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ABSTRACT

This research explored the problem of private colleges borrowing money to pay for construction of needed buildings. The study revealed that most colleges had borrowed money in the past for construction. About two-thirds of those foresaw further construction, and one-half of those who planned to build also planned to borrow to meet part of the cost of that construction. Both the lenders and the colleges included in the study still believed philanthropy to be an important source of funds for meeting the cost of college construction projects. The paper presents attitudes of colleges and lenders about long-term loans to private colleges. It sets forth models for government-related loan guarantee programs and tax-exempt bonding authorities, as well as presenting detailed instructions on completing a financial feasibility study for presentation to prospective lending institutions. The bibliography lists eighty sources of information, over fifty of which are discussed in the literature review. (Author)

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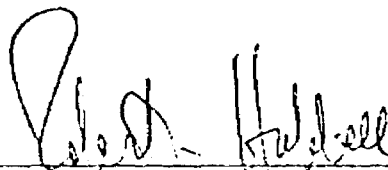
(Short Title: Loans for Private Colleges)

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## CHAPTER I

### THE PROBLEM AND ITS SETTING

#### The Problem

In order to continue to operate on a more sound day-to-day financial basis, it may, at times, be to the institution's advantage to spread capital expenditures over a number of years, via the method of long-term debt. This paper will study the problem of obtaining long-term debt for the purpose of financing expansion of physical facilities at small, nonprofit, traditional midwestern colleges.

#### Justification of the Problem

Private higher education, as it is known in America, has had a constantly changing place in the overall educational environment of the nation. From its role of almost total dominance in the early years of the nation's history, private higher education has arrived at a most tenuous position today. This tenuous position is due largely to school costs increasing more rapidly than their ability to generate revenue. If this trend continues unabated, private higher education in America could conceivably cease to exist.

However, many feel that private higher education has such an important role to play as an alternative to state supported education, that funds must, and will, be found to continue to support, at a high level of quality, the operation of the majority of the private colleges that exist today.

There are many encouraging indications that new sources of revenue will be made available to the private colleges in the future. The responsibility of the overall population, including various levels of government, to financially assist in the fiscal support of private colleges is under serious study in many areas. One of the more recent studies is being undertaken by a blue-ribbon commission on post-secondary education that was created by the 1973 Montana Legislature. It is to determine the future of higher education in that state. The Governor asked the commission to consider a number of questions, including, "To what extent should planning for publicly supported post-secondary units take into account the development plans and capabilities of private institutions within the state?" (71:3).

Financing the construction of private nonprofit facilities of higher education has never been an easy task. In the days of an expanding birth rate, increasing government financial assistance in many forms including construction grants, loans, interest subsidies and mortgage guaranties, and generally full classrooms, finding the proper financing for construction at these institutions was very difficult. With all of the positive factors now diminished, securing favorable financing through conventional routes may be all but impossible.

This study will determine if problems in obtaining long-term debt for financing construction actually do exist, and if so, to what extent. Models will be developed showing new financial programs that may be needed to make funds available to the schools in question.

#### Hypothesis to be Tested

The basic research hypothesis to be investigated is that over twenty-five per cent of the colleges in the geographical area covered by



this study will need to borrow money to construct or renovate buildings on their campuses in the future.

### Subhypotheses to be Tested

In developing the basic research hypothesis, a number of related hypotheses will be considered and tested. These are listed below in three groupings with a total of fourteen specific subhypotheses.

#### 1. College related subhypotheses:

- A. Over seventy-five per cent of the colleges have received loans for construction in the past.
- B. Over fifty per cent of the colleges plan to undertake additional construction projects to meet needs, in the future.
- C. Less than fifty per cent of those intending to borrow money to finance future projects (refer to the basic research hypothesis) expect to have some difficulty borrowing the amount they need.
- D. Less than fifty per cent of the colleges object to borrowing from a program having some type of government involvement.
- E. More than fifty per cent of the colleges that have borrowed money for construction in the past have borrowed from Health, Education, and Welfare (HEW), Office of Education, Loans for Construction of Academic Facilities Program, or the Federal Housing Administration (FHA), Department of Housing and Urban Development (HUD), College Housing Program.
- F. Over seventy-five per cent of the colleges are able to mortgage part of their assets to secure a loan.
- G. Less than twenty-five per cent of the colleges currently set aside depreciation in a fund to renovate or replace existing buildings.

#### 2. Lender related subhypotheses:

- A. Less than fifty per cent of the lenders have a working knowledge of the HEW or FHA college loans for construction programs.
- B. Less than twenty-five per cent of the lenders have made loans to colleges for construction.

- C. Over seventy-five per cent of the lenders require mortgages.
  - D. Of those lenders responding to the question, less than fifty per cent have generally received enough information from colleges with the request for a loan to make an informed decision.
  - E. Over fifty per cent of the lenders believe that a loan program with some type of government involvement to make loan money available to colleges has merit.
  - F. Over fifty per cent of the lenders believe that there is a need for borrowed funds to be used for college construction.
3. Subhypothesis related to both colleges and lenders:

Over seventy-five per cent of lenders and colleges consider philanthropy to be an important source of funds for meeting the cost of college construction projects.

Assumptions

The following items are necessary and reasonable theoretical assumptions for the orderly progression of this study:

- 1. Before construction plans are decided upon, all alternatives to construction will have been fully explored. A decision will have been made that no reasonable alternative to the expending of capital funds for the construction exists, before plans for financing are finalized.
- 2. The college is engaged in effective long-range planning so construction is not undertaken that does not meet present needs and complement future expectations. The planning has also taken into full account the additional expenses which may be reflected in the operating budget, for operation and maintenance of the completed building.
- 3. As a "subhypothesis," it was stated that philanthropy remains an important part of any college construction financing plan. It is assumed that it is better for the college not to go into any more debt than necessary to construct facilities.
- 4. Colleges planning construction are meeting valid needs of the society as a whole, and should continue to exist in order to meet those needs.
- 5. Colleges will borrow money for construction, if other methods of obtaining the needed funds fail.

6. Colleges will meet any reasonable requirements of the lender, such as mortgaging the property or pledging future revenue.
7. Funds will be available for the colleges to borrow, if they are financially able to repay the loans, and they present their request well to lenders.
8. Colleges will generally approach a local lending institution for counsel and advice, if not actually for a loan, before they will approach nonlocal lenders.

#### Delimits of the Study

The study is limited in a number of ways. The geographical size of the universe pertaining to the colleges was limited to the four states of Colorado, Kansas, Missouri and Nebraska. These states have traditionally been strong supporters of private, nonprofit institutions of higher learning. The area includes sixty colleges which fall into the category to be studied. It was determined that a total of sixty was a workable number, as it would allow every appropriate college in the geographical area to be included in the study. It was expected that sixty was a large enough number of institutions so that with the necessary qualifications applying, generalizations could be drawn at a later date about a different, but similar universe.

The geographical size of the universe pertaining to the lending institutions included institutional lenders located in Colorado, Kansas and Nebraska. The census size was ninety, and somewhat corresponded with the number of colleges included in that census. It was a size that could reasonably be analyzed.

The study is further limited by its place in time. It describes the feelings of the colleges and lending institutions at one moment in September or October of 1973. Fall appeared to be a good time for the survey, as the start of the school year brings with it the plans for the

future, as well as confirming the realities of the present.

It is recognized that these types of colleges have historically relied heavily on philanthropy, and should continue most strenuously their attempts to raise funds in this manner. However, it was decided to limit this study to that portion of the capital financing needs that will be met through the financing method of long-term debt.

#### Definitions of Terms Used

Lender includes any financial institution that makes money available to a college on a long-term basis. It could be a bank, savings and loan association, life insurance company, bond house or any other institutional investor. As included in the data gathering census, lender meant an institution located in Colorado, Kansas or Nebraska, listed in the 1973 Directory of the Mortgage Bankers Association of America.

Construction is used to describe any and all activity which results in the building, addition to, alteration or renovation, of a physical facility which when completed is under the control of the college and has been deemed necessary to the continuous operation of that college.

Buildings for the purpose of this study include all buildings as described under construction.

Loan refers to any method of making long-term funds available to a college for construction. These instruments include unsecured signature notes, loans secured by pledges of future revenue, mortgages, bonds or any combination of these, or other items.

Long-term as herein used is a repayment period that exceeds

the construction time; a debt shown on the annual financial reports as being other than a current liability. As discussed elsewhere, loan repayment periods for long-term debts will vary from one to fifty years, but will normally be more than five years.

Small as used in this study when referring to the size of colleges, is a college with an enrollment of less than 2,470 students. This figure was selected because the largest school included in the college census had an enrollment of 2,469.

Midwestern as used in the title of this study refers to the four states of Colorado, Kansas, Missouri and Nebraska.

Traditional as used in the title of this study describes a college that owns a campus and the buildings thereon.

Generally accepted usage should be applicable in defining all other terms used in this study, except as modified by the overall context.

The Probable Value and Importance of the Study

This study will determine the adequacy of current methods and sources of long-term debt available to colleges for consideration purposes. Models of programs to correct some of those existing deficiencies, as defined by the study, will be developed and presented in the appendices.

The material developed by the study, both in confirming and defining the existing problems, and in developing the models, may be of value to the field as a general point from which thinking could start in the development of solutions to individual problems.

The data collected to test the hypotheses may be useful as the basis for developing new federal or state legislation. The study

could serve as a ready reference to the possible level of acceptance by colleges and lenders, of such plans. Models of possible legislation, developed and presented in the appendices, may be used as a place for lawmakers to start in formulating legislative proposals. The entire study could be of value as the factual basis for a planned lobbying effort by college representatives to implement either one or both of the program models.

The data in this study should indicate to lenders that there may be a demand for long-term loan funds for college construction. It is an area that may well warrant more promotion and development by individual lenders. The financial community often comes under pressure to participate more fully in the solving of the nation's problems. In financing college construction, the financial community would be contributing to solving one of the nation's problems.

#### Review of Remaining Chapters

Chapter II reviews the available literature of the field, presenting it by broad subject groups. These subjects are presented in such manner that each can be used as a condensed information base without the necessity for cross referencing to other topics, when addressing basic questions. Much data was collected, even though the amount of usable information gained was not in the volume that had been expected.

Data Gathering and Analysis is the title of Chapter III. The procedure used to gather data, including a definition of the census from which the data was obtained, is presented. The chapter also contains a full discussion of the statistical analysis used to test the hypotheses.

Chapter IV presents the statistical analysis of the data collected, and discusses the narrative responses that were received during the study. The statistical data is summarized on four tables included in that chapter.

The conclusions and recommendations for further research are contained in the final chapter. It also summarizes the data presented earlier, along with some of the procedures used in the study.

## CHAPTER II

### SURVEY OF RELATED LITERATURE

The literature related to the general problem of borrowing money for long periods of time to pay for construction or renovation of private college buildings is very limited. An indepth study of this literature revealed no publication devoted exclusively to that problem. In order to provide a comprehensive review of the literature related to the topic, as much of the field of school financing as possible was considered. Much literature is available relating to the procedures used in the financing of tax supported schools and colleges, but little of this information is directly, or even indirectly, transferable to the question as related to private colleges.

In an attempt to develop all possible sources that might add significantly to this research effort, over sixty sources were contacted by mail to obtain reprints of journal articles, a number of bibliographies and abstract service publications were reviewed, and municipal and university libraries were personally visited in seven states. A great deal of information was obtained from the U. S. Second District Congressman from Colorado, pertaining to governmental programs.

The literature review considered specifically eleven major questions relating to the basic topic. After introducing the problem, it was desirable to explore the available literature to determine that a need for additional facilities and borrowed funds does actually exist. Then it was of interest to consider why long-term debt was once considered to



be unacceptable, and why this belief may now be changing. The two types of buildings found on every campus, nonrevenue yielding and revenue yielding, were explored to determine the special problems related to each. The sources of funds and methods of financing were presented in some detail and two different applications from other fields were exhibited hypothetically. The last items considered before the summary were those of length of loan, equity required, the treatment of depreciation and considerations pertaining to financial feasibility.

### Introduction

Johns and Morphet have indicated the importance of the educational concepts which stated that everyone should have equality of opportunity for the kind of educational program which best meets his need (20:5). Such opportunities should be provided in nonpublic supported schools and institutions of higher learning, as well as public schools. Public institutions of higher learning, they have reminded us, should be largely supported by public taxation, while nonpublic colleges should be supported on a voluntary basis from other than public tax funds. The Chamber of Commerce has acknowledged that education is an investment in people and schools must be adequately supported and financed in every part of the world (37:2). Eulau and Quinley, in one of their surveys, asked a group of legislators and officials where the "greatest need for additional funding" lay (12:78). The most frequently mentioned need was the need to allocate new funds for construction.

In Canada, Waines has stated:

It is clear that very substantial amounts of money will be required in each of the next five years to meet the capital needs of universities and colleges if they are to accommodate the student enrollment and provide accommodation for additional staff, research facilities, residents and other services (34:35).

The Carnegie Commission recommended:

....that private colleges prepare to accept in the next decade an increase which will, nevertheless, allow for a small decline in the proportion of private to public college enrollments between five and eight percent (21:55).

They were convinced that most private colleges were viable. They felt that higher education as a whole would be more effective and efficiently provided if a dual system of private and public colleges was fostered. They stated that on the whole, private colleges are capable of growth and utility.

Russell stated:

In most colleges and universities the construction of new academic buildings is an extraordinary event, an affair that does not occur every year, and for that reason special arrangements are usually necessary for the financing of the construction (33:339).

Special arrangements for financing would generally include some level of borrowing.

Since it appears that private education may be a desirable, if not a necessary, part of the American higher education picture, it may seem strange to be concerned about the problem of borrowing to finance the construction of buildings at these colleges. Individuals and businesses borrow routinely for less worthwhile activities. Where then does the problem lie?

Part of the problem is that portions of the lending community, along with some educators, believe private education is in a financial crisis. They are aware of authorities in the field such as Jenny and Wynn, who have stated:

As we are writing the text of this report we are once again aware of a sense of crisis within higher education circles. At the very moment when higher education is struggling with its identity, there is also increasing talk of financial troubles, of substantial deficits, and even of the insolvency of even larger numbers of private colleges and universities (19:vi).

Rivlin has pointed to the "sub-crisis" in higher education that is created by the special problems of private colleges, especially small liberal arts colleges, whose costs have risen to the point of placing them in increasingly precarious financial positions (32:6-7). She also stressed that many persons view the financial distress of private colleges as a disaster for American higher education in general. The National Catholic Educational Association has concluded:

Unless some kind of financial solution or assistance comes forth soon, many private colleges and universities cannot hold back the consequences of recent and current deficits, much less play a dynamic role on the American education scene (25:26).

Then the problem is partly seen as one of rapidly rising costs. Orwig commented that there were a variety of factors contributing to the rising cost per student (26:2). These included rising faculty salaries, need of capital expansion, expansion of more expensive graduate education, and a general inflationary trend. All of these problems, and others, have caused a number of colleges to actually close. These included Monticello in Illinois, Cascade in Oregon, Hiram Scott and John J. Pershing in Nebraska, Midwestern University in Iowa, Silvermine in Connecticut, St. Joseph's in Maryland, the Mills College of Education in New York, Cardinal Cushing in Boston, and a number of others. Eulich and Tickton pointed out that:

In December 1970, the Carnegie Commission reported that two-thirds of the private colleges and universities in the country were financially troubled or heading for trouble. And the American Association of Colleges reported that half of the private colleges in the U.S. already had or were expecting deficits (13:5).

While the authors have hastened to point out that there is serious disagreement in the field regarding the actual financial condition of private colleges, there is no reasonable doubt that, as a group, private colleges are in trouble financially.

### Need for Additional Construction

The actual need for additional construction is difficult to determine since the decision to build can be put off from one year to the next, almost indefinitely, in many cases. Need can be determined by a variety of methods including determining the current size of the market and number of loans outstanding. Another way to determine need is to estimate the useful life of existing buildings and plan for their replacement at current market costs, showing whatever adjustments should be allowed for changes in population, trends in enrollment and more or less efficient use of available buildings. While the author was unable to define the need in specific terms through this literature search, the following items strongly suggest that the need for additional construction on private college campuses is real.

Harris estimated that needs for construction for higher education facilities (private and public) for the 1960's was between \$12,000,000,000 and \$33,000,000,000 (18:322). In the period from 1955 to 1966, it has been stated that the capital outlay for construction by public school systems increased almost twice as rapidly as the composite construction cost index, therefore indicating the existence, during that period of time at least, of a significant need (80). Calkins has pointed out that the government made loans for construction to over 500 colleges during this period 1951 to 1957 and expenditures for plant and equipment in all institutions of higher learning during the school year 1955-56 were over \$800,000,000 (5:191). Castetter reported that between 1958 and "the end of 1965, not less than 950,000 new (classrooms) would be needed to house American school children" (6:3). Keeton stated that between the beginning of 1955 and the end of 1956, 243 additional private colleges had been established in America and that in 1966, sixty-four per cent of

our institutions of higher learning were private (21:55).

In 1966, Patterson and Longworth reported that the new Hampshire College in Amherst-Hadley, Massachusetts, would "need funds on the order of \$29,000,000 to plan and build a campus for 1440 students" (23:242). Plans might require up to one-half of the cost be borrowed incurring an annual debt service per student of approximately \$1,000. Burke and Weld found that the long-term debt for higher education nationwide averaged thirty-two dollars per capita (4:19). That figure may refer only to annual debt service.

Crossland has reminded us that America's higher education enterprise is larger than ever before and is still growing. He stated that:

During the twentieth century, enrollment, staffing, and physical plants have doubled every twelve to fourteen years. Today, this higher education industry requires the services of perhaps a million people who are trustees, administrators, teachers, and custodial personnel. They are at some 2,600 institutions enrolling more than eight million students and annually spending billions of dollars. The sheer size of this enterprise makes it a challenge for all of us responsible for its continuing development (60:1).

The normal replacement and renovation of the facilities referred to by the figures cited in the above paragraphs, may by themselves suggest a significant current need. This does not take into account that portion of the earlier need that for some reason or other still remains to be satisfied in the future. If only a modest amount of this need is provided for through borrowing, the total amount of debt outstanding will increase substantially, as well as the requirement for funds to borrow.

#### Attitudes Toward Borrowing

When one considers that this country's entire economy is based on the wise use of credit, it may be hard to believe that private colleges as a group have not always been agreeable to borrowing, no matter how

acute the need, or worthwhile the end result (80). Many private colleges still share this attitude, but more and more are coming to view borrowing as just another acceptable method of financing available to them under certain circumstances (79).

However, first some of the reasoning for considering borrowing to be unacceptable under all circumstances are presented. In 1944, Russell stated that about half of the indebtedness carried by American colleges was for construction of new buildings (33:342). He warned that a debt of that sort was such a menace to the future stability of the institution that every effort should be made to avoid it. Particularly in the case of academic buildings, which had no provision for an income that might be used to carry the interest on the indebtedness, it was necessary to avoid financing by means of borrowed funds. In this example, Russell chose not to explore the question to arrive at solutions, nor even to specifically define why debt was bad. He simply stated the bias of the times.

Castetter has pointed out that, "The cumulative efforts of indebtedness for public education are not always favorable, despite educational improvements made possible by its use" (6:3). Moreover, he stated that payment of maturing bonds and interest has necessitated, in some instances, drastic cuts in school current budgets, resulting in curtailed educational programs, salary reductions, heavier teaching loads, and demands for general retrenchment. Unsound debt administration creates conditions conducive to waste and misuse of public funds, reduced credit standings, fewer educational opportunities, demands for retrenchment, financial losses to investors and bond brokers, and a host of other factors which ultimately affect the welfare of the school child and

defeat the purposes for which the school exists. However, he makes it clear that he is not against all debt, only that which is unsoundly administered.

Reasons for schools not borrowing have been listed by Chambers (8:32). They included the fact that rapid technological advances tend to make buildings obsolete long before the debt is retired, and needs for facilities to house new academic programs are generally undefined because of the rapid change in the knowledge available and required. The simple fact that, even at low interest rates, the interest paid over a number of years equals or exceeds the amount of the construction, has deterred many schools.

Essex has pointed out the possibility that borrowing may tend to encourage extravagance (11:32). Since the amount that can be borrowed to be repaid over a number of years is generally substantially more than could be obtained on a cash or "pay-as-you-go" basis, borrowers are encouraged to give less consideration to the total project cost.

Jenny and Wynn, in their study of forty-eight private colleges, believed they detected:

....evidence of increasing difficulties and future financial pressures which are of a more serious nature. In particular we are concerned about the built-in fixed costs brought about by debt service and plant construction (19:5).

In other instances the repayment of debt adds another fixed cost therefore limiting the ability of the college to change.

In the assumptions presented in the first chapter, it was recognized that a college generally should not go into any more debt than is necessary. However, it is also assumed that borrowing is not necessarily undesirable under all circumstances. In fact, under certain circumstances, it may be highly desirable, for some or all of the reasons reviewed below.

Castetter stated that:

Despite attendant difficulties, the practice of borrowing money for educational purposes has become so thoroughly established that it appears to be a normal function of school boards, particularly in financing capital improvement programs (6:2).

He has further stated that before any form of debt is created, a clearcut case of need should be established. After the need is established, it is his opinion that, "In some circles the notion exists that all capital improvements should be financed by long-term borrowing" (6:6). Castetter and Ovsiew also have reported this as a "notion." They have stated that, "For a community to use its credit wisely is not an economic crime" (7:174). These generalizations, favorable to borrowing, should serve to point out that there is a wide difference of opinions on this question.

A reason for debt as pointed out by Chambers is that by financing academic buildings by pledging future student fees to retire the indebtedness, the result is to shift the cost of the academic plant from someone else to the students, on the seemingly plausible theory that the buildings should be paid for by those who use them (8:29). (This point, like so many others made in this section on attitudes toward borrowing, could be used to support the opposite contention by simply changing the emphasis).

Certainly, the total annual expenditure will be held down by the use of limited long-term debt as Handler has pointed out (16:72). Even though the interest may double the total cost of a project over its forty-year repayment life, the amount budgeted each year need only be one-twentieth of the capital cost of the building, therefore reducing the drain on the current available cash.

Another reason, or justification, for borrowing, is set forth by Longworth and Patterson, as they presented the conclusion that the



average endowment income for all private colleges was about \$150 per student per annum (23:236). Distribution is heavily in favor of a few institutions. In other words, the average private college does not have enough income from endowments to finance construction without additional sources of capital. These additional sources of capital may well be borrowed funds.

Inflation was an item discussed by Jones. He felt that with building costs growing so rapidly, colleges would be well advised to borrow money today and trade the interest costs for the increased construction costs. "If you are going to build," he said, "now is the time" (41:52). Security economist Kaufman also commented that:

The fears that government will not quell the high rate of inflation have, among other things, contributed to the binge in consumer spending and the increasing willingness to incur debt at a record-breaking pace (75:1).

So long as inflation continues at a high rate, colleges will be paying back debt with less valuable dollars.

To sum up, Essex has pointed out that school building should be financed on a basis that is fair and just to all concerned (11:33). Borrowing is fair and just under some certain conditions and unfair and unjust under many others. The field must strive to develop financing methods and philosophies that are fair and just to all.

Comparing Revenue and Nonrevenue  
Yielding Buildings

Chambers has explained that:

Buildings for educational purposes are of two distinct classes from the viewpoint of their financing and uses: 1) academic or nonresidential buildings (which do not produce any regular income from rental) and 2) nonacademic buildings in which a large part of the space is regularly leased to rent-paying tenants, lodgers, or other users (8:25).

Revenue producing units included dormitories or residence halls,



athletic plants, student unions and a whole range of student-service buildings. Since these generate income they may be facilities that can become self-financing. The Federal College Housing Program, for example, is limited to self-financing structures. Many revenue producing facilities are financed by loans to be repaid from revenues earned, on a "self-liquidating" basis in the sense that they will eventually "pay for themselves."

While the financing of revenue producing projects may be somewhat different than financing academic buildings, there is no assurance that problems will not arise. Russell pointed out that, "The first caution to be observed in undertaking a building project on this basis is to make sure that the enterprise is really self-financing" (33:346). He pointed out that the mere fact that some income will be received if the plant facilities are provided is not necessarily an indication that the building will pay the full cost of its operation and leave a surplus which can be used to repay the original cost. Careful consideration is therefore needed before an institution rushes into a construction project on the presumption that it will be self-financing (33:346).

Problems that have arisen to hinder repayment from revenue producing units include the loss of revenue from attendance at athletic events when the team has a bad year, a change of student attitudes that might leave a dormitory far from full, or a decline in enrollments that would cause a decrease in revenue derived from services to students. If revenue decreases below the level necessary to operate the facility and pay debt service, the college must obtain funds elsewhere to keep the mortgage on the building from being foreclosed.

There is, however, far from a unanimous agreement on how revenue

producing units should be financed. While on the surface it may seem that the best answer is to have them set up on a self-financing basis, questions do arise. In the early 1960's there was a great deal of construction of student residences and student service facilities in Canada, largely financed by loans. Bladen stated that many were concerned that self-financing would put room and board charges beyond the reach of a large number of students. He indicated that:

In practice, most universities indicated their intention to keep their residence charges as low as possible. They would like to service the loans in whole or in part from general university funds (35:46).

To plan to repay the debt in part from general university funds would seem to be a more flexible method than requiring that the project must be entirely self-financing. Again, it is evident that each project must be evaluated individually, as few projects meet all the requirements necessary to accept any financing method as a generalization without careful study and necessary modification.

The other class of buildings on campus is the academic or non-residential building. Harris said that, "Perhaps the toughest problem is the financing of nonrevenue yielding buildings" (17:66).

Chambers has tended to support this by stating that:

....structures to house classes, seminars, laboratories, libraries, lecture halls and faculty or administrative offices carry with them no expectation of income from their operation and therefore can not be self-liquidating (8:27).

Financing the costs of nonrevenue yielding buildings is therefore a one-way operation from which the institution expects no return. It must obtain the necessary funds from such sources as gifts, legislative appropriations, student fees, or some form of borrowing. If "some form of borrowing" is used, the problem remaining is still one of repayment, but the college has one less option--the project may not be self-liquidating.

Therefore, other sources for repayment must be developed, but these will not be explored here.

### Sources and Methods of Financing

Sources and methods of financing are considered descriptive in nature in this section and are used interchangeably.

There are many sources that a college should explore in its search for long-term loan funds. They include local banks, pension trusts and insurance companies, bond underwriters for taxable bonds and tax-exempt bonds under revenue ruling number 63-20, state higher education building authorities and federal government loan programs.

Castetter and Ovsiew stated that, "The notion is widespread that all capital improvements should be financed by long-term borrowing" (7:171). While it is true that many capital outlays are financed by long-term loans, the capital need contains no intrinsic factor which dictates the method by which it is to be financed. They indicated that it was quite conceivable that any one or any combination of methods might be employed in financing capital needs.

Corbally stated that, "This discussion should also make it clear that the mechanics of borrowing money for school capital outlay purposes are quite involved and technical" (9:228). This will probably become increasingly evident as other phases of the borrowing process are described. He strongly recommended the use of a bond attorney or other financial consultant, and commented on the strange but true occurrence that experienced administrators almost always seek assistance while the novice is likely to overlook this sort of aid. Barron also indicated the need to obtain help in the form of an agent, who will act as a "finder" and negotiator, in securing financing (56:65).

Local banks

Killenberg said, "Of the sources available for borrowing, the local banks are the first group to be considered" (67:56). The biggest advantage to financing locally may well be that the school is dealing with someone who is familiar with them, and the local banking community can be assumed to have a strong interest in local community institutions. Other advantages are that there are generally no special fees involved, there is considerably less red tape, and the funds usually are more rapidly available than from any other source. Offsetting these advantages may be a higher interest rate, and the fact that the total funds available may be somewhat limited.

It was stated by Barron that in some instances banks do have excess funds and might make term loans for as long as ten years (56:80). While these might not be generally available, banks will sometimes be willing to carry the first seven years of the financing, and arrange with an insurance company to carry the loan from the seventh to the twentieth year. He commented that:

Banks are usually flexible with respect to principal payments prior to maturity and generally are willing to permit prepayment without any call penalty as long as the proceeds for such purposes are not obtained from a loan from another bank. An added cost of such loans, as compared with other types of loans from nonbank lenders, is the cost to carry a deposit account as a compensating balance (56:81).

It appears that in the opinion of Barron, the local banker should be the school's first contact. That contact may well become the actual source, or lead to one of the sources of funds.

Pension trusts and insurance companies

Pension trusts and insurance companies have been a major source of building financing for years. Both have large sums of money which must

be invested. Some will purchase bonds issued by the school, and others will make mortgage loans directly to colleges. However, because this is such a large, well known field, further specific reference will not be made about it, except to recognize that the college's insurance company should be contacted early, as well as its local banker.

### Bonds

Long-term instruments of indebtedness are known as bonds. As Corbally has explained:

Essentially, a bond is an instrument of indebtedness with a specified face value and contains the promise of the school to repay the face value of the bond (the principal) plus an agreed-upon interest within a specified period of time (the term of the bond) (9:228).

Bonds are called serial bonds or term bonds depending on whether both interest and principal are paid throughout the term of the loan, or only interest, with the entire principal being due at the end of the term. Bonds are also classified as secured (mortgage bonds) or nonsecured (debenture bonds). A private college will generally attempt to issue revenue bonds secured by the new building (80).

Much financing by private colleges will be by the sale of taxable revenue bonds. These instruments are becoming more popular as a means of securing funds. Killenberg has explained, "Revenue bonds quite frequently can be issued for a lower interest rate and for a longer period than funds obtained through the local bank" (67:56). They often can provide a larger total loan than that obtained through local banks.

Tax-exempt bonds may be issued by a not-for-profit corporation that meets five requirements set forth by Revenue Ruling Number 63-20 issued by the Internal Revenue Service on January 1, 1963. The ruling required that 1) the corporation's activities must be essentially public in

nature, 2) it must be nonprofit, 3) its income must not inure to any private person, 4) a state or political subdivision thereof must obtain title when the debt is paid, and 5) the issue must be approved by that political body. Sears pointed out that the bonds do not have the full faith, credit and taxing power of any political subdivision so the revenue generating ability of the college must be strong (72:129). Since the interest income is exempt from all federal income taxation to the investor who receives it, the college can place it at a lower effective interest rate cost. Also, such bonds may have a life of up to forty years. When the institution is debt "free and clear" it must be transferred to the political body. However, as Van Meter indicated, the municipal entity may own and operate the institution, it may transfer it to someone else to operate, or it may simply return the institution to the operating corporation (local law allowing) (70:8). Also, since it will be thirty to forty years before the government takes title, this delay may make any practical objections almost meaningless. To date, this method has been used very little, if at all, in the field of private higher education.

Tax-exempt revenue bonds issued by an educational authority are gaining some publicity in educational and financial circles. Becker has described educational authorities as state or local agencies:

....empowered to raise funds through the sale of tax-exempt revenue bonds to finance capital improvements at private, nonprofit institutions providing a program of education beyond the high school level (73:1).

He further stated that bonds issued by the Authority are not obligations of the State or the Authority, but are secured by and payable solely from revenues pledged for payment in accord with a Bond Resolution and Trust Indenture. It was felt financing capital improvements through such

an Authority could result in a savings in interest costs of as much as two per cent. Creation of an Authority makes another type of financing available to colleges. Most authorities include the ability to finance both educational facilities and health facilities (hospitals), but most authorities appear to be used almost exclusively for one type of facilities or the other probably due to the political situation (76).

In 1973 Kavanagh, a leader in the field of educational authorities, identified fifteen states that had adopted legislation creating state health and/or educational authorities, designed to aid private nonprofit educational institutions in raising funds for construction or improvement of facilities or for refinancing outstanding debts (76:1-2). He felt the advantages included lower interest costs, financing over longer terms, relative ease in raising money, lower "up-front" expenses as compared to other types of loans, and the availability of funds prior to start of construction. This eliminates the usual costs of independently financing the project during the construction period. Another significant advantage is that the property is mortgaged or, if conveyed to the Authority, reverts to the institution when the loan is paid. Note that this is different in this respect from the 63-20 method described earlier. Refer to Exhibit I that outlines sample provisions of a State Educational Facilities Authority Act.

The major objection to Authorities as seen by some investors has been that the bonds are not backed by the "full faith and credit" of a government subdivision. In New York, one of the states that currently has a bonding authority, some of the Assemblymen have been advocating bonding with a state guarantee of the debt (12:73). This action would tend to lower interest rates because it would decrease the investors' risk.



However, passage of such legislation is not currently considered very likely because of the possibility of a state having to purchase some defaulted bonds. Hudson, in his study of the Indiana school finance picture, found that there were no state guarantees against possible default of school bond obligations, and recommended that a study be made of the feasibility of state guarantees of local bonds (40:214).

Lease-rental obligations and supplementing local bond issues with issues of an authority, commission, or agency of the state were also to be studied.

#### Federal loan programs - general

There are only two basic Federal governmental loan programs, which have as their purpose, the construction of buildings on college campuses. They are the Department of Housing and Urban Development (FHA), College Housing Program, and the Department of Health, Education, and Welfare, Office of Education, Higher Education Academic Facilities Construction Program. These will be called the housing program and the academic buildings program. Referring to an earlier section of this chapter, the housing program is for revenue-producing buildings, while the academic buildings program is for nonrevenue yielding buildings.

#### College housing

There are direct three per cent interest government loans made to public and private nonprofit colleges, and there are grants to reduce private loans to an effective three per cent interest rate. Rivlin described the Housing Act of 1950 as authorizing:

....the federal government to make long-term loans to colleges and universities for the construction of faculty and student housing, including dormitories, apartments, single-family units, and improvements to existing residential buildings (32:101).

All nonprofit institutions of higher education, both private and public, were declared eligible to apply for the loans. The program got off to a slow start since, due possibly to the influence of the Korean War, it was required that all loans be defense-related; all had to go to colleges expanding their ROTC units, working on defense contracts, and the like. After the close of hostilities, most of these restrictions were removed in August 1953. The amendments of 1955 expanded the eligible projects to include cafeterias, dining halls, student unions, infirmaries, and other service facilities, as well as actual housing. By June 30, 1959, fifty-four per cent of the eligible private nonprofit four-year institutions had applied for college housing loans. Of the 1,089 private institutions who applied by June 30, 1959, it appears from Rivlin's figures that 685, or slightly over sixty per cent had been approved (32:103). Calkins agreed with these figures stating that, "From its inception in 1951, to 1957, loans of \$583,000,000 to over 500 (private) colleges and universities have been approved" (5:191). The Housing and Urban Development Act of 1965 continued the college housing loan program with no basic changes.

The Educational Facilities Laboratories staff comment that, "The College Housing Branch of the U.S. Department of Housing and Urban Development (HUD) sees remodeling of existing dormitories as the big challenge for the next decade" (39:21). Because there has been a great deal of talk about renovation but very little action, the department suggested colleges should make renovations extensive enough to create a significant change in living patterns. However, it also suggested that this change not be so extensive that the bonded indebtedness became unwieldy. They commented that most dormitories carry an existing debt of \$2,000 to \$5,000 per student. According to HUD, it is economically

safe for a university to increase this indebtedness to between \$7,000 and \$8,000 to finance renovations if necessary. It was not mentioned how many of these dormitories currently had a HUD loan on them that were in danger of default if they were not renovated so that the students would move back into them. Refer to Exhibit II which outlines sample provisions of a program to insure private loans made to eligible colleges.

#### Academic facilities loans

The other major federal government loan program for colleges is the Loans for Construction of Academic Facilities, administered by the Department of Health, Education, and Welfare (HEW), Office of Education.

In 1958 Harris contended that the federal housing program provided loans for dormitories, but a new federal program to provide grant-in-aid support for academic building was sorely needed (17:66).

More than two years after the enactment of the college housing program, the Higher Education Facilities Act of 1963 (Public Law 88-204) was passed on December 16, 1963. It is to provide grants to reduce the cost of borrowing from private sources for construction, rehabilitation, and improvement of academic facilities. Public Law 88-204 required the applicant to finance at least one-fourth of the development costs from nonfederal sources (44:9), the 1966 amendments in Public Law 89-752 simply extended the original law by three years (45:3), and Public Law 92-318 passed in 1972 further amended PL 88-204 by extending it to June 30, 1975, and adding mortgage insurance for private loans made to non-profit institutions of higher learning (46:61-63).

Table 1 indicates approximately \$400,000,000 in loans. If the need is well over \$12,000,000,000 as pointed out earlier, this program or one similar may need to be studied for possible expansion.

TABLE 1

LOANS FOR CONSTRUCTION OF ACADEMIC FACILITIES UNDER TITLE III  
OF THE HIGHER EDUCATION FACILITIES ACT OF 1963

(Public Law 88-204, as amended)

Year ending June 30*	Number of loans made throughout the nation	Number of loans made to schools in Colo., Kans., Mo., & Nebr.	Amount of loans made throughout the nation	Amount of loans made to schools in Colo., Kans., Mo., & Nebr.
1965	132	5	\$107,706,000	\$2,503,000
1966	143	8	99,789,000	4,837,000
1968	240	8	150,000,000	4,295,000
1969	39	2	7,799,000	206,000
1970	10	none	4,773,000	none
1971	21	2	13,728,000	839,000
1972	19	2	11,074,000	1,230,000
Totals	604	27**	\$394,869,000	\$13,910,000

\* Information for 1967 is not available

\*\* 1 Colorado, 7 Kansas, 13 Missouri and 6 Nebraska. All but one of these colleges were private nonprofit.

Source: U.S. Department of Health, Education and Welfare, Office of Education, unpublished annual internal management reports obtained by U.S. Congressman, Donald G. Brotzman (R-Colo), October, 1973.

Chambers commented that in recent years both private and public colleges and universities have had accessible to them under appropriate circumstances both outright grants and low interest loans from agencies of the federal government (8:33). These loans covered at least part of

the cost of specific types of academic facilities.

Not only are these provided for under the Higher Education Facilities Act of 1963 and in its extension in the Higher Education Act of 1965 (and 1972); they are also found in contemporaneous acts relating especially to facilities for education in the medical and paramedical professions. And in the several other acts of recent years authorizing and funding programs of contracts and grants for university and college research projects and related enterprises, available from more than half a dozen major federal agencies, a substantial but apparently not precisely ascertainable fraction of the total of federal funds is lawfully used for necessary new physical facilities.

It appears that in the near future many, if not most, of the above-mentioned federal aid programs may be consolidated under one federal legislative authority giving much greater responsibility to the state and local governments for administration of the program.

#### Summary of sources and methods of financing

While the possible sources and methods of financing are limited only by the individual school's imagination, some generalizations are in order. It appears best to approach the local banker and others whom the school has done business with, first, early in the planning phase. The bank loan, if it can be obtained, may be the easiest and least expensive method. Taxable revenue bonds appear to be the most popular method in the past, but new tax-exempt schemes, while not heavily used to date, offer the promise of numerous benefits as the field becomes more familiar with their use. Federal government programs have been well received in the past, but may have fallen short of meeting the need. There is great current interest in government loan programs, so new loan programs will

quite possibly be developed in the future.

### Length of Loan

Castetter and Ovsiew have said that there is no precise index for measuring the term for which indebtedness should be contracted (7:175).

The following opinions, however, are common:

1. Twenty-five per cent of the debt should be retired within a five-year period. This is tantamount to the provision which holds that school indebtedness should be liquidated within a period of twenty years.
2. The life of the debt should not exceed the life of the improvement.

These are rules of thumb and may be appropriate in many instances. However, it is quite apparent that they cannot be followed blindly. For example, if the estimated useful life of a school building is fifty years, following the latter index to the allowable extreme, would keep many school districts in perpetual debt.

In some cases, the practice which is followed is that of taking advantage of the maximum term of indebtedness permitted by law. Because many statutes permit bond issues to run for thirty years, this maximum term is often adopted by school districts.

A more realistic index than the foregoing may be district financial ability. If indebtedness can be retired within a ten-year period without affecting unduly the educational program or the debt margin, a longer term should not be necessary.

Calkins reported that in 1959 the college housing loan program authorized fifty-year loans (5:191). The maximum practical limit in 1972 appeared to be forty years. Public Law 88-204, as amended, also sets forth fifty years as the maximum loan repayment period under the Academic Facilities Program (44:9). Kavanagh pointed out that the maximum term

under most state educational authorities is forty years (76:4). Kenny said that in the hospital financing field, which has much in common with the educational facilities financing field, the maximum term is fifteen to twenty years (77:8). The FHA Insured Loans for Hospitals Program is twenty-five years as a maximum mortgage life.

It is, therefore, difficult to determine what the length of a college's indebtedness should be since so many factors are involved. Hudson however, recommended simply, "The length of the term of a bond issue should be as short as practical" (40:214).

#### Equity Required

It is always difficult to determine what the maximum per cent of the total project costs should be borrowed.

Kavanagh pointed out that under a state educational authority, "equity requirements are low--it is conceivable to finance 100 per cent of a project" (76:2). FHA type government insured mortgages generally require ten per cent nonborrowed equity, while the Academic Facilities Loan Program, Public Law 88-204, requires the applicant to finance at least one-fourth from nonfederal sources (44:9).

The Carnegie Commission in 1970 (36:72), and Fein and Weber in 1971 (14:203), agreed that medical colleges have a very difficult time raising the fifty per cent equity required by most government-supported medical school financing programs, and recommended that the equity requirement for medical colleges be lowered to twenty-five per cent or less.

Most private lenders require twenty-five to fifty per cent non-borrowed equity. While this may be reasonable, it does make it difficult for the college to satisfy the requirements for receiving the loan. It appears that the amount of equity required should be as high as possible

but not so high that the college cannot take advantage of the needed financing.

### Treatment of Depreciation

Depreciation is a term used in accounting to show the expiration of a fixed assets fund of usefulness. As a building wears out, the accounting records show a dollar amount expiring each accounting period (usually a year). At the time a building is put into use its useful life must be predicted so that its depreciation may be allocated to the several periods in which it will be used.

Items that influence the wearing out of a building include not only the wear and tear and the action of the elements, but also the additional factors of inadequacy and obsolescence. Essex explained that depreciation and obsolescence operate in a similar manner (11:22). As soon as a building is constructed it begins to wear out or depreciate. Nothing is more certain or more regularly recurring. Obsolescence is not so certain; it depends upon the rapidity of the change in educational philosophy and procedure. Nevertheless, obsolescence, as well as depreciation, must be considered in determining annual accrual cost.

While there are any number of ways to record depreciation, it is satisfactory for purposes of this paper to simply explain the method which divides the life of the asset by its replacement cost and records that fraction of the cost to a depreciation account each year. This has been done in industry for years. More recently, the hospital field has charged depreciation to increase their charges to patients, which increased their income and thereby was used as a source of additional funds to be used to repay principal debt (76).

To make a workable estimate of the useful life of a building for



depreciation purposes, it is necessary to know how long the building can reasonably be in use. Harris said that, "Enterprise writes off its plant in ten years where institutions of higher learning take fifty years" (18:322). Linn, in 1934, stated that the useful life of fireproof, modern school buildings was eighty to 100 years. Many educators today, if asked to speculate on the useful life of a well-constructed and maintained school building, might well guess forty to fifty years. What this estimate fails to take into account is the shorter life of such things as air-conditioning systems, heating plants and plumbing systems. The American Hospital Association figured these items of fixed equipment wear out in twenty to twenty-five years, where the concrete building will depreciate over forty years (1:162). Therefore, given the high percentage of major fixed-equipment cost in any modern school building, it would be fair to estimate that the combined depreciation charge would be four per cent per year or the writing off of one twenty-fifth of the total project cost each year.

Morris said that, "As most colleges now keep accounts, the annual operating costs do not include capital outlays for buildings" (21:58). Jenny and Wynn pointed out that in a study of sixty private four-year liberal arts colleges, "Accounting practices differ markedly among the institutions in the sample" (19:vii). Waines stated that, "Some universities charge expenditures on renovations to capital account; some charge them to operating account" (34:37). This points out that there is little agreement in the accounting practices in institutions of higher learning today.

This makes it difficult to determine actual costs. As Price pointed out, it makes it impossible to set student fees on anything resembling a cost basis so long as costs are not known (28:196). Jenny explained that because of inadequate accounting in higher education for

the capital cost component, current statistics on education costs exclude the bulk of capital costs in colleges (65:49). The Association of Universities and Colleges of Canada reported that:

In accordance with any general practice of university accounting it does not include any charges for depreciation, for extraordinary repair or renovation expenses, or for capital improvements (2:18).

That omission of any capital element from the plant maintenance costs obviously resulted in a serious understatement of the total cost of university operation which must be kept in mind whenever the figures are being reviewed or compared.

What is presented for consideration is the idea that in order for the school to obtain funds to repay debt, students should be charged an amount equal to the amount depreciated that year. This amount of money would be placed into a fund from which a major portion of the debt repayment and building renovation would be paid. There is a good chance that additional amounts would have to be placed into the fund from other sources, but this depends on many individual factors including amount of debt compared to the amount of facilities that are being depreciated, and so on.

As Russell pointed out in 1944, charging and funding depreciation "is not at all common in educational institutions" (33:344). But if the practice of charging depreciation is established, the National Committee on Standard Reports for Institutions of Higher Education recommended in 1931 that, "Depreciation funds should be represented by cash assets" (43:16). Such depreciation funds would presumably be created by transfers of cash from current fund accounts.

#### Determining Financial Feasibility

It appears obvious that no lender will make a loan to any college

without first determining how much of a risk there is that the loan will not be repaid. Every lending firm has a person, or group, who review the requests for loans using their own criteria. If the request meets its criteria the loan is judged to be feasible. If it fails to meet those criteria it is rejected.

One reason for lack of attention to the private nonprofit college field may be due at least partially to relative size. Public schools borrow so much money that the term "school debt" may automatically suggest repayment from general obligation tax funds. Individual school income and management under such circumstances take on much less importance when the debt is secured by tax revenue. Should this research have been directed toward public school finance, the literature review may have been many volumes long on this subject alone.

The researcher studied the many books on school finance listed in the bibliography only to find, at best, one-sentence comments or incomplete references to other information sources, pertaining to determining the ability of a nongovernmental college to repay long-term loans. This does not infer that such information is not available. It simply points out that such information has not been published. Information is available in great detail from many confidential sources that have had much experience with the subject including lenders, consultants and some individual colleges (see also Appendix D).

#### Summary of Literature Review

This survey of related literature has presented the current thinking in the field about the problem of financing college facilities with long-term debt. It has become apparent that there is little agreement on a number of important items.

The literature revealed far less information than had been anticipated. However, many sources were found to contain small items of information relevant to the subject under consideration. When added together the value of the composite far exceeded the worth of the sum of the individual items.

What is the actual need for new construction? What do the lenders and colleges themselves think about long-term loans to private nonprofit colleges? Are there adequate sources of funds to meet the needs, and have satisfactory methods been developed to make those funds available?

It was indicated, for example, that substantial amounts of money will be needed to meet the capital needs of colleges. Attitudes toward borrowing to meet those needs, however, were quite diverse. One author stated that some college administrators believed all capital improvements should be financed by long-term borrowing. Others, however, pointed out that many private colleges share the attitude that borrowing was not acceptable under any circumstance.

Much discussion has been presented on each question but few absolutes have been developed. It is, therefore, necessary to look at each proposed project as an individual, unique situation before coming to any conclusion pertaining to it.

## CHAPTER III

### DATA GATHERING AND ANALYSIS

#### Procedure and Questionnaire Development

After developing the hypothesis and subhypotheses, two questionnaires were used to test them (refer to Appendix A).

One questionnaire was for the colleges and the other for the lenders. To test some of the individual hypotheses, it was necessary to have input from both colleges and lenders. Other hypotheses required input from only one of the two sources.

Neither of the questionnaires was over eleven questions in length. They were short questionnaires which included basic "Yes-No" type questions. However, in addition to the "Yes-No" questions, respondents were encouraged by narrative questions to discuss in depth the reasons behind their answers. Therefore, each hypothesis could be statistically tested, and information would be available for narrative presentation of supportive material.

In order to maximize the return, a cover letter was developed to introduce the study. The importance of the questionnaire and the reason for the study was explained. Each letter was currently dated and individually signed. The recipients were assured that the questionnaires were confidential.

The first mailing of the questionnaires was sent to ninety lenders and ninety colleges within a three-day period prior to September 24, 1973. A period of three weeks following that date was allowed for the return of

the questionnaires. Thirty-three colleges and forty-four lenders returned questionnaires from the first mailing. Seven of the questionnaires from lenders were not completed, so these were also included in the second mailing.

At the end of the initial three-week period, on October 12, 1973, the second mailing was made to twenty-seven colleges and fifty-three lenders. The second mailing included the original questionnaire and a reminder letter requesting cooperation. By November 2, 1973, three weeks later, an additional seventeen questionnaires had been received from colleges and twelve from lenders. The total satisfactorily completed questionnaires received at the end of the six week period was fifty (or eighty-three per cent) for colleges and forty-nine (or fifty-four per cent) for lenders.

Some questionnaires were received after November 2, 1973. While they were retained, no immediate use was made of them in the statistical analysis.

#### The College Census

Because of the relatively small number of colleges in the four-state area of Colorado, Kansas, Missouri and Nebraska, it was determined that the total population would be more valuable than a sample.

A census is the universe or "parent" population. In this instance the finished return consisted of a sample made up of those in the universe who chose to return the questionnaires.

The names for the college census were obtained by referring to the listings in the National Center for Educational Statistics, Educational Directory, Higher Education, 1972-73 (47). All colleges indicating a type of control other than federal, state, local and profit making, and

indicating their highest academic offering to be at the "four or five year baccalaureate" or higher, were included. There was a total of seventy-nine colleges that met these criteria.

The list was reviewed and it was determined that nineteen of the seventy-nine colleges did not meet the definition of a "small, nonprofit, traditional college," and those were removed from the list.

Thirteen of those removed from the list were removed because they were schools of theology and offered no other course of study. Two were removed because they were specialized institutes of music and art. The other four were removed because of their size. Their enrollments were 11,221, 9,158, 9,119 and 4,172 students respectively, and therefore by definition not considered to be small.

The remaining sixty colleges on the list comprised the census or total population as defined above. They had a total enrollment of 49,730 students in 1972. The colleges ranged in size from a low of eighty-nine students to the high of 2,469 with the average (mean) size being 828.833 or 829 students. The median fell between the enrollment figures of 711 and 738, and the mode was 600 and 800, when the enrollment figures were rounded to the lower hundred for each college.

#### The Lender Census

It was calculated that a statistically valid random sample of the entire nation's lenders, given the available listings, which are found mainly in the directories of professional organizations, would require a sample of approximately 285 institutions. Being a random sample it could be assumed that a relative number of local lenders would be included. Since one of the assumptions of the study was that the college would usually approach a local lender for counsel and advice, if not actually

a loan, before going to nonlocal sources, it was decided that a census of the institutions in the three-state area was acceptable for use as the data base.

The questionnaire was sent to a census of ninety lending institutions geographically located in the states of Colorado, Kansas and Nebraska. Due to the fact that these three states furnished a large enough number of lenders, there was no need to include the state of Missouri as was done in the college census.

The sample was developed by contacting, by questionnaire, every appropriate institution listed by the Roster of Members in the 1973 Directory of the Mortgage Bankers Association of America (24) for the states of Colorado, Kansas and Nebraska. Of the ninety-five names listed, five were deleted as not being true financial institutions, or as being branch offices of parent institutions included elsewhere in the census. The Mortgage Bankers Association of America, from whose membership the lender census was drawn, is an association whose purpose includes preserving and improving the mortgage banking correspondent system and encouraging its use in the making and servicing of mortgage loan investments. The membership is selected from business organizations (i.e., banks, pension funds, insurance companies, etc.) whose major activities include originating, financing, closing, selling and servicing mortgage loans on real estate (24:329).

It was assumed that while many lending institutions were not members of this professional national association, the majority of the larger, more active firms were included. These were the firms that would be most likely to involve themselves in financing the construction of large projects including educational facilities.

While no attempt was made to generalize outside of the defined



universe, it must be noted that because of competition in the financing field, there is little difference between a lending institution in one geographical part of the country and another. Also, since it is common practice for a number of financial institutions to "participate" (i.e., each firm or institution loans only a portion of the total amount of funds required) in a loan, especially a large loan, local lenders often participate only in a small portion of the total loan amount. The other participating lenders are often located in a wide range of geographical locations. In other words, the size, type and specific geographical location of the lending institution would appear to have little effect on the validity of this study.

It is recognized that this census or sample is composed of lending institutions that generally make mortgage loans. This is to say that they loan money which is primarily secured by a mortgage or first lien on the property constructed. Bond or security houses, on the other hand, generally specialize in the issuing of bonds, backed primarily by the pledge of revenues, which are sold to firms or individuals as long-term investments. It was assumed that this population was satisfactory for the purposes of this study as the decision to use either bonds or mortgages is normally arrived at after the items considered by this paper have been fully studied. It was also noted that many members of the lender census have other departments, including those concerned entirely with some facet of consulting about, underwriting or distributing institutional bonds.

#### Explanation of Statistical Analysis

It is often desirable to perform statistical analysis on data that is derived from questionnaires. This data is nonparametric in nature as

it does not depend on particular population parameters such as mean and variance. Questionnaire data often do not conform to a particular probability distribution. The Chi Square ( $X^2$ ) test is suitable for testing hypotheses concerning frequencies, ratios or in comparing the frequency of observed responses to the frequency of responses expected under a particular hypothesis.

The null ( $H_0$ ) hypothesis under a  $X^2$  test is that there is no difference in the observed and expected data. The alternate ( $H_a$ ) hypothesis is that the difference in observed and expected data is statistically different. The calculated value of  $X^2$  is determined by the formula

$$X^2_{\text{CALC}} = \sum_{L=1}^k \frac{(O_i - E_i)^2}{E_i} \text{ where } k \text{ is the number of discrete data categories,}$$

$O_i$  is the observed frequency in the  $i^{\text{th}}$  category. The value of  $X^2_{\text{CALC}}$  is compared with a table value for  $X^2$  with degrees of freedom (df) equal to  $k-1$  for an appropriate  $\alpha$  (alpha) level. Commonly accepted alpha levels are  $\alpha = 0.05$  and  $\alpha = 0.01$ . As a standard base of comparison, all statistical tests conducted under this study will use  $\alpha = 0.05$ .

#### Comments on the Statistical Analysis

The data gathered from those institutions responding, represents the results of the questionnaires that were sent to the entire census.

To make valid statistical inferences about populations by examining samples, three criteria must be satisfied. First, each element of the population must be identified; secondly, a census or random sample must be obtained; and lastly, the size of the sample must be sufficiently large to warrant generalizing to the larger population. These criteria have been met by this research study.

This study has mainly used research hypotheses as its "base," as opposed to statistical, null or alternative hypotheses. The study may

therefore include an undetermined number of type I and type II errors. A type I error is one in which the hypothesis is true, but is rejected. A type II error is one in which the hypothesis is false, but is accepted. It should be observed that the larger the difference is between the positive and negative answers on the "Yes or No" part of the question, the less chance of the application of the decision rule resulting in these types of errors.

Each hypothesis will be tested by the method defined and explained earlier in this chapter, and accepted or rejected. Regardless of acceptance, each hypothesis will be discussed using the narrative information supplied on the questionnaire. The discussion of even a rejected hypothesis should be of value.

## CHAPTER IV

### PRESENTATION OF FINDINGS AND DISCUSSION

#### Introduction

As summarized on Tables 2 and 3, a number of responses were received pertaining to each question. Tables 4 and 5 summarize the results of the statistical tests performed on the responses to the sixteen questions examined in that manner.

The presentation of data section which follows explains in detail the statistical tests and their results. The remaining portion of the chapter is concerned with practical discussions of the responses to the narrative sections of the questionnaires.

#### Presentation of Data

##### Basic Hypothesis:

More than twenty-five per cent of the colleges in the geographical area covered by this study will need to borrow money to construct or renovate buildings on their campuses in the future.

##### Question:

Do you expect to borrow money in the future to cover all or part of the cost of that construction?

Yes 15      No 21      Undecided 10      Total 46

##### Discussion:

It can be seen that over thirty-two per cent of total respondents did anticipate borrowing funds for construction or renovation. Twenty per cent were undecided while approximately forty-five per cent do not

TABLE 2

SUMMARY OF COLLEGE QUESTIONNAIRE RESPONSES

Question Number	Subhypothesis Number	Question	Total Answers	Yes	No	Undecided
1	1b	Building in future?	50	29	13	8
2	Basic	Will you borrow?	46	15	21	10
3	1a	Have you borrowed?	50	47	3	0
4	1c	Will it be difficult?	21	3	14	4
5	3	Philanthropy good?	48	43	4	1
6	1d	Government program?	50	11	33	6
7	1e	HEW or HUD program?	49	33	16	0
8	1f	Able to mortgage?	45	36	6	3
9a	none	Maintain enrollment?	49	14	32	3
9b	none	Enough applicant?;	48	18	17	13
10	none	Your priority?	34	(see text for details)		
11	1g	Fund depreciation?	48	12	36	0

TABLE 3

SUMMARY OF LENDER QUESTIONNAIRE RESPONSES

Question Number	Subhypothesis Number	Question	Total Answers	Yes	No	Undecided
1	2b	Have you loaned?	49	7	42	0
2	2d	Enough information?	18	2	8	8
3	2f	Need to borrow?	43	31	4	8
4	2e	Merit in Fed. programs?	41	29	0	12
5	2a	Know FHA-DHUD?	46	5	40	1
6	3	Philanthropy good?	47	38	2	7
7	none	What equity?	35	(see text for details)		
8	none	Best security?	34	(see text for details)		
9	2c	Require mortgage?	32	25	0	7

TABLE 4

SUMMARY OF STATISTICAL TESTS FOR COLLEGE QUESTIONNAIRE RESPONSES

Question Number	Subhypothesis Number	Question	Hypothesis Accepted	Hypothesis Rejected	*Calculated value of $\chi^2$	P Value
1	1b	Building in the future?	X		5.357	.05
2	Basic	Will you borrow?	X		4.481	.05
3	1a	Have you borrowed?	X		8.640	.01
4	1c	Will it be difficult?	X		5.882	.05
**5	3	Philanthropy good?	X		5.964	.05
6	1d	Government program?	X		4.545	.05
7	1e	HEW or HUD program?	X		4.029	.05
8	1f	Able to mortgage?		X	2.032	NS
11	1g	Fund depreciation?		X	0.0	NS

\* Critical value (table value) of  $\chi^2$  for  $df = 1$  and  $\alpha = 0.05$  is 3.841

\*\* Subhypothesis number 3 is tested with Lender question number 6 also.

TABLE 5

SUMMARY OF STATISTICAL TESTS FOR LENDER QUESTIONNAIRE RESPONSES

Question Number	Subhypothesis Number	Question	Hypothesis Accepted	Hypothesis Rejected	*Calculated value of $\chi^2$	P Value
1	2b	Have you loaned?		X	2.456	NS
2	2d	Enough information?		X	2.5	NS
3	2f	Need to borrow?	X		19.314	.001
4	2e	Merit in Fed. Programs?	X		27.034	.001
5	2a	Know FHA-DHEW?	X		3.919	.05
**6	3	Philanthropy good?	X		7.5	.01
9	2c	Require mortgage?	X		7.053	.01

\* Critical value (table value) of  $\chi^2$  for df = J and  $\alpha = 0.05$  is 3.841

\*\* Subhypothesis number 3 is tested with College question number 5 also.



anticipate future borrowing.

The basic hypothesis is therefore accepted for  $df = 1$  and  $\alpha = 0.05$ . It can be concluded that more than twenty-five per cent of those colleges in the geographical area studied would need to borrow money to construct or renovate buildings on their campuses in the future.

Subhypothesis Number 1a:

Over seventy-five per cent of the colleges have received loans for construction in the past.

Question:

Have you borrowed money for construction in the past?

Yes 47    No 3    Undecided 0    Total 50

Discussion:

This subhypothesis is accepted. Comparison of the observed "Yes-No" responses received to the expected responses under the hypothesis would be forty-seven observed for "yes" and thirty-seven and one-half expected, and three observed for "no" and twelve and one-half expected, for a total in each instance of fifty responses.

It may therefore be concluded that the difference between the observed and expected values for the "Yes-No" responses is significant. Based on the analyses conducted using the Chi Square test, it can be concluded that over seventy-five per cent of the colleges have received loans for construction in the past.

Subhypothesis Number 1b:

Over fifty per cent of the colleges plan to undertake additional construction projects to meet needs, in the future.

Question:

Will it be necessary for your college to undertake additional construction in the future?

Yes 29      No 13      Undecided 8      Total 50

Discussion:

To analyze subhypothesis 1b, it can be seen that twenty-nine out of fifty responses, or fifty-eight per cent, indicated that additional construction in the future will be necessary. Thirteen respondents (twenty-six per cent) indicated that future construction was not anticipated, while eight respondents (sixteen per cent) were undecided. In that those respondents who were undecided cannot be considered in either the "Yes" or "No" category for this hypothesis, the hypothesis was again tested using a Chi Square test employing only those responses that indicate a firm commitment one way or another. Fifty per cent of the colleges indicate that they plan to undertake additional construction projects to meet future needs. Subhypothesis number 1b is accepted.

Subhypothesis Number 1c:

Less than fifty per cent of those intending to borrow money to finance future projects (refer to the basic research hypothesis) expect to have some difficulty borrowing the amount they need.

Question:

Do you anticipate having difficulty borrowing the amount of money you will need?

Yes 3      No 14      Undecided 4      Total 21

Discussion:

As can be seen by the results, over sixty-six per cent of those responding indicated they would have little difficulty borrowing money. The Chi Square test rendered a significant difference between expected and observed frequencies in this instance. The subhypothesis is therefore

accepted.

Subhypothesis Number 1d:

Less than fifty per cent of the colleges object to borrowing from a program having some type of government involvement.

Question:

Would your college object to some type of government (state or federal) loan guarantee or bonding program that would help make long-term loans available to colleges:

Yes 11      No 33      Undecided 6      Total 50

Discussion:

Twenty-two per cent of the colleges object to borrowing from a program having some form of government involvement while sixty-six per cent indicated that they did not object to such involvement and twelve per cent were undecided. On both a relative and adjusted frequency basis, these figures tend to support this subhypothesis. Statistical verification of this subhypothesis can again be seen by conducting a Chi Square test. The subhypothesis is accepted.

Subhypothesis Number 1e:

More than fifty per cent of the colleges that have borrowed money in the past have borrowed from the HEW, Office of Education, Loans for Construction of Academic Facilities Program, or the FHA-DHUD, College Housing Program.

Question:

Have you ever borrowed under the HEW, Office of Education, Loans for Construction of Academic Facilities Program, or the FHA-DHUD College Housing Program?

Yes 33      No 16      Undecided 0      Total 49

## Discussion:

One can observe from the data that thirty-three of forty-nine respondents, or sixty-seven per cent, indicated that they had borrowed from the various agencies mentioned. As the observed frequency in this case significantly exceeds the expected, subhypothesis 1e is accepted.

Subhypothesis Number 1f:

Over seventy-five per cent of the colleges are able to mortgage part of their assets to secure a loan.

## Question:

Are you able to mortgage part of your assets to secure a loan?

Yes 36      No 6      Undecided 3      Total 45

## Discussion:

On an absolute basis, eighty per cent of those colleges responding indicated that they were able to mortgage part of their assets as a means to secure a loan. However, based on only the definitive responses the calculated Chi Square test is less than the critical value.

Therefore, it can be concluded that the proportion of colleges able to mortgage part of their assets to secure a loan is seventy-five per cent, but does not exceed seventy-five per cent. The subhypothesis is rejected.

Subhypothesis Number 1g:

Less than twenty-five per cent of the colleges currently set aside depreciation in a fund to renovate, or replace existing buildings.

## Question:

Some type of institutions set aside funds from operations as cash charges to depreciation, to be used for the replacement or renovation of existing buildings when such action becomes necessary. Long-term debt

may also be retired from these funds. This may be called "funding depreciation" or "establishing a replacement reserve." Does your institution now formally set aside a fund to renovate or replace existing building?

Yes 12      No 36      Undecided 0      Total 48

Discussion:

It can be observed that the data relevant to subhypothesis 1g indicates that twenty-five per cent of those responding do set aside a depreciation reserve for renovation or replacement while seventy-five per cent of those responding indicated that they do not set aside such reserves.

The Chi Square test yields a value of zero. Thus, while it cannot be stated that the percentage of those setting aside reserves is less than twenty-five per cent, it can be stated that the true percentage is equal to twenty-five per cent. The subhypothesis is rejected.

Subhypothesis Number 2a:

Less than fifty per cent of the lenders have a working knowledge of the HEW or FHA-DHUD college loans for construction programs.

Question:

Do you have a working knowledge of the FHA-DHUD College Housing Program, or the HEW, Office of Education, Loans for Construction of Academic Facilities Program?

Yes 5      No 40      Undecided 1      Total 46

Discussion:

The data received relevant to subhypothesis 2a, regarding the extent of working knowledge by lenders, of the HEW or FHA-DHUD college loans for construction programs, indicates an immediate acceptance of

this subhypothesis based on absolute frequency (five out of forty-six "yes" responses or eleven per cent).

The Chi Square test rendered a significant difference between expected and observed frequencies in this instance. The subhypothesis is accepted.

Subhypothesis Number 2b:

Less than twenty-five per cent of the lenders have made loans to colleges.

Question:

Have you (or your institution) been involved in making long-term loans to colleges for construction?

Yes 7      No 42      Undecided 0      Total 49

Discussion:

It can be observed that seven out of forty-nine total respondents (fourteen per cent) indicated that they have made loans to colleges. This percentage would tend to support the hypothesis that less than twenty-five per cent of lenders have made college loans.

However, since the Chi Square critical value is greater than the calculated value, it cannot be concluded that the proportion of lenders making loans to colleges is less than twenty-five per cent. It can be concluded that the proportion is equal to twenty-five per cent. The subhypothesis is rejected.

Subhypothesis Number 2c:

Over seventy-five per cent of the lenders require mortgages.

Question:

Realizing both that a college campus is generally made up of a number of single use buildings, but also that a mortgage has a certain

psychological value, as well as helping to control future actions, do you generally require a mortgage from colleges?

Yes 25      No 0      Undecided 7      Total 32

Discussion:

The responses relevant to subhypothesis 2c indicate first that not one lender responding indicated that a mortgage was not required. Seven lenders were undecided while twenty-five (seventy-eight per cent) indicated that they definitely required a mortgage. Thus based on the firm responses (excluding those undecided) 100 per cent indicated that a mortgage was required.

The Chi Square test indicates a significant difference between frequencies, so the true proportion of lenders requiring mortgages is in excess of eighty per cent. Thus, the subhypothesis, as stated, can definitely be accepted.

Subhypothesis Number 2d:

Of those lenders responding to the question, less than fifty per cent have generally received enough information from colleges with the request for a loan to make an informed decision.

Question:

Do requests for loans received from colleges generally include enough information on which to make an informed decision?

Yes 2      No 8      Undecided 8      Total 18

Discussion:

The number of responses received relevant to subhypothesis 2d is barely sufficient for a definitive analysis using a Chi Square test. Employing a Chi Square test consistent with the subhypothesis under study created expected frequencies of five for the "Yes-No" responses received.

According to standard practice an expected frequency of five is the minimum value acceptable for Chi Square analysis. In addition, since  $df = 1$ , this makes the analysis more susceptible to bias.

Insufficient data may exist with which to test this hypothesis. The fact that eight of eighteen respondents were undecided is indicative also that insufficient data exists. One may wonder (and speculate) as to why only eighteen total responses were received here but, as a part of this study, this is an unanswerable question. Subhypothesis 2d is rejected because of lack of data.

Subhypothesis Number 2e:

Over fifty per cent of the lenders believe a loan program with some type of government involvement to make loan money available to colleges has merit.

Question:

Regardless of whether or not you now "participate" in federal government guaranteed programs, bonds issued pursuant to Revenue Ruling 63-20, or bonds issued under a state government bonding authority, do you see merit in such programs for colleges?

Yes 29      No 0      Undecided 12      Total 41

Discussion:

The first observation that is significant with regard to the data relevant to subhypothesis number 2e is that no respondents answered "no" to this question. In other words, the lenders, in general, do see merit in government involvement in a college loan program.

Thus, using the Chi Square test to examine the basic question, it can be stated conclusively that over fifty per cent of the lenders believe a loan program with some type of government involvement to make loan money



available to colleges has merit. The subhypothesis is accepted.

Subhypothesis Number 2f:

Over fifty per cent of the lenders believe that there is a need for borrowed funds to be used for college construction.

Question:

Do you believe there is a need for borrowed funds for college facility construction?

Yes 31      No 4      Undecided 8      Total 43

Discussion:

It can be seen that the raw data relevant to subhypothesis 2f indicate that seventy-two per cent of the total respondents believe that there is a need for borrowed funds for college facility construction. These results tend to support the subhypothesis on a subjective basis. Performing a Chi Square test exploring only definitive responses supports the conclusion that the true proportion of lenders believing that a need exists for borrowed funds for college facility construction is in excess of fifty per cent. Therefore, it can be concluded that this subhypothesis is accepted.

Subhypothesis Number 3:

Over seventy-five per cent of lenders and colleges consider philanthropy to be an important source of funds for meeting the cost of college construction projects.

Question:

Colleges - Do you consider philanthropy to be an important part of the financing of your future capital expansion plans?

Yes 43      No 4      Undecided 1      Total 48

Lenders - Do you believe philanthropy should continue to be an

important part of the overall financing of college construction?

Yes 38      No 2      Undecided 7      Total 47

Discussion:

Both colleges and lenders were asked if they considered philanthropy to be an important source of future college construction funds.

On both an adjusted and relative frequency basis, for both college and lender respondents, the responses tend to confirm the subhypothesis that over seventy-five per cent consider philanthropy as an important source of funds for meeting the cost of construction projects. Performing a Chi Square test to further verify this hypothesis, it was concluded that the true proportion of college respondents who consider philanthropy to be important for future college building programs is in excess of seventy-five per cent.

A similar analysis for lenders was sufficient to conclude, for lender respondents, that the true proportion of college respondents who consider philanthropy to be important for future college building programs is in excess of seventy-five per cent.

Subhypothesis number three is accepted.

#### Discussion of Narrative Questionnaire Response

##### College Questionnaire, Question One:

What types of construction projects do you anticipate (i.e., mostly new construction or renovation or replacement, etc.)?

Comments:

When asked to comment on what types of construction were anticipated, twenty-three colleges responded, and listed forty-six projects. No conclusions can be drawn from the ratio since most of the remaining colleges indicated that they had unmet needs, but they were not currently

defined. While not differentiating here between new construction, renovation or replacement, the listing below indicates the need as seen by the colleges themselves:

Classrooms, Learning Resource and Academic Buildings	- - - - -	11
Physical Education (including swimming pools and field houses)	- - - - -	8
Fine Arts Buildings	- - - - -	7
Office and Administrative Buildings	- - - - -	6
Libraries	- - - - -	5
Chapels	- - - - -	3
Student Unions	- - - - -	2
Dormitories	- - - - -	2
Married Student Housing	- - - - -	2

While it is impossible to draw valid conclusions from this data, it can be noted that of the forty-six projects, only six are self-supporting (revenue yielding) and the remaining forty are mostly not revenue yielding. This points out that forty of the forty-six anticipated projects are those that have historically been considered to be less desirable to loan money for, since the loan would need to be repaid from general operating revenue and not from direct project revenue.

This may suggest that revenue-yielding buildings such as student housing facilities and student unions have already been built, using borrowed funds, so the need in those areas is not as acute as it was a few years ago. It may also reflect the changing student living patterns. The apparent need for nonrevenue yielding buildings may reflect a need not addressed during the years of rapidly increasing enrollment when the need for student housing and service facilities was more pressing (as opposed to classrooms and libraries).

College Questionnaire, Question Two:

What problems do you anticipate encountering with future financing?

Comments:

In this instance the forty-nine respondents were asked to comment



about the problems they anticipated encountering with future financing. Thirty-three did not respond to the narrative portion of this question, or if they did respond, stated that they foresaw no specific problems relating to future financing. It must be recognized that some of the thirty-three are not anticipating future financing at all.

Of the sixteen who did respond, one-half (eight) saw the currently high interest rates as being a serious problem, five questioned whether or not sufficient funds would be available from either borrowing, philanthropy or a combination of these sources. One pointed out that there were problems relating to its current large amount of debt, the fact that its needs consisted of "non-self-amortizing" buildings, and that most lenders would question the value of the collateral they offered. It appears that colleges are experiencing the same types of problems that other businesses are experiencing in the current money market.

College Questionnaire, Question Three:

What has been your experience with long-term debt?

Comments:

When the question was asked, a variety of answers were received. Of the forty-two who responded, twenty-seven indicated that they had experienced no significant problems, while fifteen mentioned that it was difficult to make payments when due. No one indicated that they were in serious trouble regarding repayment.

Ten specifically mentioned that they had had very satisfactory results using loans involving HEW or HUD problems (or both). One commented, "The only long-term financing available to us has been through HUD." Another said, "We have used both private and federal sources for long-term borrowing. The terms of the federal loans are more attractive--

longer maturity schedule and lower rate of interest."

Two commented on the student housing problems. "I do not know of a private school in our area which didn't overexpand in dorm space," said one. Another lamented, "The dorm is half empty!"

College Questionnaire, Question Four:

What do you believe the college could do to improve the chances of the loan being approved?

Comments:

When asked how the college could improve the chances of having a loan approved, most did not respond since few colleges in this study believed that they would have any problems at all in this area.

Of the thirteen who made meaningful responses, over one-half (seven) believed the best thing they could do would be to raise more money so they were asking to borrow a smaller amount of the total project cost. This action would tend to increase the value of the collateral for the loan in the case where mortgages were involved. Three others indicated that a college should improve its fiscal operations as the best way of convincing a lender that they could repay the loan.

Others indicated that shorter-term loans were easier to obtain, that a person or organization co-signing with the college would help and one commented that good relations with local lenders would be very helpful.

College Questionnaire, Question Five:

What are your thoughts on using philanthropy as a basis of repaying long-term debt as it becomes due?

Comments:

The response from the colleges to the idea of using philanthropy for repayment of long-term indebtedness was somewhat split. Of the

thirty-five responding, nineteen were against it and sixteen supported the idea.

Five of those supporting the idea said they had done it in the past. One went so far as to state, "Philanthropy is an absolute necessity for the payment of our outstanding indebtedness."

Seven of those not in favor of using philanthropy to repay debt stressed that it was hard to motivate donors to give to repay debts. One college fund raiser said, "Raising money for debt retirement is perhaps the most difficult single item in fund raising."

College Questionnaire, Question Six:

Could you elaborate on this?

Comments:

After getting the college's opinion about their support, or objection, to some type of government involvement in loan programs, they were asked to elaborate on their feelings. Twenty responded and eighteen of those were positive to some degree.

Five had used such programs before with a high degree of satisfaction, and five others stressed the need for additional sources of long-term, low interest loan support. The other eight favored such a program, but stressed that there must not be too many restrictions on the conduct of the normal business of the college.

One commented on the need to, "keep government out of private colleges!"

It appeared, therefore, that there is a need for an additional source of low interest rate, long-term loan money, so long as it does not overly restrict the ability of the college to manage its own affairs.

College Questionnaire, Question Seven:

What do you suggest to make these two programs more responsive to the needs of the colleges?

Comments:

Colleges were asked to suggest ways in which the HEW and/or HUD programs could be made more responsive to their needs. As pointed out in the discussion of college questionnaire question number three, those who are familiar with the HEW-HUD loans are generally satisfied.

Of the fourteen responding to this question, six thought that fewer restrictions and more rapid application approval would be desirable. Six others commented that the government programs have been restricted during the past few years because of lack of funds and hopefully could be better funded in the future.

Two commented that it would be a good idea to establish a contingency fund, through additional borrowing at the start of the project, as is common in most bonding schemes, to meet unforeseen needs during "poor" years.

College Questionnaire, Question Eight:

What type of security would you propose to give a lender to secure a long-term loan (i.e., mortgage lien, pledge of future income, pledge of future gifts, etc.)?

Comments:

When asked to list the type of security the college would propose to give to a lender to secure a long-term loan, thirty responded, and seventeen of those recommended a first mortgage lien on the facility.

However, four suggested the pledge of college endowment fund assets, three suggested the pledge of future general income and five said

they had pledged future gifts as security for repayment in the past, and would recommend it again.

Only one offered the opinion that a long-term loan secured by only the faith and credit of the college should be acceptable.

College Questionnaire, Question Ten:

Could you list in priority order your construction needs (i.e., classrooms, administrative space, student residences, etc.)?

Comments:

This asked the colleges to list their construction needs. The responses to this question turned out to be little different from those needs listed in question number one. It was not possible from their responses to determine any order of priority, except within the generalizations of those comments listed on question one.

College Questionnaire, Question Eleven:

What is your opinion about funding depreciation?

Comments:

The colleges were asked their opinion about "funding depreciation" or "establishing a replacement reserve" by setting aside cash from operations. Of the forty-two responding, thirty-eight thought it was a good idea, and eight of those actually funded depreciation to some extent.

Of those favoring "funding," all mentioned the problem of justifying the setting aside of money from current operations to meet future needs, when current income only barely met the current needs.

Three thought it was neither necessary or desirable for nonprofit institutions to "fund depreciation," since the needs of these institutions should be met from current operations and gifts, as those needs arose.



One respondent was careful to point out that donors often like to donate to construct specific buildings. Therefore, it might be more favorable to use current income to meet current needs, and ask the donors to provide additional or remodeled facilities. This might be considered the "historic" view.

Lender Questionnaire, Question One:

How active have you been in this field? Are you actively soliciting applications from colleges? Why or why not?

Comments:

Of the forty-nine satisfactorily completed questionnaires, no one indicated that they had been very active in the college loan field, nor did anyone state that they were actively soliciting applications for loans from colleges. However, only a few stated that they would not be interested in considering loan proposals from colleges.

Thirty-four did comment on why they were not active in the college loan field. To generalize, they implied that they had enough other business without specifically seeking college loans. Below are listed the five categories that thirty-one of the comments were grouped into:

Investors are not interested, general shortage of loan funds	15
High risk, future of private colleges is in question	9
Lender specializes in single family home loans	4
Lender has never been approached by a college	3

Three comments<sup>2</sup> are quoted below as being representative of the thoughts of many of those who responded.

Private colleges fit into a group of philanthropic organizations. Most institutional investors are reluctant to make loans to them because they do not later want to be associated with a possible foreclosure.

"Colleges are very unsophisticated in financing real estate."

"We are not presently in the college loan field, but we are always interested in potential new business."

No conclusions can be drawn from these comments, but it appears that any effort to interest the "average" lender in making loans to private colleges must be initiated by the schools as a quasi-educational effort. There is no indication that lenders will actively seek out college loans. Neither, however, are there indications that the average lender would not give full consideration to a well documented loan request presented by a college.

Lender Questionnaire, Question Two:

What types of information do you most need to act on these loan requests?

Comments:

Ten lenders responded to this question and listed items they needed to help them determine whether or not to make a loan to a college. Seven required a five-year audited financial statement showing profitable operations. Other items required included descriptions of the proposed project, including an estimated cost breakdown. Description of the school's history, current operations and projected financial and enrollment pictures were also mentioned.

Appendix D of this paper is a discussion of the financial feasibility study process, and goes into the loan presentation in detail.

Lender Questionnaire, Question Three:

If you answered "no," or "undecided," where do you see these funds coming from? If you answered "yes," what main problem do you foresee?

**Comments:**

Of the twelve who indicated that there was either no need for colleges to borrow, or the respondent was undecided about that need, nine made comments relative to the source of nonborrowed funds. Five believed that funds to build these facilities should come from state or federal grants and private gifts. The other four questioned that construction should take place at all, because of the financial problems private colleges have been experiencing.

Thirty-one respondents thought that colleges did need to borrow money for construction. Twenty-seven of those commented on the main problems they foresaw the colleges running into when they asked for loans.

Fourteen lenders pointed out that with the possibility of smaller enrollment and reduced gift receipts, the earning ability, or capacity, of the institution might be less, thereby raising the level of risk to the lender. Nine others saw the problem as one of insufficient collateral or security, for the loan. The fact that the buildings were considered single purpose, with little or no resale value, tended to reduce the acceptability of the security. Four saw high interest rates as the main problem facing the colleges in their attempts to obtain loans.

The problem may have been summed up by one lender who commented:

The main problem stems from the financial feasibility of the college as a whole. Because of the failure of a number of small private colleges in the recent past, most lenders are very skeptical about lending money to similar colleges.

These comments may indicate that most lenders are aware of only the financially unsound colleges, and are not familiar with the well-run, financially viable colleges in America today. It appears that the financial feasibility study must be an educational tool, to a large extent.

Lender Questionnaire, Question Four:

What suggestions do you have for types of financing programs to make loan money available to colleges?

Comments:

Regarding this question, no lender said that he saw no merit in government assistance of some type to private colleges. Twelve made further narrative comments regarding the subject.

Seven of those felt that more and better government guarantees were necessary, while three more mentioned the desirability of establishing some sort of private (nongovernmental) mortgage insurance scheme. The other two believed that a local group of banks should "pool" the loan in the interests of a community betterment project.

If a conclusion could be drawn from these few comments, it might simply be that lenders appear to have no objections to the indirect (and possibly direct) support of private higher education by government.

Lender Questionnaire, Question Five:

In your opinion, have these programs (HEW-FHA) been responsive to the needs, and if not, how could these programs be more responsive to the needs of the field?

Comments:

Only five of the forty-five people responding to the basic question indicated that they had a "working knowledge" of the HEW-FHA loans to colleges. Those five were the only ones to make narrative comments, referring to the above question.

They seemed to feel that these were good programs, but should be expanded to meet unmet needs. In expanding the programs, they should become more permanent and better publicized within the lending community.

Lender Questionnaire, Question Six:

What are your thoughts on philanthropy being used to pay long-term debt as it becomes due?

Comments:

There were thirty-one responses to this question. It probably should have been a "Yes-No" question rather than a narrative question. Philanthropy was favored by sixteen as a method of paying long-term debt, but fifteen did not favor it.

It is observed, however, that the fifteen who did not favor it appeared very firm, while the sixteen who favored it hedged their comments in almost all instances.

Two of the more favorable comments follow. "This would be a guarantee to the lender that his loan would be repaid, and that is most important in loans of this type." Another respondent observed, "It is done not only by colleges, but by churches, with amazing success."

No conclusions may be drawn from these comments because they were too general in nature. It appears that many lenders will consider this matter with an open mind. However, it must be observed that it is quite difficult to justify projections of future revenue from philanthropy. If such projections cannot be strongly substantiated, the lender will probably reject it as not being an acceptable method of repayment.

Lender Questionnaire, Question Seven:

What per cent cash equity, if any, should be required for each project, as a minimum?

Comments:

There is a valid question pertaining to the actual importance of an equity requirement, since the critical consideration is not how much

is borrowed, but the ability to repay that amount. Generally, however, the lenders expect the borrower to have a certain amount of his own funds to contribute to the project. An increase in equity, or borrower's cash contribution, increases the net value of the security held by the lender in the form of a mortgage.

Of the thirty-five responses to this question, five pointed out that no equity would be necessary if the loan was guaranteed. This does not mean that equity would not be required. It means that the responsibility for determining the amount of equity is shifted to the person giving the guarantee.

Two respondents indicated they would require an equity of fifteen per cent, two said they would require forty to fifty per cent and one would require a seventy-five per cent payment.

Twenty-five of the thirty-five responding indicated that in their opinions, an equity payment of between twenty and thirty-three per cent should be required. This suggests that the average lender will loan no more than two-thirds to four-fifths of the total project costs. The college must, therefore, expect to be required to generate one-fifth to one-third of total project costs from sources other than borrowing.

Lender Questionnaire, Question Eight:

What do you consider to be the best type of security that a college can offer you when requesting a loan? What do you see in the future regarding types of security?

Comments:

Most of the thirty-four who responded to these questions did so with a combined answer.

Eighteen answered that they would require a first mortgage lien

on the project real estate, while others referred to endowment assets, co-signers, special student fees, and a strong history of good management.

It appears that many regard the future direction as being toward government guarantees and a more major emphasis on an outstanding management record. While the reliance on the real estate mortgage may never disappear, it can be reasonably expected to decrease in importance in the future.

Lender Questionnaire, Question Nine:

Please comment on this in general.

Comments:

Most of the comments were simply a reiteration that the lenders would normally take a mortgage.

However, eight respondents commented to the effect that the mortgage was "secondary" to the ability of the college to run a strong financial operation and assure repayment in that manner. They pointed out again, that a college building was not "liquid" and was difficult to turn into cash.

One person commented:

We consider that a mortgage is necessary because as a college gets into financial difficulty they begin to dilute their position, and as their financial condition deteriorates they will give mortgages to later lenders.

Summary of Findings

Based on the statistical tests the basic hypothesis was accepted, as were eleven of the subhypotheses. Four other subhypotheses were rejected.

Ninety-four per cent of the colleges had borrowed money for con-

struction in the past, and sixty-seven per cent had borrowed under a government program. Fifty-eight per cent indicated that additional construction in the future would be necessary, but only thirty-two per cent indicated that they anticipated borrowing funds to pay for that future construction.

When it is recognized that only about one-half of those planning to build, plan also to borrow, it is not surprising that ninety per cent of the colleges, as well as eighty-one per cent of the lenders, indicated that they considered philanthropy to be an important part of the overall financing picture.

Loan programs with government involvement were also considered important in the overall field. Sixty-six per cent of the colleges indicated they would not object to some form of government involvement, while seventy-one per cent of the lenders saw merit in such programs. However, when asked about existing federal loan programs for colleges, only eleven per cent of the lenders indicated a working knowledge of those programs.

Only fourteen per cent of the lenders indicated they had loaned money to colleges, even though seventy-two per cent indicated that there was a need for borrowed funds to be available for college facility construction.

Seventy-eight per cent of the lenders indicated they would require a mortgage to secure a loan made to a college, while eighty per cent of the colleges indicated that they were able to mortgage their assets.

Sixty-six per cent of the colleges believed that they would have little difficulty borrowing money, but only eleven per cent of the lenders indicated that the loan requests they generally received from colleges



contained enough information on which a lender could make an informed decision. /

Each narrative question was answered in general terms and discussed in detail in the preceding section, and is not summarized here.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Review and Restatement of Problem

In order to continue to operate on a more sound day-to-day financial basis, it may, at times, be to the institution's advantage to spread capital expenditures over a number of years, via the method of long-term debt. This paper considered the problem of obtaining long-term debt for the purpose of financing expansion of physical facilities at small, nonprofit, traditional midwestern colleges.

It was necessary to determine if colleges actually would need to borrow money, if they thought they would have problems borrowing the needed money and if the lenders believed it was necessary for colleges to borrow money. In addition, did colleges furnish lenders with enough information to make decisions concerning requests for loans and did government programs to help make money available to colleges have merit?

#### Summary of Universe and Procedure

To gather information the usual literature review was conducted to establish part of the factual data base. The literature revealed that the published material pertaining to loans for nonprofit private colleges was not in the depth or quantity that had been anticipated. Many items of available literature were very old, one dating back to 1924. However, even the older items were of value in establishing background and developing historical perspective. It was noted that there were a great

many published sources pertaining exclusively to financing public, government supported facilities, but these publications were of little value to this study. This was because public debt is normally repaid through tax revenue, while private colleges must rely on revenue from earnings or gifts to repay their loans. Adequate physical security to protect the lender against loan default is required when the faith and credit of a governmental subdivision is not available.

In the four-state area there were sixty colleges that met the definition as set forth in this study. Similarly, there were ninety lenders in the three-state area defined for lenders.

Because of the relatively small size of the population, it was decided to treat the population as a census, rather than to develop a random sample. A questionnaire was developed for each group (colleges and lenders). To test some of the individual hypotheses, it was necessary to receive input from both colleges and lenders. Other hypotheses required input from only one of the two groups. The questionnaires were mailed to each member of the population. A second mailing was sent three weeks after the first, to all those not responding. The overall response rate was eighty-three per cent for the colleges and fifty-four per cent for the lenders. This high rate of return could indicate in part, a great deal of interest about the subject among colleges and lenders.

The hypotheses statistically tested revealed data which was developed and presented in Chapter IV. The Chi Square ( $\chi^2$ ) test was found to be suitable under these circumstances.

Of the fifteen hypotheses statistically tested, eleven were accepted and four were rejected. Three of the four rejected hypotheses

(numbers 1f, 1g and 2b) were rejected because the researcher had stated that a certain action would take place more or less often than a certain percentage. The frequency matched exactly with the projected base number on those three. The fourth hypothesis (number 2d) was rejected for lack of information.

Narrative questions were also used to gather data. The results are fully discussed and presented in Chapter IV.

#### Summary of Major Findings

Ninety-four per cent of the colleges in the area covered by the study had borrowed money for construction in the past. In this instance forty-six of fifty colleges had borrowed money for construction. This is a much higher portion than the author had expected. When the responses of those colleges planning to borrow in the future also indicated that thirty-two per cent anticipated seeking loans, the continuing importance of long-term loans to private nonprofit colleges was affirmed.

Sixty-six per cent of the colleges indicated that they did not believe there would be any problem in borrowing the money they needed when they needed to borrow it. However, only fourteen per cent of the lenders indicated that they had loaned money to colleges in the past.

While seventy-one per cent of the lenders saw merit in government involvement in loans to colleges programs, only eleven per cent had a working knowledge about even one of the two major existing college loan programs.

Sixty-seven per cent of the colleges had borrowed under the HEW or HUD loans to colleges program. Only twenty-two per cent of the colleges stated that they objected to government loan programs.

Fourteen per cent of the lenders had loaned money to colleges in the past. While lenders would seriously consider requests received from colleges for loans, lenders generally would not make any attempts to generate new college loan applications. Even though seventy-two per cent of the lenders believed that it was necessary for colleges to borrow, eighty-one per cent believed, as did ninety per cent of the colleges, that philanthropy should continue to play an important role in financing construction.

In order to set aside money to repay loans, other nonprofit organizations establish sinking funds by setting aside money from a cash allowance for depreciation of the buildings on which the debt is outstanding. Ninety-one per cent of the colleges thought it was a good idea, but only twenty-five per cent actually did fund depreciation.

#### Major Conclusions

From this study seven major conclusions are drawn by the researcher even though many more conclusions may be developed, given the individual's need for specific conclusions upon which to base decisions and take action.

1. Borrowing has been an important part of the financing of many private nonprofit college construction projects, and will continue to perform a significant role in the future.
2. Private nonprofit colleges do not anticipate difficulty in obtaining loans when needed, but few lenders have loaned money to colleges in the past. Therefore, colleges should expect to have to seek out additional sources of loans.
3. Government assistance in helping private nonprofit colleges obtain loan funds is not found to be objectionable to the majority of either colleges or lenders.
4. An effort to educate lenders about government programs related to the private nonprofit college lending field, would be proper, because of the apparent lack of information about the subject on the part of many lenders.

5. Philanthropy should continue to be an important consideration in the planning of any private nonprofit college construction financing program.
6. Establishing a sinking fund to repay loans by setting aside money from cash allowances for depreciation of existing buildings, while a good idea in general, may not be possible in a practical sense due to the current financial needs and lack of sufficient cash flow of many private nonprofit colleges.
7. While most private nonprofit colleges can mortgage their assets to secure loans, a few are prohibited from pledging their assets. Some lenders indicated a willingness to discuss security other than mortgages, so the prohibition against pledging assets will not necessarily exclude a college from being able to borrow money.

#### Recommendations for Further Research

The data received indicated that most colleges expected to have no difficulty borrowing the funds they needed. However, few lenders indicated that they had had anything to do with loans to private colleges. Further research should be undertaken to determine if these items are inconsistent, and if so, what action is necessary to reconcile them.

Most of the colleges indicated that they were familiar with the HEW or HUD loans to colleges program. Most lenders indicated that they were unfamiliar with these same programs. Research should be undertaken to determine the reason that these programs are not better understood by members of the lending community.

Research should be undertaken to determine if a State Educational Facilities Authority Act is desirable in some or all of the thirty-five states that do not presently have such legislation. If a favorable determination is reached, the next research subject should be the determination of how best to promote and introduce the law into that state.

FHA mortgage insurance has been successful in many areas. Research should be undertaken to determine if a similar program would be helpful for colleges.

A valuable research project would be to perform a needs assessment to determine what form future government support of the entire private education sector should take.

Further study, and publication, is recommended to more clearly define the problem of financing construction by use of long-term loans, at small, private, nonprofit colleges in its larger geographical setting. During this study, the researcher was not able to find a single publication (book, article or study) which dealt significantly or entirely with the problem of long-term debt for facility construction at private nonprofit colleges.

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APPENDIX A

**SURVEY INSTRUMENTS:**

Cover letter	(1 page)
Lender questionnaire	(3 pages)
College questionnaire	(4 pages)
College follow-up letter	(1 page)



13491 W. Ohio Drive  
Lakewood, Colorado 80228  
September 24, 1973

As a part-time PhD doctoral student I am exploring the current status of long-term borrowing as a means of securing financing for new construction and renovation of small, nonprofit college campuses in Colorado, Kansas, Missouri and Nebraska. This research is concerned only with those funds secured from loans. The focus of the research will be the development of guidelines for a financial feasibility study. This study will provide a detailed system that colleges could present to lenders when asking to be considered for a loan. Lenders could also use it as a guideline for assisting the college in making a meaningful presentation.

My full-time employment is with a Federal government program that cooperates with the private sector in the financing of the construction of needed health care facilities. The health care facilities program has been successful. It is hoped that the results of this PhD study will be useful in developing workable programs for the education sector.

The attached questionnaire is the prime method of data gathering for the study. Would you or a member of your staff knowledgeable about such matters complete and return it to me by October 5, 1973.

As the information you will provide could be considered to some extent confidential, I assure you that all responses will be treated as privileged communications. Strict confidentiality will be maintained and the anonymity of each respondent will be honored. The number in the top right corner of the questionnaire is only to determine who has responded. Your narrative comments are valuable to me as a description of your activities regarding this subject.

The results of the dissertation will be summarized and sent to you in the spring. I hope it will be of assistance to you in this major concern of financing college construction through borrowed funds. Please return the questionnaire in the attached stamped, self-addressed envelope. Thank you for your assistance in this matter.

Sincerely,

Charles A. Westin

Encl.

## QUESTIONNAIRE

"Colleges," as used in this questionnaire refers only to traditional, private, (generally) small, nonprofit four-year colleges located in Colorado, Kansas, Missouri and Nebraska.

"Construction," as used in this questionnaire refers to both new building and renovation.

Please make any comments you can that will help me to evaluate the current situation as perceived by professional lenders. You may continue any comment on the reverse side of the sheet.

1. Have you (or your institution) been involved in making long-term loans to colleges for construction?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

How active have you been in this field?

Are you actively soliciting applications from colleges?

Why or why not?

2. Do requests for loans received from colleges generally include enough information on which to make an informed decision?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

Any specific examples, or comments, that you could include would be of great assistance to me in determining the information needed by lending institutions to make decisions pertaining to these types of loans.

What types of information do you most need to act on these loan requests?

3. Do you believe there is a need for borrowed funds for college facility construction?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

If you answered "no," or "undecided," where do you see these funds coming from?

If you answered "yes," what main problems do you foresee?

4. Regardless of whether or not you now "participate" in Federal government guaranteed loan programs, bonds issued pursuant to Revenue Ruling 63-20, or bonds issued under a state government educational bonding authority, do you see merit in such programs for colleges?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What suggestions do you have for types of financing programs (in addition to or including those above) to make loan money available to colleges?

5. Do you have a working knowledge of the FHA-DHUD College Housing Program, or the HEW, Office of Education, Loans for Construction of Academic Facilities Program?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

In your opinion, have these programs been responsive to the needs, and if not, how could these programs be more responsive to the needs of the field?

Page 3

6. Do you believe philanthropy should continue to be an important part of the overall financing of college construction?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What are your thoughts on philanthropy being used to pay long-term debt as it becomes due?

7. What per cent cash equity, if any, should be required for each project, as a minimum?

\_\_\_\_\_ % equity should be required as a minimum.

8. What do you consider to be the best type of security that a college can offer you when requesting a loan?

What do you see in the future regarding types of security?

9. Realizing both that a college campus is generally made up of a number of single use buildings, but also that a mortgage has a certain psychological value, as well as helping to control future actions, do you generally require a mortgage from colleges?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

Please comment on this in general.

Your completing this questionnaire is greatly appreciated. If you have additional narrative comments (or other materials) related to any phase of financing college construction with long-term debt, please include them. I would value their inclusion in my research.

Please return this questionnaire to me in the enclosed, stamped self-addressed envelope. Thank you. Charles A. Westin, 13491 W. Ohio Drive, Lakewood, Colorado 80228.

## QUESTIONNAIRE

As used in this questionnaire, "Construction," includes new building and renovation. Please consider each question, then check the "Yes" or "No" response appropriate to you, and add any narrative comments that amplify your feelings on the matter. You may also continue any comments on the reverse side of the sheet.

1. Will it be necessary for your college to undertake additional construction projects to meet future needs?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What types of construction projects do you anticipate (i.e., mostly new construction or renovation or replacement, etc.)?

2. Do you expect to borrow money in the future to cover all or part of the cost of that construction?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What problems do you anticipate encountering with future financing?

3. Have you borrowed money for construction in the past?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What has been your experience with long-term debt?

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4. Do you anticipate having difficulties borrowing the amount of money you will need?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What do you believe the college could do to improve the chances of the loan being approved?

5. Do you consider philanthropy to be an important part of the financing of your future capital expansion plans?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What are your thoughts on using philanthropy as a basis of repaying long-term debt as it becomes due?

6. Would your college object to some type of government (state or federal) loan guarantee or bonding program that would help make long-term loans available to colleges?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

Could you elaborate on this?

7. Have you ever borrowed under the HEW, Office of Education, Loans for Construction of Academic Facilities Program, or the FHA-DHUD College Housing Program?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What do you suggest to make these two programs more responsive to the needs of the colleges?

8. Are you able to mortgage part of your assets to secure a loan?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What type of security would you propose to give a lender to secure a long-term loan (i.e., mortgage lien, pledge of future income, pledge of future gifts, etc.)?

- 9a. Is future construction at your college necessary to maintain or increase enrollment?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

- b. Do you project enough applicants for admission in the future to always maintain the enrollment level you wish?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

10. Could you list in <sup>2</sup>priority order your construction needs (i.e., classrooms, administrative space, student residences, etc.)?

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11. Some types of institutions set aside funds from operations as cash charges to depreciation, to be used for the replacement or renovation of existing buildings when such action becomes necessary. Long-term debt may also be retired from these funds. This may be called "funding depreciation" or "establishing a replacement reserve." Does your institution now formally set aside a fund to renovate or replace existing buildings?

Yes \_\_\_\_\_ No \_\_\_\_\_ Undecided \_\_\_\_\_

What is your opinion about funding depreciation?

Your completing this questionnaire is greatly appreciated. If you have additional narrative comments (or other materials) relating to any phase of financing college construction with long-term debt, I would value their inclusion in my research.

Please return this questionnaire to me in the enclosed, stamped, self-addressed envelope. Thank you. Charles A. Westin, 13491 W. Ohio Drive, Lakewood, Colorado 80228.



13491 W. Ohio Drive  
Lakewood, CO 80228  
October 12, 1973

On September 24, I mailed a blue colored PhD research project questionnaire to a few colleges in the mid-west, inquiring into their thoughts pertaining to long-term loans for college construction. The answers will be of great value to me regardless of whether or not your college has in the past, or plans in the future, to borrow money for construction.

I made a mistake in mailing the questionnaire during the first week or two of the new school year. I fear some of my letters were lost in the mail. If you could complete the attached questionnaire and return it to me in the stamped self-addressed envelope, I would certainly appreciate it.

Sincerely,

Charles A. Westin

Attch: Questionnaire

APPENDIX B

EXHIBIT I

SAMPLE PROVISIONS OF A STATE EDUCATIONAL  
FACILITIES AUTHORITY ACT

Section 1 - Legislative findings and intent

The purpose of this chapter is to provide assistance and alternative methods of financing needed educational institutions.

Section 2 - Definition of terms

Educational institutions are any private nonprofit institutions authorized by the State to provide a program of education beyond the high school level within the State.

Section 3 - Authority created

There is hereby created a body politic and corporate to be known as the "state educational facilities authority."

Section 4 - Appointment of members, number of members, terms, conflict of interest, annual election of officers, compensation, removal, etc.

These items are to be set forth by the legislature as part of the act.

Section 5 - Quorum of authority - Vote required for action

A defined quorum of members must favorably vote on any action taken.

Section 6 - Executive director, consultants, and other support personnel - Compensation

Necessary support personnel shall be retained and compensated at the rate established herein.

Section 7 - Corporate powers of authority

The authority shall have the necessary power to carry out its responsibilities, including the right to perpetual existence, to adopt bylaws, to take part in law suits, to have a seal, to maintain an office, to maintain records, to accept gifts and loans, to invest surplus funds, to charge fees, and to delegate powers and duties as necessary.

#### Section 8 - Security for bondholders

The authority shall take such action as is necessary to protect the bondholders.

#### Section 9 - Operation of facilities restricted to leasing

The authority shall not have the power to operate the facilities as a business other than as a lessor.

#### Section 10 - Loans to participating institutions - Maximum amount

The amount of the loans shall not exceed the total cost of the project, plus refinanced outstanding indebtedness, subject to the approval of the authority.

#### Section 11 - Terms and forms of bonds issued

Bonds shall be of the type and at the interest rate as determined by the authority. The authority shall pay the expenses involved in the bond sales.

#### Section 12 - Bonds payable only from project revenues

The bonds are payable from the revenues of the project only and no general tax obligation is promised nor is any State debt or obligation created.

#### Section 13 - Pledge of revenues to secure bonds

The principal of and interest on any bonds issued by the authority shall be secured by a mortgage or other trust indenture covering all or part of the facility. The pledge of revenues continues until the bonds are paid.

#### Section 14 - Remedies of bondholders on default

These items are set forth by the legislature as part of the act.

#### Section 15 - Pledge of full faith and credit of authority or institution

Nothing contained herein shall prevent this.

#### Section 16 - Conveyance of facility to participating institution when debt is paid

When the debt is fully paid, the authority shall promptly convey the facility that was mortgaged to secure the bonds, to such participating educational institution.

#### Section 17 - Tax exemption of authority

The authority shall take necessary action to maintain itself as a tax-exempt organization.

Section 18 - Liberal construction of chapter

This chapter shall be liberally constructed to accomplish the intentions expressed herein, which include the intention that the authority be able to sell bonds to raise funds for needed construction at participating educational institutions.

Possible Program Example: South Dakota Health and Educational  
Facilities Authority

APPENDIX C

## EXHIBIT II

### SAMPLE PROVISIONS FOR A FHA TYPE MORTGAGE INSURANCE FOR COLLEGES PROGRAM

**Objective:** To insure loans made by private lenders to institutions of higher learning.

**Eligible institutions:** Any institution offering a full-time resident academic course of study above the high school level recognized by the individual state, or as described by the legislation.

**Statutory authority:** As passed by Congress.

**Limit:** There is no limit to the total amount of loans insured under this program. However, each project will be limited to the actual cost of the project, a statutory limit if one is established or the amount found to be financially feasible by program staff, whichever is less.

**Length of loan:** As established by regulations, but in no case to exceed the useful life of the building.

**Maximum interest rate:** Market rate as established by policy.

**Financial support:** The program will be financed by fees at the initial application submittal, and a one-half per cent insurance premium on each loan payment. Excess funds will be retained as a reserve fund to insure against possible defaults.

**Security:** First mortgage lien on the facility constructed, and a pledge of revenues in the case of a revenue producing building, and/or such other security agreed upon.

**Possible Program Example:** FHA Section 242, Mortgage Insurance for Hospitals

APPENDIX D



THE FINANCIAL FEASIBILITY STUDY:

A necessity to be completed by  
private, nonprofit colleges prior  
to borrowing for construction.

## FINANCIAL FEASIBILITY STUDY

Of sixty private, nonprofit colleges contacted in late 1973, all but three very small, specialized institutions stated that they had borrowed money in the past to cover part or all of the costs of campus construction. Over two-thirds planned additional construction, and one-half of those planning additional construction expected to borrow funds for that construction. With past history as a guide, one would assume that more colleges end up borrowing than now intend to. It therefore appears that in the foreseeable future, long-term borrowing will continue to be a major source of funds for financing the construction of buildings on private college campuses.

In order to borrow money it is necessary to convince a lender that there is every reason to believe that the loan will be repaid in full, following the terms agreed upon by both parties. The lender wants to be certain that adequate funds will be available for repayment of the loan, as well as to meet day-to-day operating expenses, to establish cash reserves if desirable, and that a cash surplus will be generated during the life of the loan. One of the best methods of convincing a lender that the college can repay the loan, is to present the lender a financing proposal in the form of a well done Financial Feasibility Study, showing why it is reasonable for the lender to assume that the loan being requested can be repaid.

Many lenders believe private colleges are very unsophisticated in their approach to the financing of real estate. This is somewhat surprising when one considers how successful private colleges have been

in the field of institutional development (i.e., fund raising). Of course, fund raising is no longer considered a project to most colleges, it is now a fully funded program. Long-term financing, on the other hand, is often undertaken on a project basis, after the fund-raising program for that certain building has been completed without furnishing the entire financial resources needed for the planned construction.

#### Need for a Formal Financial Feasibility Study

In the past many colleges have not done formal, in-depth, financial feasibility studies. They thought the studies were unnecessary because it was a "government loan," or due to the belief that the lender would perform another one anyway.

Financial feasibility studies are required for all loans having government involvement. While the government does insure the loan, those officials approving the loan are still fully responsible for protecting the financial interests of the United States, and must not make loans where it is not reasonably certain that the loans will be repaid. When enough information is not submitted to make such a favorable determination of feasibility, the loan must be deferred, or rejected, until such information is available. While the government will make its own determination of feasibility, the study presented by the college will serve as a "foundation" for the agency to build its own study and determination on. It goes without saying that a study done by the applicant presents the information from the applicant's point of view, and therefore should be considered an opportunity<sup>o</sup> to communicate this point of view at an early stage of loan consideration.

Private lenders have their own requirements also, as to determining what makes a loan to a college financially feasible. However, a well-

done study by the college will serve as a base for the lender's own study, and will often be accepted by the lender as a final document, depending on his faith in those who produced the study, and the ease with which he can verify items used in it.

The financial feasibility study will be used by the lender in his presentation to others who may wish to participate in a portion of the loan. He will also use it to convince his own board that the requested loan should be approved. Mortgage bankers and institutional lenders must establish the economic and financial feasibility of a college construction program. The ability of the college to meet its debt service responsibilities is the prime consideration in making a decision on the marketability of bonds, or the appropriateness of a mortgage loan. Therefore, it is to the college's advantage to have a complete, well-done study prior to approaching prospective lenders.

Administrators and trustees are being expected, more and more, to be fully accountable to the community they serve for their actions. A well-done feasibility study should assist in indicating that the decision in question is based on good business practices, and that scarce resources were not allocated without a reasonable assurance that they would be protected. If the project is not only needed, but also economically justified and feasible, the board should be able to arrive at a satisfactory decision, and one that can better be defended, if necessary.

#### When the Study Should be Prepared

A financial feasibility study should be completed as early in the planning stage as possible. As the plan develops, the study will probably need to be adjusted to accommodate changes. On the other hand,

determinations of the financial feasibility study may require modifications be made in the actual project plans, in order to keep the project within the financial resources available to the college.

The study might be used by the development officer, in his fund raising activities, to present to prospective benefactors as an indication of the business-like manner in which the college has planned for the financing of the part of the project not provided for by gifts. That way the giver will be assured that his gift will not be lost to the college in the future, due to the lack of financial planning. The study would also indicate that a portion of the total cost of the project probably could not be borrowed, as most lenders require a certain amount of unborrowed (cash) equity. Therefore, the feasibility study could also help set minimum goals for a development effort, and point out in graphic form, the desirability of exceeding that goal.

The study should be performed prior to identifying the appropriate method of financing the borrowed portion. The college must, of course, have earlier determined what it proposes to construct and the estimated cost. The results of the study could change both of these ideas, in an attempt to compromise on a project that meets the needs of the campus, and at the same time is a project the college can afford.

#### Who Prepares the Study

It is not always necessary to have a "third party" prepare the study. While the study must be done in such a manner that every statement and conclusion can be documented, there is no reason that a college should not consider doing the study itself. A study done by the college should present not only the factual history in detail, but should be expected to add a depth of human understanding not possible when an

outside group writes it.

A college may gain much by using the effort as a "self-study" project. Items take on more significance when developed by the people who are directly affected by them.

There are, however, many instances when for any number of reasons, the decision is reached to have the study completed by an outside firm. There are obvious reasons to select a knowledgeable outside group or individual. For one thing, the outside group is expected to be more objective. It can also be expected that if the outside firm has completed this type of study before, it will be more knowledgeable overall and know what to look for. The only cautions to remember here are that the outside firm must lose some objectivity when it becomes employed, and past experience generally guarantees that some past mistakes will also be repeated.

So the decision on who will prepare the study is up to the individual college administration. However, this should not be construed to suggest that outside legal and financial counsel are not necessary or required, as the project moves past the financial feasibility study stage. The administration may be faced only once in a lifetime with the problems inherent in obtaining long-term financing for major capital improvements. Few decisions have such irrevocable long-term effects on the overall operation of the college. Consequently, adequate consideration should be given to selecting those who will participate in the financing plans, and in the final decisions. Unless the college has on its staff persons who are completely competent to handle the legal and financial mechanics of this quite involved and technical matter, they should seek outside counsel as soon as the decision has been made to go forward with the project.

### Outline of a Financial Feasibility Study

1. Introduction and Description of Proposed Project
2. History of College
3. Future of College
4. Financial Review, Current Status and Projections
5. Enrollment, Faculty and Administration
6. The Proposed Loan
7. Presentation to Lenders (optional section of study)

### Introduction and Description of Proposed Project

In the opening section of the study, the proposed project should be presented to set the tone for the remainder of the study. Capital improvements are usually necessary because of an increasing school population, obsolescent buildings, a changing program of education, or a combination of these reasons.

The need should be explained and justified in detail. This should leave no doubt that the project is desirable and necessary. The first step in assuring that a project will have enough money available to repay the loan is to assure that it meets or solves a valid need. There are various methods of determining need, but generally a presentation will show the basis of that need causing a hardship on students first, and on the financial structure of the college second. The need should be presented in view of its contribution to the purposes for which the college exists.

For example, if the basic science department turned away 200 well-qualified applicants last year due to lack of laboratory space, it would be reasonable to indicate that this resulted in, not only 200 students being denied the education they sought, but also a loss of income to the

school because the additional students could have been handled without a proportionate increase in staff and supporting services. It might be pointed out, if true, that there exists certain unused capacities in some student services, such as food service and housing, that could have been utilized by these additional students, therefore increasing the financial well being of the entire school and lowering the individual cost to the students.

It should be pointed out in detail, how the proposed project will meet the existing need. If it will do more than meet the existing need, then the effect of any excess capacity generated must be explained.

The estimated cost should be set forth. It should be realistic and based on an estimate made by a professional. This should include a detailed cost breakdown of the new construction, based on preliminary architectural drawings. An artist's rendering of the completed building should be included, along with a copy of those basic architectural drawings.

Since a college building is generally considered a one-use facility, consideration should be given to a flexible design so the building can be modified as conditions change, and converted to other educationally related uses should such action become necessary. Foreclosure on a college building is not desirable because the buildings are special-purpose with few, if any, uses other than being college buildings, and the bad public relations aspects for the foreclosing lender must also certainly be considered. It is therefore to everyone's advantage that the building be flexible enough so if functions must be changed, in order for the building to remain a viable part of the campus until the loan is repaid, such actions can be accomplished.

The proposed breakdown of sources of funds for the project should



be presented early in the study. There appear to be for this item only a few sources of funds, among which are current operations (i.e., pay as you go), philanthropy, unrestricted endowments and borrowing. These items will be presented in later parts of the study, but should be summarized here also. It might be desirable to simply present percentages of the total cost at this time. These will be spelled out in more detail and in dollar amounts in later sections.

### History of College

The history is valuable because it can prove that the institution has been able to sustain itself over a period of time and is likely to continue to exist. This feature is no different from the "going concern concept" applied to industrial companies by credit analysts.

It is here that a college should point out and discuss its past debt experience. Dates, amounts borrowed, letters of reference from those previous lenders, etc., are all items of interest to the future lender. A summary of changes in the institution's debt structure that have taken place within the past ten years should be included here. Also, the manner in which past debt has been met is important. Any slow or late payments should be explained in detail. Great care should be taken not to "forget" unfavorable data, since it will probably be revealed anyway in the lender's routine credit check. If the college presents the unfavorable information first, they have the advantage of presenting it in the most favorable light. If past debt was repaid early, this should be stressed.

Any unique items that appear in the history of the college should be discussed, especially if those items have relevance for the future. Examples of how the college has worked with the community to help meet

its needs are well placed here, as they tend to suggest future support by that community. The economic and employment impact of the college on the community should be discussed also.

### Future of College

The purpose of this section of the study is to convince the lender that the college will continue to meet future needs at least long enough to repay the loan.

The future development of curriculum, and the physical facilities to serve that increased or changing demand should be explored. In order to assume a viable future, the college should probably plan for at least a limited, directed growth in enrollment, and make plans to assure the recruitment of additional students is successful. If an enrollment gain is not forecasted, then it should be explained in detail why limiting the growth to such an extent will be to the college's best interests.

A long-range plan, probably in narrative form, should be presented in this section. There is no reason to expect that money will be loaned on a long-term basis to construct a building if there is no plan for its productive use for more than a few years. A capital budget, indicating the capital needs for a period of from five to ten years, is also a desirable tool.

If the long-range plans call for the conversion of the building for other uses in the future, this should be explored in detail. The building itself should be so designed to be convertible into the other use at a minimum of expense and effort.

The future of the college so far as finances, staff and students are concerned, is covered in separate sections because of their importance.

### Financial Review, Current Status and Projections

As with all other businesses, a college's ability to borrow, depends on its ability to repay the loan, which almost entirely depends on its ability to generate income in excess of normal operating expenses. Therefore, a careful examination of the financial information is warranted. Financial statements would be examined to determine the college's credit worthiness by estimating the ability of the college to repay the proposed debt, evaluating the college's overall financial condition, and assessing the ability of the college's management.

Colleges should reduce debt as much as practical before taking on new debt. The total debt picture influences the creation of new indebtedness. What the proposed debt will mean must be determined in order to judge the propriety of an additional debt burden.

Most lenders wish to examine the audited financial statements for the past five years (or maybe ten). These would include the Income Statement, the Cash Flow Statement and the Balance Sheet. Most lenders prefer fully audited statements with an unqualified opinion by an independent certified public accountant. Probably the financial statements will be an attachment to the financial feasibility study, with a copy included in the body of the study.

The most recent financial statement should be complete in all respects, including notes, and submitted as an attachment to the study. Conclusions to be drawn from the current statement should be included in the body with full references to the attached document. The latest financial statement should indicate all debt, whether current or long-term. All existing mortgages and liens should be shown.

Various statistical reports should be submitted as desirable to reflect nonfiscal portions of the operation. These could include

descriptions of certain programs of instruction, etc.

A set of Pro Forma operating projections should be developed covering the next three to ten years. Financial projections should be prepared showing both the revenue specifically derived from the individual project (if it is revenue yielding), as well as the revenue picture for the entire college. These projections should include forecasts of revenue and expense, as well as other necessary forecasts. The projections should be accompanied by narrative conclusions, related directly to repayment of the debt. Income statements should include observations about how charges to students will compare with other institutions and how this may affect future growth. For example, a nearby college with a much lower scale of total charges to students, may well tend to reduce the enrollment of the more expensive college in times of financial uncertainty.

Two obvious methods of improving financial stability in the present or future, are to raise income and reduce costs. Show how this can be done if it ever becomes necessary.

Philanthropic projections should be included since, if the college has a good institutional development program, with a proven history of income from this source, it may well be possible to consider this as another source of regular income. Future projections of income and expense are based on historic trends and future expectations, so if properly presented, philanthropy could also be projected and considered in future years. Most lenders do not favor the inclusion of philanthropy in projections of future income, but a realistic case can be made for doing so in some instances. Information on endowment is quite important. This would include present endowment assets and future expectations such as wills and bequests, items in probate, etc.

### Enrollment, Faculty and Administration

The enrollment history of the institution should be traced back many years. It should be analyzed to indicate who enrolled, why, and where they lived prior to enrolling. The present situation should be presented to show who now attends the college, why, and how many vacancies, if any, there are in the entering class.

The future enrollment question is critical in determining the ability of the college to generate income and repay debt. A demographic analysis, or "student origin study," with an analysis of expected enrollment based on numbers of pre-college students by age group in the school's "service area" could furnish important data. The projections of the student body enrollment in the future should be analyzed to determine that it is in fact not an overenthusiastic estimate. It is very important that the functional planning include full consideration of new programs to meet new student needs, and to insure an adequate future student enrollment. Expected recruiting efforts, scholarship programs, etc., could be useful and persuasive to a lender.

The faculty is another important area of concern. What has been the history of the institution's faculty? Have more mature, experienced teachers remained, as well as younger teachers been attracted? If almost the entire staff is tenured, this probably indicates a good employment climate. However, it also means that the school cannot improve the student-faculty ratio without recruiting additional students. A highly tenured staff may limit management.

Items to be discussed about the faculty include the ability to recruit new staff for new programs, the actual control management has over the staff and how their wage-benefit package compares with other colleges. Any unique personalities on the teaching staff should be

introduced in the comments.

The administration is another very important item. It is good to present the qualifications and backgrounds of administrators and board members to the lender, so he can become as familiar as possible with their individual and combined abilities.

Management must have the authority and ability to continue to run the college. Any plans to improve the quality of the administration should be presented as a positive item. Good management, in the final consideration, is probably the best assurance that the loan will be repaid.

#### The Proposed Loan

In presenting the overall loan picture, the financial feasibility study must indicate the amount of money to be borrowed, the security offered, the amount of equity available, the length of the loan repayment period and the method of repayment.

The amount of money to be borrowed should be set forth including alternate amounts. If alternate amounts are mentioned, the reason for the difference should be explained. The amount of the loan, when added to the cash equity, must equal or exceed the project's construction costs, but at the same time be within the range that can be repaid by the college over the life of the loan.

Length of the loan is an item that will require a great deal of careful consideration. There is no easy way to determine what the term of the indebtedness should be. However, it appears to decrease from a high of fifty years as allowed by the FHA College Housing Program, down to the maturities on bank loans of one to ten years.

While the loan should be repaid in as short a time as possible, it appears to be a good rule of thumb that the life of the debt should not

exceed the useful life of the building.

The nonborrowed equity requirement is another item to carefully consider. It appears from the results of a recent survey that most lenders recommend, or require as a minimum, a nonborrowed equity of between twenty and thirty-five per cent of the total project cost. Most lenders look much more favorably at requests from projects that include a high amount of equity, rather than requests from those projects with less equity when considered as a per cent of total project cost.

For financial feasibility purposes, use an interest rate for planning that appears to be realistic. It appears reasonable to consider going ahead with the loan whenever construction is ready, regardless of the current interest rate, since attempts to play the market often result in increased construction costs, and inflationary pressures eating up any advantage gained by obtaining a slightly better interest rate at a slightly later time. A borrower should consider borrowing money at the time when it is needed, because of the uncertainty of today's money market.

There are different methods of debt repayment. Philanthropy is one method that most lenders will not accept, even though if a historical trend approach is presented, there should be a chance of having the lenders reconsider this historic bias. Lenders generally want to see that the debt can be repaid from current cash flow. Therefore, the financial feasibility presentation must indicate high enough earnings to pay operating expenses and debt service, and still generate a surplus to cover unforeseen expenses.

The security offered the lender to assure repayment must be considered. While other things may be used, such as income from unrestricted endowments, most lenders require a first mortgage lien

against the property that the loan was expended on. The college should indicate its willingness to mortgage the new construction and to pledge that amount of revenue, from the building or from the general college operations, necessary to make the routine debt repayments.

Presentation to Lenders (optional section of study)

The above described financial feasibility study may be presented to the lenders in the form of a request for loan. A cover letter should be prepared, introducing the project, briefly defining the loan that is being requested, and referring to the attached financial feasibility study. Offers from lenders should be requested in specific terms and by a certain date. The letter should give a contact person and offer additional information if needed.

While there is no reason to contact a large number of lenders, many experts recommend that between three and ten lenders be formally contacted. The important thing is that the lenders realize that the college is sincere in its loan proposal. This is why the lending institutions should be screened in order to limit the number of contacts to those lenders who are interested and will give serious consideration to the loan proposal.

When the responses to the proposal are received, it is hoped that there will be more than one satisfactory offer for the college to consider. When more than one offer to loan the needed money to the college is received, the college becomes the party to select the most beneficial plan, and is not left with a "take it or leave it" situation.

Once the college has agreed with a lender, on a satisfactory course of financing, the project may proceed to start of construction and eventually to the completion of the needed campus building.



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