total operating income is		$831,420
From which is deducted the estimated expense of		753,700
To make an expected gain of		$ 77,720

Instructional

Income:			
Earned Income:			
Tuition	$220,000		
Fees	25,000		
Church Rental	1,020		
Room Rental Home Economics	400		
Total earned incomes		$246,420	
Donations:			
Subsidy, Regular	$37,000		
Subsidy, Elementary School	500		
Pastoral Training	1,200		
Michigan Conference	300		
Total donations		$39,000	
Total Income			$285,420
Expenses:			
Administration	$40,000		
Advertising	5,000		
Depreciation	13,000		
General Supplies	20,000		
Health Service	7,000		
Laboratories	14,000		
Library	15,000		
Plant, Maintenance	40,000		
Salaries, Teaching	85,000		
Teachers' Expense	10,000		
Total Expense			$249,000
Surplus			$ 36,420

TABLE A I, continued

The Homes

	Income	Expense	Gain
Cafeteria	$120,000	$105,000	$15,000
Dormitories	50,000	48,000	2,000
Houses	16,000	15,000	1,000
Totals	$186,000	$168,000	$18,000

Industrial Summary

	Income	Expense	Gain
Bindery	$30,000	$30,000	
Dairy	40,000	36,000	$4,000
Farm Crops	12,000	12,000	
Farm Storeroom	7,000	7,000	
Fruit	3,000	2,800	200
Garden	12,000	10,000	2,000
Laundry	18,000	17,000	1,000
Poultry	3,000	2,900	100
Press	125,000	115,000	10,000
Store	110,000	104,000	6,000
Totals	$360,000	$336,700	$23,300

Summary of Operating Budget

	Income	Expense	Gain
Instructional	$285,420	$249,000	$36,420
Homes	186,000	168,000	18,000
Industrials	360,000	336,700	23,300
Totals	$831,420	$753,700	$77,720

TABLE A II

EMMANUEL MISSIONARY COLLEGE BUDGET, 1948-49

Berrien Springs, Michigan

The estimated total income is	$1,036,200
From which is deducted the estimated expense of	976,535
To make an expected gain of	$59,665

Instructional

Income:			
Earned Income:			
Tuition and Fees	$270,000		
Church Rentals	900		
Room Rentals	700		
Total Earned Incomes		$271,600	
Donations:			
Subsidy, Regular	$38,500		
Subsidy, Elementary School	300		
Pastoral Training	1,000		
Michigan Conference	300		
Total Donations		$40,300	
Total Income			$311,900
Expense:			
Administration	$45,000		
Advertising	4,000		
Depreciation	13,000		
General Supplies	20,000		
Health Service	8,000		
Laboratories	17,000		
Library	14,000		
Plant, Maintenance	50,000		
Salaries, Teaching	100,000		
Teachers' Expense	10,000		
Miscellaneous	5,000		
Total Expense			$294,000
Surplus			$17,900

TABLE A II, continued

The Homes

	Income	Expense	Gain
Cafeteria	$160,000	$144,000	$16,000
Houses	19,000	18,150	850
Dormitories	85,000	81,750	3,250
Trailer Court, College	3,300	4,075	(275)
Totals	$267,300	$247,975	$19,825

Industrial Summary

	Income	Expense	Gain
Bindery	$37,000	$36,260	$740
Dairy	68,000	64,000	4,000
Farm Crops	13,000	11,700	1,300
Farm Storeroom	3,500	3,500	
Fruit	2,000	1,800	200
Garden	12,000	11,400	600
Laundry	28,000	25,800	2,200
Poultry	3,000	3,000	
Press	130,000	123,500	6,500
Store	160,000	153,600	6,400
Totals	$456,500	$434,560	$21,940

Summary of Operating Budget

	Income	Expense	Gain
Instructional	$311,900	$294,000	$17,900
Homes	267,300	247,975	19,825
Industrials	456,500	434,560	21,940
Totals	$1,036,200	$976,535	$59,665

TABLE A III [1]

ESTIMATED INCOME RECEIVED IN MICHIGAN URBAN COUNTIES, 1938

County	Private Production Excluding Agriculture		Agricultural Production	
	Actual (000) (1)	Per Cent of County Total (2)	Actual (000) (3)	Per Cent of County Total (4)
Bay	$20,094	68.50	$2,930	9.99
Calhoun	30,192	73.32	3,535	8.58
Genesee	90,455	78.91	3,631	3.17
Ingham	45,281	74.25	3,800	6.23
Jackson	25,702	69.21	3,604	9.70
Kalamazoo	34,281	75.45	3,174	6.99
Kent	79,246	75.31	5,372	5.11
Muskegon	26,626	74.45	1,653	4.62
Oakland	82,129	77.52	3,581	3.38
Saginaw	41,911	73.89	5,516	9.73
Wayne	979,822	79.60	2,436	0.20
Total	$1,455,739		$39,232	
Average		78.13		2.10
State Total	$1,759,000		$192,000	
State Average		71.68		7.82

1 -- Marvin A. Bacon, Income As An Index Of Fiscal Capacity Of Michigan Counties. Michigan Governmental Studies, Number 8. Ann Arbor: University of Michigan Press, 1941, pp. 55, 59.

TABLE A III, continued

County	Government		Other		Total Realized Income (000) (9)
	Actual (000) (5)	Per Cent of County Total (6)	Actual (000) (7)	Per Cent of County Total (8)	
Bay	$5,355	18.25	$ 956	3.26	$ 29,335
Calhoun	6,112	14.84	1,342	3.26	41,181
Genesee	16,806	14.66	3,737	3.26	114,629
Ingham	9,919	16.26	1,988	3.26	60,988
Jackson	6,620	17.83	1,211	3.26	37,137
Kalamazoo	6,497	14.30	1,481	3.26	45,433
Kent	17,173	16.32	3,430	3.26	105,221
Muskegon	6,320	17.67	1,166	3.26	35,765
Oakland	16,780	15.84	3,454	3.26	105,944
Saginaw	7,441	13.12	1,849	3.26	56,717
Wayne	208,560	16.94	40,129	3.26	1,230,947
Total	$307,583		$ 60,743		$1,863,297
Average		16.51		3.26	
State Total	$423,000		$80,000		$2,454,000
State Average		17.24		3.26	

TABLE A IV [1]

FLINT TAX RATES, CITY, COUNTY, AND STATE, 1927-49

Year	City			County			State
	Operating	Debt Service	Total	Operating	Debt Service	Total	
1927	12.09	4.10	16.19	3.50	2.47	5.97	2.67
1928	9.84	3.87	13.71	4.46	1.94	6.40	3.65
1929	11.26	3.71	14.97	4.37	1.61	5.98	3.37
1930	11.03	3.58	14.61	4.13	2.33*	6.46	4.77
1931	10.98	3.82	14.80	4.83	1.51	6.34	4.41
1932	8.23	3.87	12.40	2.56	1.43	3.99	4.42
1933	10.19	5.01	15.20	2.93	0.56	3.49	4.08
1934	6.45	6.53	12.90	3.44	0.69	4.13	0.69
1935**	6.00	5.37	11.37	3.32	0.70	4.02	0.70
1936	6.26	7.79	14.05	3.51	0.00	3.51	0.00
1937	6.35	8.93	15.28	3.40	0.00	3.40	0.00
1938	6.60	5.30	11.90	3.15	0.00	3.15	0.00
1939	6.45	4.65	11.10	3.30	0.00	3.30	0.00
1940	6.60	4.00	10.60	3.40	0.00	3.40	0.00
1941	6.30	3.83	10.13	3.70	0.00	3.70	0.00
1942	6.25	3.43	9.68	3.30	0.00	3.30	0.00
1943	6.20	3.27	9.47	3.35	0.00	3.35	0.00
1944	6.20	3.04	9.24	3.35	0.00	3.35	0.00
1945	6.10	2.70	8.80	3.20	0.00	3.20	0.00
1946	6.118	2.489	8.607	3.01	1.002	4.012	0.00
1947	6.10	2.34	8.44	3.00	1.00	4.00	0.00
1948	6.10	1.81	7.91	3.00	0.00	3.00	0.00
1949	5.94	1.31	7.25	3.16	0.00	3.16	0.00

* -- Includes .81 mills County Jail Building C. O.
** -- 15-mill limitation in effect 1934-35.

1 -- Information supplied from the Assistant Superintendent's Office.

TABLE A IV, continued

FLINT TAX RATES, SCHOOL AND TOTALS FOR CITY, COUNTY, STATE, AND SCHOOL, 1927-49

Year	School				Grand Total, City County, State, School		
	Operating	Library	Debt Service	Total	Operating	Debt Service	Total
1927	[illegible]	.00	5.22	14.40	27.46	11.79	39.25
1928	[illegible]	.40	5.30	15.74	28.31	11.19	39.50
1929	10.41	.40	5.28	16.18	29.90	10.60	40.50
1930	10.00	.40	5.98	16.36	30.41	11.79	42.20
1931	9.56	.50	6.12	16.20	30.30	11.45	41.75
1932	9.43	.52	4.75	14.70	25.16	10.05	35.21
1933	7.30	.32	5.38	13.00	24.92	10.85	35.77
1934	6.92	.40	5.90	13.30	17.98	13.12	31.10
1935**	4.40	.45	6.52	11.37	14.97	12.59	27.46
1936	4.75	.45	6.46	11.66	14.97	14.25	29.22
1937	4.83	.42	6.00	11.25	15.00	14.03	29.03
1938	4.83	.42	4.99	10.24	15.00	10.29	25.29
1939	4.87	.38	3.87	9.12	15.00	8.52	23.52
1940	4.75	.25	3.30	8.30	15.00	7.30	22.30
1941	4.75	.25	3.11	8.11	15.00	6.94	21.94
1942	5.13	.32	2.72	8.17	15.00	6.15	21.15
1943	5.13	.32	2.07	7.52	15.00	5.34	20.34
1944	5.13	.32	2.20	7.65	15.00	5.24	20.24
1945	5.38	.32	1.88	7.58	15.00	4.58	19.58
1946	5.34	.34	1.77	7.69	15.048	5.254	20.302
1947	5.58	.34	1.62	7.52	15.00	4.96	19.96
1948	5.58	.32	1.10	7.00	15.00	2.91	17.91
1949	5.465	.435	.33	6.73	15.00	2.14	17.14

TABLE A V [1]

FLINT SCHOOL DISTRICT VALUATIONS, 1926-49

Year	Assessed	County Equalized	State Equalized
1926-27	$164,294,100	$194,096,490	$189,783,678
1927-28	176,478,939	206,281,329	211,463,780
1928-29	192,114,700	203,795,326	258,364,837
1929-30	204,480,300	220,000,000	282,265,983
1930-31	225,371,470	227,156,223	283,802,343
1931-32	221,355,500	202,510,160	244,288,467
1932-33	196,064,120	175,634,243	203,472,896
1933-34	172,084,590	168,934,000	191,653,942
1934-35	170,848,140	168,934,000	188,744,046
1935-36	170,511,680	168,934,000	187,899,376
1936-37	175,316,900	175,691,360	189,588,715
1937-38	181,032,760	180,759,380	193,136,329
1938-39	202,774,770	202,720,800	193,136,329
1939-40	205,605,030	205,254,810	203,103,435
1940-41	202,394,940	203,128,520	199,765,980
1941-42	213,658,370	213,074,720	206,733,730
1942-43	217,707,210	217,189,320	245,532,330
1943-44	222,206,850	221,809,540	257,345,994
1944-45	224,870,650	225,472,940	248,094,999
1945-46	228,588,800	229,261,914	229,274,612
1946-47	234,006,840	234,006,840	233,053,728
1947-48	280,846,620	280,846,620	268,210,201
1948-49	294,366,300	293,366,300	278,325,784

1 -- Supplied by Lawrence Lundberg, Assistant Superintendent of Flint Public Schools and the Department of Public Instruction.

TABLE A VI [1]

FLINT PUBLIC SCHOOLS PER PUPIL EXPENDITURES OF SCHOOL OPERATION BASED ON AVERAGE MEMBERSHIP, 1925-48

Year	Number of Months	* Operation Expenditures	Average Membership	Per Pupil Expenditures
1925-26	10	$1,805,208.11	21,575	$83.67
1926-27	10	1,899,897.61	24,286	78.23
1927-28	10	2,221,640.86	27,481	80.84
1928-29	10	2,652,351.19	30,254	87.67
1929-30	10	2,784,651.23	31,629	88.04
1930-31	10	2,776,886.24	31,721	87.54
1931-32	10	2,581,135.75	32,260	80.01
1932-33	9	1,836,062.98	31,279	58.70
1933-34	9	1,915,563.57	32,461	59.01
1934-35	9	2,106,387.04	33,467	62.94
1935-36	9 1/4	2,322,588.79	33,856	68.60
1936-37	10	2,602,910.04	33,638	77.38
1937-38	9	2,670,075.76	34,196	78.08
1938-39	9 1/4	2,522,776.00	33,624	75.03
1939-40	9 1/2	2,596,872.57	32,503	79.90
1940-41	9 1/2	2,652,284.93	31,497	84.21
1941-42	9 1/2	2,780,851.46	30,385	91.52
1942-43	9 1/2	2,662,978.84	28,786	92.51
1943-44	9 1/2	2,737,103.39	28,314	96.67
1944-45	9 1/2	2,930,434.50	27,741	105.63
1945-46	9 3/4	3,243,762.67	27,123	119.59
1946-47	9 1/2	3,738,772.18	26,800	139.50
1947-48	9 3/4	4,298,888.09	26,418	162.73

* -- Does not include cost of Library.

1 -- Information supplied by Lawrence Lundberg, Assistant Superintendent of Flint Public Schools.

TABLE A VII [1]

FLINT TAXES LEVIED FOR SCHOOL PURPOSES, 1923-49

Year	Operation	Library	Debt Service and Capital Outlay	Total Levy
1923-24	$1,223,954.62	$37,000.00	$402,835.00	$1,663,789.62
1924-25	1,388,811.73	30,857.00	600.115.32	2,019,784.16
1925-26	1,434,481.22	31,878.10	620,078.00	2,086,437.32
1926-27	1,477,946.71	32,858.82	846,325.87	2,367,131.40
1927-28	1,758,311.43	70,000.00	947,918.87	2,776,230.30
1928-29	1,997,973.33	95,000.00	1,013,657.86	3,106,631.19
1929-30	2,042,410.60	97,000.00	1,199,092.77	3,338,503.37
1930-31	2,150,094.52	117,000.00	1,377,903.04	3,644,997.56
1931-32	2,085,757.89	116,000.00	1,051,207.91	3,252,965.80
1932-33	1,430,647.94	63,000.00	1,055,185.62	2,548,833.56
1933-34	1,189,912.55	83,500.00	1,015,312.50	2,288,725.05
1934-35	754,186.09	77,132.20	1,114,309.29	1,945,627.58
1935-36	808,952.50	76,637.61	1,100,175.51	1,985,765.51
1936-37	845,555.00	73,526.52	1,049,348.31	1,968,429.83
1937-38	876,499.14	76,033.76	901,242.58	1,853,775.48
1938-39	987,580.11	77,054.41	784,671.38	1,849,305.90
1939-40	978,926.08	51,395.78	676,018.04	1,706,339.90
1940-41	964,097.20	50,598.74	626,727.03	1,641,422.97
1941-42	1,097,851.72	68,370.68	579,366.49	1,745,588.89
1942-43	1,118,160.80	69,666.31	449,331.10	1,637,158.21
1943-44	1,141,226.12	71,106.19	487,550.09	1,699,882.40
1944-45	1,218,788.34	72,297.82	421,468.47	1,712,554.63
1945-46	1,282,534.62	73,336.38	400,449.90	1,756,320.90
1946-47	1,307,925.98	74,882.19	376,923.25	1,759,731.42
1947-48	1,568,627.39	89,870.92	307,428.03	1,965,926.34
1948-49	1,603,613.46	127,613.74	243,128.02	1,974,355.22

1 -- Information supplied by Lawrence Lundberg, Assistant Superintendent of Flint Public Schools.

TABLE A VIII [1]

FLINT PUBLIC SCHOOLS PER PUPIL EXPENDITURES (IN AVERAGE DAILY MEMBERSHIP) OF SCHOOL OPERATION BY SCHOOL DIVISIONS, 1930-48

Year ending	Junior College (Gross) *	Senior High School *	Junior High School *	Elementary School *	Part-time School *	Junior Senior H. S. *	All Schools
1930	$231	$135	$103	$75	$33	$114	$88.04
1931	176	119	105	75	65	110	87.54
1932	179	104	98	67	76	100	80.01
1933	141	71	66	52	45	68	58.70
1934	152	72	65	52	53	68	59.01
1935	159	78	70	55	53	74	62.94
1936	186	83	76	59	108	79	68.60
1937	189	89	84	69	82	86	77.38
1938	198	89	86	70	84	87	78.08
1939	158	81	84	68	95	82	75.03
1940	152	90	90	71	93	90	79.50
1941	177	103(2)	91	73	92	96	84.21
1942	222	110	100	79	92	104	91.52
1943	300(3)	112	102	79	--	107	92.51
1944	258	125	106	83	--	--	96.67
1945	222	134	113	92	--	--	105.63
1946(4)	243	142	129	100	--	135	119.59
1947(4)	196	166	156	121	--	161	139.50
1948(4)	235	196	188	138	--	192	162.72

* -- Amounts calculated to the nearest dollar.

1 -- Data supplied by Lawrence Lundberg.

2 -- Central, Northern, and Technical High School.

3 -- These figures are calculated from the maintenance reports and corrected to correspond to the official per pupil expenditure for operation of all schools. The maintenance costs are usually slightly lower than operation expenditures.

4 -- Figures are on cost basis, not expenditures.

TABLE A IX [1]

FLINT PUBLIC SCHOOLS

PERCENTAGE OF TAXES COLLECTED, 1930-46

Year ending	School Library Total Levy (000)*	Current Taxes Collected (000)*	Percent Current Taxes Collected	Delinquent Taxes Collected (000)*	Total Taxes Collected (000)*	Percent Total Collection is of Levy
1930	$3,338	$2,866	85.87	$291	$3,158	94.60
1931	3,644	2,940	80.67	304	3,245	89.03
1932	3,252	2,111	64.91	445	2,557	78.61
1933	2,548	1,616	63.41	724	2,340	91.83
1934	2,288	1,551	67.78	427	1,978	86.44
1935	1,945	1,390	71.48	439	1,830	94.07
1936	1,985	1,565	78.82	783	2,348	118.27
1937	1,968	1,651	83.89	675	2,327	118.22
1938	1,853	1,599	86.29	580	2,179	117.59
1939	1,849	1,607	86.92	271	1,878	101.59
1940	1,706	1,560	91.47	402	1,963	115.04
1941	1,641	1,563	95.23	234	1,797	109.51
1942	1,745	1,664	95.35	162	1,826	104.67
1943	1,637	1,588	97.03	211	1,798	109.80
1944	1,699	1,665	97.96	119	1,784	**
1945	1,712	**	**	**	**	**
1946	1,756	1,686	96.00	**	**	**

* -- Thousands omitted.
** -- Data not available.

1 -- Adapted from data supplied by Lawrence Lundberg.

TABLE A X [1]

FLINT'S CENSUS AND SCHOOL ENROLLMENT, 1936-47

Column 1	Column 2	Column 3 *	Column 4	Column 5	Column 6
Year	Census	Public Membership	Non-Public Membership	Non-Resident	Total Membership (3-4)
1936	43,670	33,401	3,023	160	36,424
1937	44,170	33,295	3,046	270	36,331
1938	42,209	34,000	3,062	232	37,062
1939	41,409	33,240	2,188	227	36,428
1940	40,300	32,189	3,330	189	35,519
1941	40,282	31,049	3,211	152	34,260
1942	38,456	29,878	2,958	140	32,836
1943	38,868	28,224	3,574	109	31,798
1944	39,184	27,767	3,735	318	31,502
1945	39,826	27,244	3,870	306	31,114
1946	36,916	26,249	3,896	203.9	30,145
1947	39,155	25,622	**	**	

* -- By grades at the close of the school year.
** -- Not available (July 9, 1948).

1 -- Flint Annual Statistical and Financial Reports, 1936-47.

TABLE A XI [1]

FLINT'S SCHOOL DISTRICT GENERAL FUND REVENUE RECEIPTS, 1933-47

Year	Current Operating Tax Receipts	State and Federal Aid	Total Revenue Receipts *
1933	$1,616,321	$610,954	$3,332,065
1934	863,088	749,342	3,215,069
1935	601,360	776,018	3,681,177
1936	698,093	1,236,717	4,548,413
1937	770,985	1,345,292	4,624,579
1938	821,889	1,536,829	4,595,790
1939	925,355	1,386,277	2,625,581
1940	942,393	1,429,035	2,769,175
1941	966,301	1,360,285	2,633,296
1942	1,111,879	1,424,576	2,784,882
1943	1,152,539	1,377,321	2,817,639
1944	1,187,420	1,426,867	2,831,311
1945	1,257,957	1,450,954	2,921,397
1946	1,300,820	1,770,892	3,292,847
1947	1,338,276	1,679,327	3,836,595

* -- Does not include the cash balance from the preceding in each instance.

1 -- Adapted from the Flint Annual Statistical and Financial Reports, 1933-47.

TABLE A XII [1]

REVENUES FOR CITIES COMPARABLE TO FLINT

City	Pop. 1940 (000 omitted)	GENERAL REVENUE (in thousands)			
		Total	Local Taxes	Aid from Gov't.	Charges and Misc.
Bridgeport	147	$9,708	$8,090	$635	$983
Des Moines	160	4,273	3,669	22	582
Flint	152	4,977	2,221	697	2,059
Grand Rapids	164	3,834	2,529	802	503
Hartford	166	13,477	11,631	1,146	700
Jacksonville	173	6,423	2,607	41	3,775
Long Beach	164	7,817	4,581	471	2,765
Miami	172	9,961	6,878	96	2,987
Nashville	167	7,002	4,947	1,393	662
New Haven	161	10,231	9,063	682	486
Norfolk	144	10,602	6,803	1,830	1,969
Paterson	140	8,481	6,091	2,218	172
Salt Lake City	150	4,202	3,091	169	942
Springfield	150	13,159	8,940	3,598	621
Tulsa	142	3,236	2,397	147	692
Yonkers	143	11,846	8,469	2,986	391
Youngstown	168	3,890	2,360	1,156	374

1 -- Adapted from The Municipal Year Book. 1948. Chicago: The International City Managers' Association, 1948, pp. 200-201.

TABLE A XIII [1]

EXPENDITURES FOR CITIES COMPARABLE TO FLINT

City	GENERAL EXPENDITURES (in thousands)						
	Total	Operation	Capital Outlay	Debt Retirement	Interest	Help Retirement	Other
Bridgeport	$10,386	$7,422	$512	$1,615	$301	$343	...
Des Moines	3,881	2,932	77	487	136	249	...
Flint	4,840	4,149	11	427	144	73	36
Grand Rapids	3,643	2,487	130	838	106	82	...
Hartford	14,011	10,761	242	1,589	485	333	601
Jacksonville	6,945	5,038	739	444	199	427	98
Long Beach	8,117	6,655	88	741	156	436	41
Miami	10,140	7,331	299	1,368	813	339	...
Nashville	8,385	5,948	1,263	512	386	214	59
New Haven	10,152	7,950	114	999	266	546	277
Norfolk	10,249	7,554	607	697	1,020	371	...
Paterson	8,585	6,154	314	1,095	899	123	...
Salt Lake C.	4.073	3,438	286	208	58	84	...
Springfield	13,305	11,581	790	653	138	143	...
Tulsa	3,512	2,311	369	339	275	...	218
Yonkers	12,286	8,207	591	2,057	684	747	...
Youngstown	4,408	2,485	254	785	189	205	490

1 -- Adapted from The Municipal Year Book, 1948. op. cit., pp. 200-201.

TABLE A XIV [1]

ECONOMIC BASE OF METROPOLITAN DISTRICTS

Cities of 100,000 to 200,000	Percent of Labor Force		Economic Base
	In Mfg.	In Trade	
Charlotte	25	23	Mr
Chattanooga	36	17	Mm
Davenport, Rock Island, Moline	42	20	M
Des Moines	17	24	Rr
Duluth, Superior	17	26	RrT
Erie	46	19	Mm
Flint	56	16	Mm
Fort Wayne	37	22	M
Harrisburg	24	18	MrTG
Huntington, Ashland	26	20	MrT
Jacksonville	14	25	RrT
Johnstown	34	15	Mg
Knoxville	28	21	Mr
Peoria	37	20	M
Reading	49	16	Mm
Sacramento	9	23	GT
Saginaw, Bay City	40	20	M
South Bend	48	17	Mm
Spokane	15	26	RrT
Tacoma	27	21	Mr
Tulsa	17	24	Rr
Utica, Rome	42	17	Mm
Wheeling	33	17	MgM
Wichita	18	27	Rr
Wilmington	37	15	Mm

Mm -- Manufacturing area.
M -- Industrial area.
Mr -- Diversified area: manufacturing greater.
Rm -- Diversified area: trade greater.
Rr -- Trade center.
G -- Government center.
Mg -- Mining area.
T -- Transportation center.

1 -- Adapted from The Municipal Year Book, op. cit., pp. 25-26.

TABLE A XV [1]

SUMMARY OF ALMA COLLEGE BUDGET, 1947-48

AND PROPOSED BUDGET, 1948-49

Expenditure	Budget for 1947-48	Estimated Budget 1948-49	Budget Approved, Finance Committee 1948-49
Administration	$31,465	$34,514	$34,514
General	7,558	17,660	17,660
Promotion	14,500	32,782	32,782
Instruction	119,125	128,678	130,228
Library	7,950	8,730	8,730
Operation and Maintenance	58,226	72,098	72,638
Dining Hall	117,700	140,335	140,335
Other Auxiliary Enterprises	5,000	23,800	23,800
Endowment Property			
Wright Hall	14,500	10,897	10,947
Pioneer Hall	4,326	3,706	3,750
Miscellaneous	1,700	1,834	1,815
Non-Educational	7,100	24,700	24,700
Total	$389,200	$499,715	$501.905

1 -- Information supplied by Earl Peterson, Business Manager of Alma College, Alma, Michigan.

TABLE A XVI [1]

SUMMARY OF ANTICIPATED INCOME FOR ALMA COLLEGE, 1948-49

Sources of Revenue	Amount
Tuition (600 students @ $350)	$210,000
Board and Room (300 students @ $450)	135,000
Board only (100 students @ 350)	35,000
Sixty Music and other specials	3,000
Endowment	6,000
Detroit Lions (35 days @ $240 per day)	8,400
Trailer Court Rentals	3,300
Family Apartments (8 families)	1,900
Conferences	
Synodical	500
Synod	1,250
Youth Conference	1,250
Lay Conference	600
Miscellaneous	600
Non-Educational	30,000
Gifts - Churches and Christian Endeavor	35,000
Gifts - Individuals	30,105
Total	$501,905

1 -- Information supplied by Earl Peterson, Business Manager of Alma College, Alma, Michigan.

TABLE A XVII [1]

SUMMARY OF EXPENDITURES FOR AQUINAS COLLEGE, 1947-48

AND ANTICIPATED EXPENDITURES FOR 1948-49

Expenditure	Budget for 1947-48	Budget for 1948-49
Administration - - - -	$12,729.80*	$20,537.00*
General - - - - - - -	3,215.89	3,636.85
Promotion (catalogs) - -	920.75	1,350.00
Instruction - - - - - -	106,610.63*	115,033.00*
Library - - - - - - -	4,509.91**	5,520.00**
Operation and Maintenance-	22,454.24	24,605.00
Dining Hall - - - - -	7,230.90	7,600.00
Other Auxiliary Enterprises	14,703.25	14,745.00
Endowment Property (None)		
Non*Educational - - - -	5,774.18	5,025.00
Total	$178,159.45	$198,051.85

* -- Includes estimate for contributed services of priests and sisters on faculty and administration.

** -- Does not include salaries of library staff. These salaries included in administration.

-- 1947-48 Enrollment was 564.
-- 1948-49 Enrollment was 529.

1 -- Information supplied by Reverend Arthur F. Bukowski, President of Aquinas College, Grand Rapids, Michigan.

TABLE A XVIII [1]

SUMMARY OF EXPENDITURES FOR HOPE COLLEGE, 1947-48

AND ANTICIPATED EXPENDITURES FOR 1948-49

Expenditure	Budget for 1947-48	Budget for 1948-49
Administration	$47,000	$45,770
General	--	--
Promotion	30,150	22,130
Instruction	236,325	273,500
Library	22,100	22,100
Operation and Maintenance	78,250	72,000
Dining Hall	208,700	233,500
Other Auxiliary Enterprises	--	--
Endowment Property	--	--
Extra Curriculum	44,875	40,000
Non-Educational	6,600	8,000
Total	$674,000	$717,000

1 -- Information supplied by Henry Steffens, Treasurer of Hope College, Holland, Michigan.

TABLE A XIX [1]

SUMMARY OF INCOME FOR HILLSDALE COLLEGE, 1947-48

AND ANTICIPATED INCOME FOR 1948-49

Income	Budget for 1947-48	Budget for 1948-49
Tuition and Fees	$215,250	$260,000
Endowment	31,000	34,000
Dormitories and Houses	40,000	44,000
Music Lessons and Rentals	3,200	2,800
Miscellaneous Fees	3,500	3,000
Nursery School Tuition	1,600	1,500
Development & Improvement Fund	40,000	30,000
Veterans' Guidance Center	3,500	3,000
Food Service, Not Overhead	4,000	5,000
Total	$342,050	$383,300

1 -- Information supplied by Harvey L. Turner, President of Hillsdale College, Hillsdale, Michigan.

TABLE A XX [1]

SUMMARY OF EXPENDITURES FOR HILLSDALE COLLEGE, 1947-48

AND ANTICIPATED EXPENDITURES FOR 1948-49

Expenditure	Budget for 1947-48	Budget for 1948-49
Salaries	$205,000	$218,000
Faculty Retirement Program	6,500	8,500
Group Insurance for Staff	800	800
Departmental Equip. & Supplies	5,000	7,000
Library, Books, Magazines, etc.	4,000	4,000
Heat, Light, Water, Insurance	18,000	20,000
Maintenance and Operation	20,000	20,000
Administration and Operation	3,000	4,000
Truck Purchase and Maintenance	200	2,000
Miscellaneous Property Expense	300	300
Plant Improvements	10,000	10,000
Catalogs, Office Supplies	4,000	5,000
Publicity and Fund Raising	5,000	7,000
Debate, Diplomas, etc.	250	500
Postage, Telephone, Telegraph	2,500	2,500
Scholarships	6,500	7,000
Student Aid, Part-time Work	10,000	9,000
Community Concert Series	1,845	1,500
All College Assemblies	1,000	1,000
Student Health Service & Ins.	12,300	12,000
Federation & Student Publications	4,920	5,600
Commencement Expenses	500	300
Teacher Placement Service	150	100
Athletics for Men	7,000	10,000
Physical Education for Women	1,500	1,500
Nursery School Expenses	1,000	2,000
Arboretum Main. & Improvement	1,500	3,000
Annual Audit	550	520
Brokerage on Investments	750	750
Interest, Annuities & Mortgage	3,500	3,750
Taxes	250	250
Contingencies	4,235	5,230
Surplus for Retiring Deficit	--	10,000
Total	$342,050	$383,300

1 -- Information supplied by Harvey L. Turner, President of Hillsdale College, Hillsdale, Michigan.

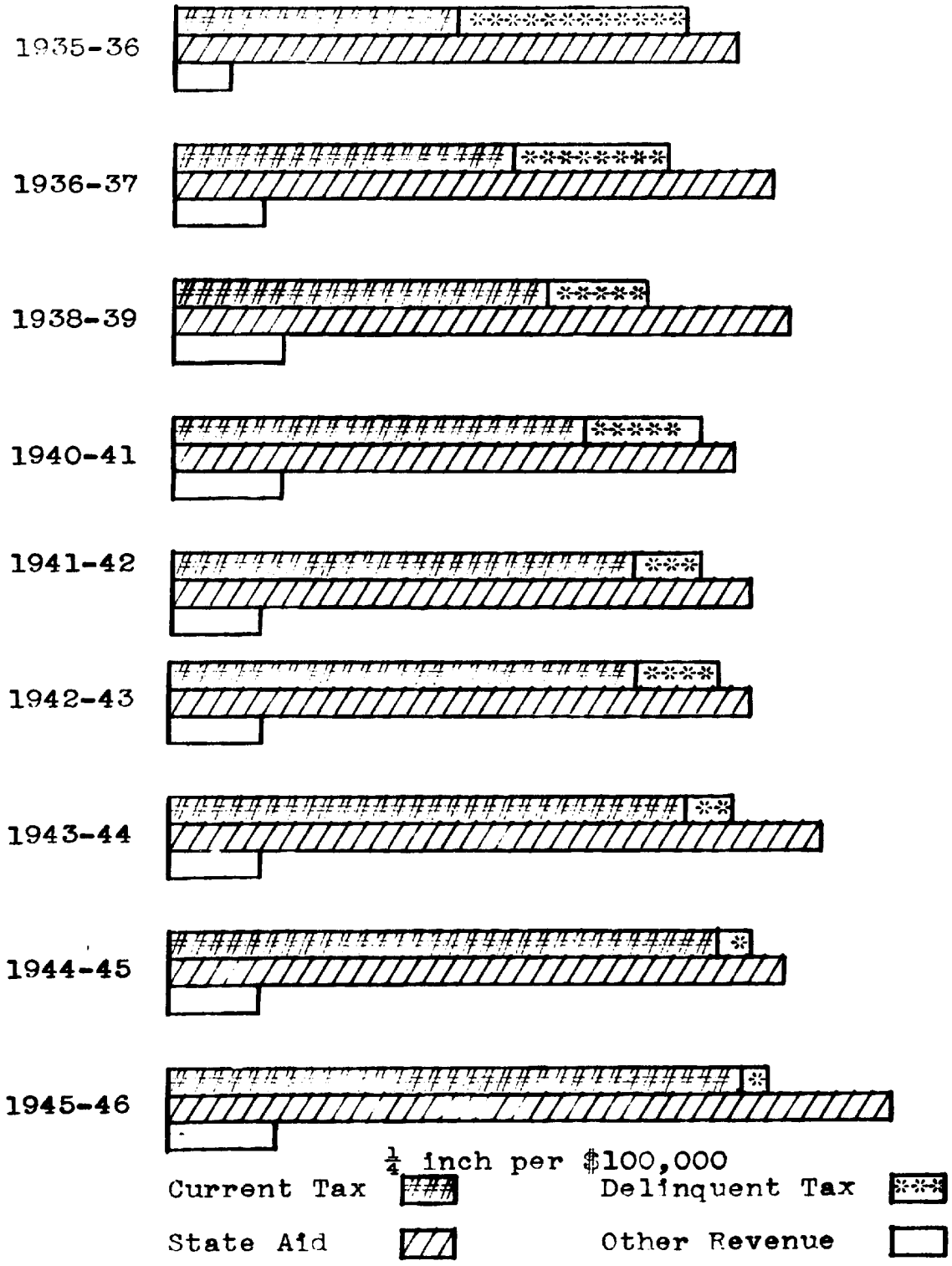


FIGURE A I - Flint's Income for School Operation [1]

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1 -- Adapted from information supplied by John Barrett, Business Manager of Flint Public Schools.

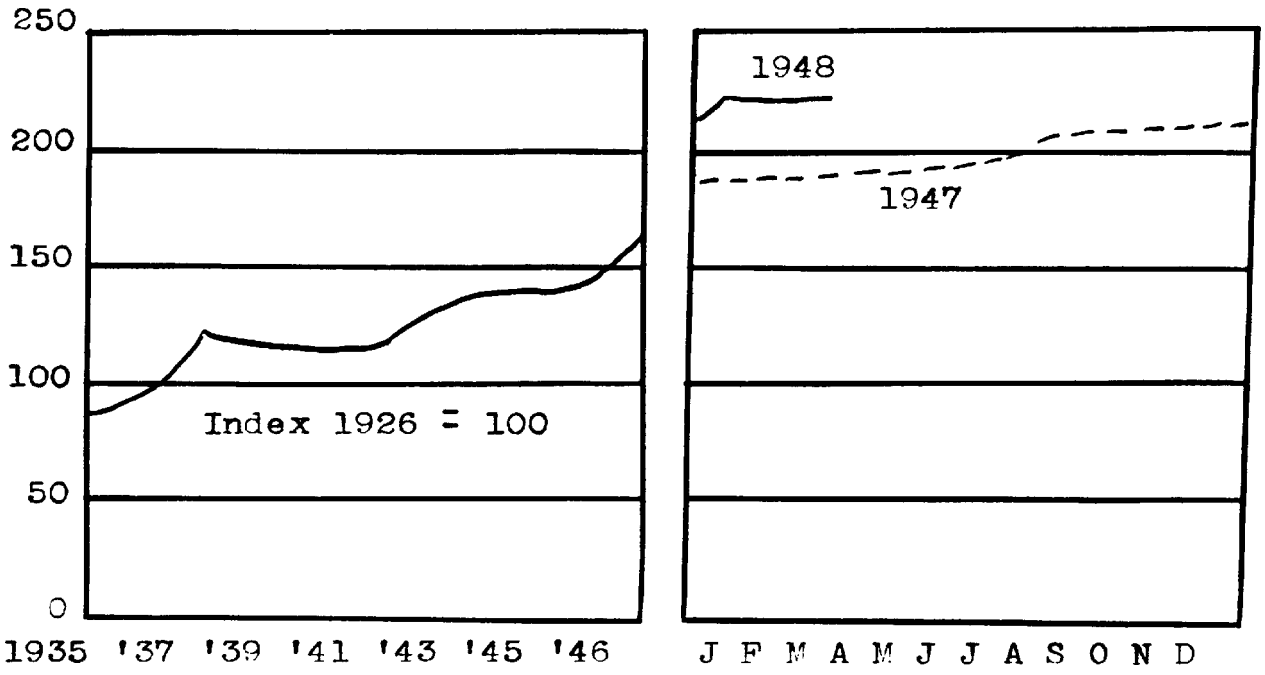


FIGURE A II - Trends in Construction Cost Index, 1935-46 and by Months for 1947 and January to March, 1948 [1]

The Engineering News Record construction cost index for March, 1948 was 210.74, as compared to 188.4 in March, 1947, and 155.7 in March, 1946, based on 1926 = 100. The construction cost index has four component parts - steel, lumber, cement, and common labor - and is designed to measure construction costs in general. This index does not apply to any specific class of construction or to a particular locality, and should not be used to measure building cost trends because since 1933 common labor wages have increased more than skilled wages. Moreover, this index does not correct for labor productivity, excessive overtime, or costs during abnormal periods.

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1 -- The Municipal Year Book, 1948, op. cit., p. 295.

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