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ABSTRACT

The estimated fiscal impact of four federal cost reduction options for the Guaranteed Student Loan (GSL) Program was studied. Income and other financial strength data on current New York State recipients of guaranteed loans during the 1981-82 academic year were collected in order to assess the impact of the cost reduction proposals. Two major findings of the survey were that the GSL program serves students from a wide range of income levels, and that the financial dependency status of the typical loan recipient is the same for all institutional sectors. Findings regarding family size and structure, which affect the calculation of financial need and loan eligibility, include: the average financially dependent (two parent) loan recipient comes from a family of 4.7 members, with 1.7 members in college; and family size and the number of family members in college increase as income increases. A computer model assessed the impact of proposed policy options, using the income profiles and actual loan approval volumes for the 1981-82 academic year. A simulation of the GSL recipient population was constructed, and need analysis formulas were applied to the simulation to assess loss of loan eligibility by such characteristics as income level, financial dependency, institutional sector, and level of study. Each of the following four policy options was found to reduce the total dollar value of loans available to students: need analysis requirement for students with incomes over \$30,000, need analysis requirement for all students, denial of loan eligibility for students with incomes over \$40,000, and need analysis requirement for all students and denial of graduate loans. A questionnaire is appended. (SW)

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NEW YORK STATE
HIGHER EDUCATION SERVICES CORPORATION
GUARANTEED STUDENT LOAN INCOME SURVEY:
ANALYSIS OF THE FISCAL IMPACT OF
PROPOSALS TO REDUCE LOAN ELIGIBILITY

AE 015 108

April 1982

Author's Note

This report presents the estimated fiscal impact of four federal cost reduction options for the Guaranteed Student Loan Program. All of these options employ a standard needs analysis methodology to determine a student's loan eligibility.

At the time of publication, the United States Department of Education had not released the "Expected Family Contribution" schedules required for the needs analysis of lower income students. For this report, Expected Family Contribution schedules were estimated for students with incomes below \$30,000. The EFC schedule for financially dependent students was assumed to equal that presented in recent publications of the College Scholarship Service. Schedules for independent students were estimated by extrapolating from the EFC schedules enacted by the federal government in October 1, 1981. The Expected Family Contribution schedules used in this report are presented in the appendix.

Albany, New York
April, 1981

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INTRODUCTION

The federal government has recently enacted regulations that will restrict the availability of guaranteed student loans to middle-income students. Additional regulations are being considered which will reduce eligibility still further.

The New York State Higher Education Services Corporation undertook a study to determine the impact of these developments on the Guaranteed Student Loan Program. Its purpose was to assess the estimated loss of loan volume that will be experienced by New York State students during the 1982-83 academic year. The policy options which were considered in this study include:

1. Needs Analysis Requirement for Students With Incomes Over \$30,000
This requirement became law in October 1981. It mandates that loan applicants with incomes over \$30,000 demonstrate financial need to be considered eligible for a loan. Because this regulation was enacted after the peak of the 1981-82 loan processing cycle, its full impact will not be felt until the 1982-83 academic year.
2. Needs Analysis Requirement for all Students
This proposal is an extension of the partial needs analysis requirement stated above. Under this proposal, all loan applicants must demonstrate financial need.
3. Denial of Loan Eligibility for Students With Incomes Over \$40,000
This proposal has two components; first, that no loan will be made to a student with family income over \$40,000, second, that all students with incomes over \$25,000 must demonstrate financial need. This is the only proposal where a "cap" is placed on loan eligibility; that is, where loans are denied regardless of financial need.
4. Needs Analysis Requirement for all Students and Denial of Graduate Loans
Under this proposal, all undergraduate loan applicants must demonstrate financial need in a manner identical to that of Proposal 2. In addition, however, no loans would be made to graduate students.

The options delineated above cover the full spectrum of cost reducing plans being considered for the Guaranteed Student Loan Program. The first is a baseline and represents the current set of eligibility requirements. The second, third, and fourth are increasingly severe proposals.

The conclusions reached in this study are the result of a sound analytic approach. The methodology employed to develop fiscal impact estimates involved two steps. The first was survey of 15,000 GSL recipients to determine the income and financial strength characteristics of the current population. The second was the development of a computer model to assess the impact of proposed policy options. Using income profiles collected by the survey and actual loan approval volumes for the 1981-82 academic year, a simulation of the GSL recipient population was constructed. The needs analysis formulas were then applied to the simulation to assess loss of loan eligibility by such characteristics as income level, financial dependency, institutional sector and level of study.

This study was designed to be a definitive assessment of the fiscal impact on New York State students of all recently proposed GSL policy options. It should serve as a means to compare the relative costs of these proposals in terms of their estimated effect on the State.

BACKGROUND

The Guaranteed Student Loan Program is the single most extensive financial aid program in New York State. This program accounted for 51% of all State and federal financial aid available to New York State students during the 1980-81 academic year. It has grown still further during the current academic year and the following statistics can be cited:

- over 460,000 resident students received loans during this year; 374,000 of these students attended college in New York State.
- the value of loan approvals during the same period equalled \$1.1 billion; \$847 million of which was received by in-state colleges.
- 38% of all students attending postsecondary institutions in the State received guaranteed loans.
- over 17% of the total cost of going to college in New York State is supported by the Guaranteed Student Loan Program.

The Guaranteed Student Loan Program has attained such a dominant role in student financing due to the explosive increase in college costs during the past six years. During this period it has been the only major aid program without stringent eligibility requirements. For this reason, it is heavily relied on as the major means by which middle-income students meet increasing college costs.

Since 1976, the cost paid by students to attend college in New York State has increased by \$1.74 billion. Over the same period, the total value of guaranteed loans available to these students increased by only \$651 million. The following table shows the radical changes in college costs and financial aid that have occurred during this critical six year period.

Total Attendance Costs and Financial Aid for Students at New York State Colleges (in millions)

	Academic Year		Amount of Increase
	1976-77	1981-82	
a. Total Cost of Attendance	\$3,210	\$4,950	\$1,740
b. Total other State and Federal Financial Aid	(870)	(940)	(70)
c. Guaranteed Student Loans	(196)	(847)	(651)
Non-Aided Costs	\$2,144	\$3,163	\$1,019

The table above shows the increase of the Guaranteed Student Loan Program in the perspective of mounting college costs. Despite the program's four-fold increase, total non-aided college costs have increased by over one billion dollars.* This is the net cost of college attendance; it is the cost which must be borne by the student, his parents and often the college itself.

The Guaranteed Student Loan Program has grown to its present level in response to rapidly rising college costs. Since it is the only financial aid program with no eligibility requirements, it is that program which families rely on to cover the gap between cost and other forms of aid. The gap, however, has grown by over one billion dollars during the past six years despite a four-fold increase in loan approvals. It is from this context that cuts to the guaranteed student loan program should be considered.

SURVEY DESIGN AND METHODOLOGY

The Higher Education Services Corporation conducted a survey of 15,625 students who had received guaranteed loans during the 1981-82 academic year. The objective of the survey was to collect income and other financial strength data on the current recipient population in order to assess the impact of the federal GSL cost reduction proposals. These data would be used to construct frequency distributions for such characteristics as adjusted gross family income, financial dependence status, marital status, family size, and number of family members in college. All of these variables are required to determine the financial need of a student according to the methodology proposed in the policy options.

To achieve these purposes, the following design concepts were employed in the development of the survey:

1. Simple Random Sample

A sample of 15,625 loans was randomly selected from the Corporation's master file of loan recipients. The master file was current as of November 1, 1981 and contained a population of 373,275 approved loans. The sample contained undergraduate and graduate, in-state and out-of-state students in the same proportions found on the master file.

2. Major Earner as Respondee

The survey instrument was mailed directly to the major household earner. That is, it was mailed to the parents of the financially dependent student, but to the student if he were financially independent. In this manner, income reporting bias was minimized as the largest income was supplied by its earner. The student did not have to guess his parent's income, a source of error in earlier HESC surveys.

3. Anonymous

The returned questionnaires bore no identifying numbers or labels. When the respondee completed the questionnaire, he tore off the portion which displayed his name and address. The anonymity of the survey was stressed repeatedly on the survey instrument. The instrument, however, did contain the name of the college which the respondee attends. This was needed to match back to costs of attendance estimates for fiscal impact assessment.

4. Simple Design

To optimize response rate, the questionnaire was made as simple and attractive as possible. The entire questionnaire fit on one page and the respondee was required to answer only four questions. The respondee could complete the questionnaire in less than two minutes.

The primary objective of the survey was to collect statistically valid income and financial strength profiles for the population of current loan recipients. Its design and methodology were kept as simple as possible. Simple to ensure a high response rate; and simple to allow for the timely collection of data.

SURVEY REPRESENTATIVENESS AND VALIDITY

The survey was successful. Five weeks after the release of 15,625 questionnaires, over 6,935 completed documents were returned giving a response rate of 44%. This was achieved without dunning or follow-up mailings. The distribution of survey responses were as follows:

Distribution of Survey Responses As of March 17, 1982
(Bracketed Figures Are Representative Percents)

SECTOR	2 yr. Colleges		4 yr. Colleges		Graduate	Total
	Vocational					
CUNY	77	(.97%)	135	(.79%)	47 (1.21%)	259 (.90%)
SUNY	581	(1.20%)	1,195	(1.70%)	141 (1.40%)	1,917 (1.49%)
Indep. Univ.	542	(1.05%)	1,915	(1.55%)	585 (1.42%)	3,042 (1.41%)
Out-of State	73	(1.58%)	1,344	(2.13%)	300 (1.58%)	1,717 (1.97%)
TOTAL	1,273	(1.13%)	4,589	(1.68%)	1,073 (1.45%)	6,935 (1.51%)

The above table illustrates two important points. First, the number of responses within sector and level specific cells is sufficiently high to allow contrasts to be made between subpopulations. For example, the most significant determinant of financial strength, financial dependence status, of each subpopulation can be compared with high levels of statistical confidence.¹ The second point to be made from the above table is that the sample provides a representative picture of the recipient population. The figures in the brackets indicate the percent of actual loan recipients that the responses represent for a specific institutional sector and level. Despite differences due to sample selection and response rate, most institutional sectors and levels are proportionately represented. Where there is a difference, as in the case of City University and Out-of-State colleges, analysis done on a sector-specific level when it was suspected that disproportionate representation would cause bias in the estimation of a statistic.

The validity of a sample is the accuracy of the statistics which are derived from it. The two most important statistics which are estimated from the sample are income and financial dependence. To test the validity of the sample, these two statistics were contrasted with known values for the same or similar populations.

¹Consider two of the smallest cells: undergraduate and graduate students at City University. The data indicates that 66% ± 8% of the undergraduates are financially independent, whereas this figure is 81% ± 11% for the graduates. A statistical test at a 99% confidence level indicates that the independence rate of CUNY graduates is significantly higher than that of undergraduates.

1. Income

No actual figures of mean income for the population of New York State student loan recipients were found. However, the actual mean income for a specific subpopulation was obtained. The mean income of all aid recipients at Upstate Medical College is known to be \$29,200. The estimates from the survey indicate that the mean income of GSL recipients attending in-state medical schools to be \$28,400. Although medical school students represent only a very small portion of the sample, the method by which the survey was administered to them was identical to the way it was administered to other students. Hence, there is no reason to believe that the income estimate for medical school students is any more or less accurate than that for other students.

2. Financial Independence Status

Financial independence was determined in the survey by asking whether the student was claimed as an exemption on his parents' income tax return. Although no actual independence rate is known for New York State loan recipients, it is known for New York State grant recipients. A comparison of the independence rates provide an indication of the validity of the sample. Note, however, that the populations are slightly dissimilar (the grant population does not include part-time students and is limited to lower income families) but that these dissimilarities produce predictable differences in independence rates.

Financial Independence Rates

SECTOR	<u>Loan Survey</u>	<u>Grant Population</u>
City University		
Undergraduate	66%	48%
Graduate	81%	76%
State University		
Undergraduate	14%	17%
Graduate	62%	65%
Independent Colleges		
Undergraduate	20%	21%
Graduate	75%	60%
TOTAL		
Undergraduate	19%	24%
Graduate	73%	63%

In most categories the financial independence rates of the recipient populations of both programs are similar. The one glaring difference, undergraduates at City University, is probably the result of genuine dissimilarities in the characteristics of the two populations. Whereas grant utilization among City University is rather high (48%), loan utilization is very low (14%), indicating that there is very little "overlap" between the two programs in this subpopulation.

The survey was performed to create a database of financial strength profiles that is representative of the population of current student loan recipients. The sample was selected in a random manner and the distribution of responses reveals that the recipients generally responded randomly by institutional sector. Further, comparison of statistics from the survey appear consistent with known information about the surveyed population. Although there is no single statistical test that can unequivocally determine the representativeness and validity of the survey, it does appear to reflect the financial strength characteristics of the recipient population.

NEEDS ANALYSIS METHODOLOGY

In 1981, Congress enacted a law which restricts the availability of guaranteed loans to middle-income students. Effective on October 1, 1981, all loan applicants with family incomes over \$30,000 had to demonstrate financial need according to the following formula:

$$\begin{array}{r}
 \text{Student's Cost of College Attendance} \\
 - \text{Total Financial Aid Received From Other Sources} \\
 - \text{Expected Family Contribution} \\
 \hline
 = \text{Financial Need}
 \end{array}$$

A student can annually borrow an amount that does not exceed his financial need. An undergraduate student can borrow no more than \$2,500 per year and a graduate can borrow no more than \$5,000.

The above methodology for determining student financial need is similar to that used by the College Scholarship Service for the determination of student eligibility for all forms of financial aid. All federal proposals restricting loan eligibility employ this needs analysis methodology. The three components of the formula, "cost of attendance", "other financial aid" and "expected family contribution," have specific definitions according to the needs analysis procedures of the College Scholarship Service. The definitions of these variables are as follows:

1. Cost of Attendance

The cost of attendance is determined by the financial aid administrator at the student's college. This is done by the development of a model student's expense budget reflecting the cost of tuition, fees, books, supplies and living expenses reported by the institution. The cost of attendance, of course, varies markedly among postsecondary institutions. For the 1981-82 academic year, the average cost of attendance paid by loan recipients appeared:

Undergraduate GSL Recipients at 4-Year Colleges
1981-82 Year

Sector	Cost of Attendance
City University	\$5,311
State University	\$4,300
Independent Colleges	\$7,457
Out-of-State Colleges	\$7,861
Total	\$6,608

The data from which the above averages are calculated is entered by the financial aid administrator on the student's guaranteed loan application.

2. Other Financial Aid

This figure represents the total value of other grants, scholarships, loans and on-campus work that is expected to be received during the period for which the loan is received. All federal, state and private sources of aid are considered. This figure is entered on the student's loan application by the financial aid administrator. Average values of this figure as calculated from the HESC student loan master file are:

Undergraduate GSL Recipients at 4-Year Colleges
1981-82 Year

Sector	Average Other Financial Aid
City University	\$821
State University	\$669
Independent Colleges	\$1,457
Out-of-State Colleges	\$1,143
Total	\$1,143

The average GSL recipient receives a substantial amount of financial aid from other sources. Although this aid is highly correlated with income (see following section), it is a major determinant in the calculation of loan eligibility.

3. Expected Family Contribution

This is the portion of the cost of college attendance that is to be paid directly by the student and parent. The schedule which determines this amount considers family structure, family size and total family income. It was developed by the College Scholarship Service based on research concerning actual and discretionary income. The primary determinant of expected family contribution is the family structure of the student. A different EFC schedule is used, depending on the financial dependence and marital status of the student. Expected family contribution is then scaled to family income and family size. Selected values of expected family contribution are:

Expected Family Contribution		
Total Family Income ¹	Financially Dependent ²	Financially Independent ³
\$ 5,000	\$ -750	\$ 3,540
\$15,000	\$ 500	\$10,244
\$20,000	\$1,190	\$13,596
\$30,000	\$2,500	\$20,300
\$40,000	\$4,910	\$25,590

Note that the two schedules provide markedly different values of expected family contributions for the same level of income. The independent student is the sole dependent on his income and contributes a much larger portion of it to his education than can the father of the dependent student.

1. Total family adjusted gross income for the 1980 year. From IRS Form 1040, line 31 or Form 1040A, line 11.

Family with two parents and 2 children, 1 child in college
Student is single.

The needs analysis methodology provides a uniform structure for determining the financial strength of the college-going student. All federal policy options to reduce the cost of the Guaranteed Student Loan Program involve applying some aspect of this methodology.

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THE GUARANTEED STUDENT LOAN POLICY ANALYSIS MODEL

This computerized model was developed to assess the fiscal impact of proposed federal policy options on the guaranteed student loan recipients of New York State. It uses income and financial strength profiles from the GSL survey and loan approved volumes from the HESC loan processing system to create a simulation of the GSL applicant population for the 1982-83 academic year. Fiscal impact is determined by applying proposed eligibility requirements against the simulation. The number and value of loans which will be denied or reduced is then determined.

Like any computerized model, this one is based on simplifications and assumptions concerning the simulated population and its behavior. These assumptions are as follows:

1. Loan Applicant Population In 1982-83

The pool of loan applicants in the 1982-83 academic year is assumed to be identical to the population of loan recipients during the preceding year. For example, there were 460,120 New York State loan recipients during 1981-82; it is assumed that there will be 460,120 students requiring loans in the following year. This assumption is based on two facts. First, the size of the college going population is relatively stable. In New York State, the number of full-time students decreased 1% between 1980 and 1981; the number of part-time students increased 1% during the same period. Second, the Guaranteed Student Loan Program is fully utilized at present. The program is well-known and its financial benefits are obvious; all those who require a loan are now receiving one.

2. Characteristics of Applicant Population In 1982-83

The characteristics of the applicant population are assumed to be identical to those of the current recipient population as obtained by the GSL Survey. The distribution of income, family size and financial dependence status characteristics were applied to the future loan recipient population. The following equations describe how this distribution was performed:

POP82(i,j,k,l,m,n) is the population of 1982 loan applicants as distributed by the characteristics:

- i= institutional sector (CUNY, SUNY, independent, Out-of-State)
- j= level (2-year/vocational, 4-year, graduate)
- k= financial independence status (dependent with 2 parents, dependent with 1 parent, independent married, independent single)
- l= size of family (1 to 9 members)
- m= family members in college (1 to 5 members)
- n= total family adjusted gross income (in \$2,500 increments)

$$POP82(i,j,k,l,m,n) = ACT81(i,j,k) \times SURV1(i,j,k) \times SURV2(k,l,m) \times SURV3(k,m)$$

where:

- ACT81(i,j) is population of actual 1981-82 loan recipients
- SURV1(i,j,k)
- SURV2(k,l,m) are distributions of characteristics as found by the GSL Survey¹.
- SURV3(k,m)

Note:

$$\sum_{i \dots n} POP82(i,j,k,l,m,n) = \sum_{i,j} ACT81(i,j) = 460,120$$

3. Cost of Attendance In 1982-83

The cost of college attendance during the 1982-83 academic year is assumed to be equal to that paid by loan recipients in the preceding year. Average values for each sector/level were generated from the HESC master file of loan recipients. These average figures are weighted according to each recipient's college of attendance. The cost of attendance estimates are represented as:

$$CA82(i,j)$$

4. Other Financial Aid

The total value of other financial aid is critical in the determination of loan eligibility. Further, this figure is highly correlated with income. To estimate this variable for modeling purposes, analysis was performed on actual student records for which family income is known (post 10/01/82 GSL approvals). Stepwise regression revealed that the best estimation formula for other financial aid could be obtained if the population was stratified by level of study. The following equations were developed:

FA(i,j,n) is the average value of other financial aid received by loan recipients in sector i, level; and at income level n,

$$FA(i,j,n) = a_0(j) + a_1(j) \times CA(i,j) + a_2(j) \times n$$

Coefficients $a_0(j)$, $a_1(j)$ and $a_2(j)$ were determined by multiple regression analysis.

Note that the value of other financial aid is estimated according to relationships found in data for the 1981-82 year. Cutbacks in other federal financial aid programs for the 1982-83 year, therefore, are not to be taken into account in the determination of loan eligibility.

* The distribution equation assumes no interaction between certain characteristics. As can be seen, a single income distribution is assigned to each value of characteristic k(financial dependence). Factor Analysis of survey data revealed no significant difference in mean income between sectors and levels once financial dependence was controlled.

5. Expected Family Contribution

The determination of estimated family contribution is done in a straight-forward manner. The only approximation that is made concerns the income axes of the EFC tables, which is grouped into \$2,500 increments. In all other respects, the expected family contribution is determined according to a table that is identical to that published in the Federal Register.

6. Determination of Loan Eligibility

The determination of loan eligibility is performed simply by subtracting the other financial aid estimate and expected family contribution from the average cost of attendance figure. This calculation is performed for all values of the six characteristics. It is assumed that the maximum loan eligibility for each sector/level equals the average loan for the sector/level during the 1981-82 academic year. The equation which determines loan eligibility for each set of characteristics i through n is as follows:

$$LE(i,j,k,l,m,n) = CA(i,j) - FA(i,j,n) - EFC(k,l,n)/m$$

The policy analysis model is intended to be a mechanism to assess the fiscal impact of the federal policy options on the guaranteed loan recipients of New York State. It uses all sources of data concerning the population that is available at this time. The underlying assumptions of the model are consistent with known relationships between the data.

FINANCIAL STRENGTH PROFILES OF 1981-82 RECIPIENTS

Introduction

The Guaranteed Student Loan Survey provided an understanding of the financial strength of the current population of loan recipients. The major findings of the survey revealed:

- The average family income of all loan recipients is \$29,766.
- 58% of all recipients have incomes between \$10,000 and \$50,000.
- 43% of all recipients have incomes over \$30,000.
- 62% of all loan recipients are financially dependent and come from a 2 parent family. They have an average income of \$39,485; an average family size of 4.7 and an average of 1.7 family members in college.
- There are no significant differences in incomes between institutional sectors. There are, however, significant differences in incomes between recipients at 2 year, 4 year, and graduate institutions.

The most striking finding of the survey is that the Guaranteed Student Loan Program serves a predominantly middle-income population. Generally, the loan recipient comes from a large family with another family member currently in college.

FINANCIAL STRENGTH PROFILES OF 1981-82 RECIPIENTS

Financial Dependence Status

A loan recipient's financial dependence status describes his family structure and the number of relevant family earners to be considered in the calculation of total income. The values of financial dependence status are: financially dependent (with 2 parents), financially dependent (with 1 parent), financially independent (married), and financially independent (single). Findings of the survey concerning this variable are:

- Financial dependence status is highly correlated with total income. Values of this characteristic define the loan recipient population into classes, each with significantly different income profiles. (See Table I at the end of this section.)
- 62% of all loan recipients are financially dependent and from 2 parent families. However, this figure is 80% for recipients at out-of-state four year colleges and 15% for recipients at City University graduate schools. (See Table II at the end of this section.)

Financial dependence status is the most significant determinant of financial strength. Whether a student is dependent on his parent or is self-supporting, greatly predetermines his total family income. This is obvious, the total family income of the dependent student is considered to be the total of he and his parents'; for the independent student it is simply his own and his wife's. These differences in financial strength are so marked that all subsequent analysis will be performed on sub-populations of recipients defined by this characteristic. Consider the differences in the following average values of income, family size and family members in college:

<u>Financial Dependence Status</u>	<u>Percent of Population</u>	<u>Average Income</u>	<u>Average Family Size</u>	<u>Average Number in College</u>
Financially Dependent - 2 Parent Family	62%	\$39,458	4.7	1.7
Financially Dependent - 1 Parent Family	10%	\$21,029	3.4	1.6
Financially Independent - Married	9%	\$20,018	3.4	1.4
Financially Independent - Single	19%	\$ 7,819	1.0	1.0
TOTAL	100%	\$29,766	3.9	1.6

The financially dependent student from the two parent family is the typical loan recipient. Over 62% of all loan recipients (over 73% of those at 4 year undergraduate colleges) are in this category. Note, however, that the other categories of financial dependence are also substantially represented and that these categories have significantly lower total incomes and family sizes. Table I at the end of this section displays the confidence intervals for the mean income estimates for each category. Note, in Table I that these intervals are, in most cases, rather small, indicating the statistical significance of the differences in mean income between each category.

The proportion of financially independent loan recipients varies considerably between institutional sectors and level. Two trends, however, are apparent. First, recipients at vocational, two year and graduate schools are, in all cases, more likely to be financially independent than their counterparts at four year undergraduate institutions. This is expected and agrees with statistics from other program recipient populations. That is, graduate students are generally older and two year college students are generally employed while enrolled; both are more likely to be self-sufficient. Second, recipients at the City University are generally more financially independent and recipients at out-of-state institutions are generally less financially independent than the norm. Table II at the end of this section displays the distribution of financial dependence characteristics across institutional levels and sectors.

Financial dependence status is the most important characteristic for determining financial strength. This characteristic defines the number of earners and dependents per family. Hence, the distribution or mixture of dependent and independent students within an institutional sector and level has a major effect on the overall financial strength of the recipients of that subpopulation.

FINANCIAL STRENGTH PROFILES OF 1981-82 RECIPIENTS

Income Profiles

The needs analysis methodology that is used in the calculation of guaranteed student loan eligibility considers the income of the recipient to equal the sum of the adjusted gross incomes (i.e., income filed on 1980 Federal income tax return) earned by all relevant family members. Findings of the survey concerning this variable are:

- The average income of all loan recipients is \$29,766. 43% of all recipients have incomes over \$30,000; 58% of all recipients have incomes between \$10,000 and \$50,000 (see Table III at the end of this section).
- There is no significant difference in mean income between institutional sectors for a specific value of financial dependence. However, there is a significant difference in mean income between institutional levels. (See Table IV at the end of this section.)
- Differences in mean income between institutional sectors can largely be explained by differences in financial dependence rates. (See Table V at the end of this section.)

Until October 1, 1981 there were no restrictions on the availability of loans to higher income students during the 1981-82 academic year. By this date, the vast majority (85%) of loan applications had been received. Hence, the survey sampled from a population that spanned the full spectrum of income levels. The results from the survey illustrate this.

Table III illustrates the income distribution of loan recipients by the various values of financial dependence status. Note the marked differences in the four separate distributions. Just as there are significant differences in the mean values, each distribution has a considerably different shape. Consider financially dependent (2 parent) students and financially independent students (single). Whereas only 37% of the former category has income below \$30,000; 100% of the latter category does. Hence, any cost reducing proposal which places an arbitrary "cap" on total family income could severely affect financially dependent students but not affect independent students.

Table III also shows the wide range of income levels served by the GSL program. The percentages from the table, however, do not illustrate the sheer number of recipients in each income level. For example, 30% of all recipients have incomes between \$30,000 and \$50,000. In more human terms, that represents over 120,000 New York Stat students and nearly \$303,000,000 in approved loans.

Table IV at the end of this section focuses on the major category of loan recipient, the financially dependent student from a two parent family. The intent of the table is to illustrate that there are no significant differences in income between institutional sector for a given value of financial dependence status. The confidence intervals below each average estimate display the likely range of the mean income based on the data which was collected by the survey. In the column at the far right of the table, it can be seen that the mean income for most sectors (excluding the out-of-state sector) are not very different. The confidence intervals for each overlap considerably, indicating that it is likely that whatever difference there is in the point estimate is a random occurrence. In fact a statistical test reveals that there is no significant difference in the mean income of the City University, State University and Independent College sectors*.

Table III does show, however, considerable differences in the mean incomes of the various institutional levels. Consider the bottom row of the table. Not only is the mean incomes different by more than \$6,000, the confidence intervals are small enough to indicate that there are genuine differences in the mean estimates. A statistical test at a 95% level of confidence indicates that, in fact, the differences are significant.

It is important to note that Table III presents income data on only the financially dependent (2 parent) loan recipients in each sector and level. Once financial dependence status is no longer controlled for, however, there are substantial differences in mean income between institutional sectors. These differences, therefore, are the result of differences in the proportion of financially dependent and independent students in each sector.

Table I presents mean income of all loan recipients by institutional sector and level. Below each over-all mean income estimate is the percent of loan recipients who are financially dependent (from 2 parent and 1 parent families). This table illustrates how financial dependence rate is a major determinant of over-all mean income for an institutional sector and level. Note the considerable differences in over-all mean income between the institutional sectors in the right-most column of the table. Also note, however, that financial dependence rate is correlated with mean income. For example, the highest mean income corresponds to the sector with the highest proportion of dependent students; and the lowest with the lowest. This is the

* At a 95% confidence level.

perspective from which to compare incomes across institutional sectors. Loan recipients at City University are no poorer than recipients at independent colleges. Rather, far fewer recipients at City University are financially dependent (33%) than at independent colleges (64%); and hence, rely on different structure of earners as used in the calculation of family income.

The Guaranteed Student Loan Survey revealed two things about the recipient's income. First, that the program serves students from a wide range of income levels. Second, that the income of the typical loan recipient (financially dependent) is the same for all institutional sectors. These two points are helpful in understanding the impact of the cost-reducing options which are being considered by the federal government.

FINANCIAL STRENGTH PROFILES OF 1981-82 RECIPIENTS

FAMILY SIZE AND STRUCTURE

The characteristics of family size and number of family members in college play an important role in determining a student's financial need. Under the current and proposed needs analysis formulas, the expected family contribution for a given income is inversely scaled to family size. Further, the expected family contribution is the total expected family payment to the education of all of their children's college education. The entry determined from the Expected Family Contribution schedule is divided by the number of family members currently in college. Because family size is so important in the calculation of financial need and loan eligibility, the following findings are significant:

- The average financially dependent (2 parent) loan recipient comes from a family of 4.7 members; with 1.7 members in college.
- Family size and the number of family members in college increase as income increases. (See Tables VI and VII at the end of this section).

The rightmost column in Table VI displays the average total family size by income level. This statistic increases from 2.1 to 4.8 over the income range of \$10,000 to \$60,000. There are two reasons for this dramatic increase. First, a large proportion of the lower income levels are financially independent and have no dependents. Second, there is a true increase in family size by income even within a specific value of financial dependence. This can be seen in the leftmost column of Table VI. What is important about the increase of family size by income is the fact that higher income does not necessarily translate into less financial need. Substantial drains on a family's income, such as other children and other college-going family members, become more prevalent at higher incomes. Thus, the amount of disposable income that a family has available for a child's education does not increase proportionately with income. Although the needs analysis formula considers these factors, those proposals which deny loan eligibility at a given income level do not. This understanding of income and financial need is necessary for realizing the impact of the cost-reduction proposals.

Guaranteed Student Loan Survey
Financial Strength Profiles of 1981-82 Recipients

TABLE I
Average Income By Financial Dependence Status

Financial Dependence Status	Average Income
Financially Dependent	
Two Parent Family	\$39,485 [38,394-40,522] ¹ (4585)
One Parent Family	\$21,029 [17,583-24,475] (731)
Financially Independent	
Married	\$20,018 [18,679-21,357] (652)
Single	\$ 7,819 [6,399- 7,980] (1404)
TOTAL	\$29,766 [28,941-30,590] (7372)

¹ [Bracketed figures represent 95% confidence interval]
(Figures in parenthesis is number of cases)

Guaranteed Student Loan Survey
Financial Strength Profiles of 1981-82 Recipients

TABLE II
Financial Dependence Status

SECTOR	Dependent		Independent	
	<u>2 Parents</u>	<u>1 Parent</u>	<u>Married</u>	<u>Single</u>
City University				
2 Year Colleges	34%	6%	19%	40%
4 Year Colleges	27%	7%	23%	43%
Graduate	15%	4%	26%	55%
State University				
2 Year Colleges	52%	8%	11%	29%
4 Year Colleges	76%	10%	4%	11%
Graduate	35%	3%	26%	36%
Independent				
2 Year Colleges	47%	9%	14%	31%
4 Year Colleges	69%	11%	5%	14%
Graduate	20%	5%	30%	45%
Out-Of-State				
2 Year Colleges	52%	14%	10%	25%
4 Year Colleges	80%	12%	2%	6%
Graduate	77%	10%	21%	43%
TOTAL				
2 Year Colleges	51%	9%	12%	28%
4 Year Colleges	73%	11%	4%	12%
Graduate	30%	5%	25%	40%

Guaranteed Student Loan Survey
Financial Strength Profiles of 1981-82 Recipients

TABLE III
Income Profile By Financial Dependence Status

Income Level	-Dependent-		-Independent-		Total
	Two Parents	One Parent	Married	Single	
\$0 - \$10,000	3%	23%	27%	77%	21%
\$10,001 - \$20,000	11%	45%	28%	19%	17%
\$20,001 - \$30,000	23%	20%	25%	4%	19%
\$30,001 - \$40,000	27%	7%	13%	0%	19%
\$40,001 - \$50,000	17%	2%	4%	0%	11%
\$50,001 - \$60,000	8%	1%	2%	0%	6%
over \$60,000	10%	3%	2%	0%	7%
TOTAL	100%	100%	100%	100%	100%
Average Income	\$39,458	\$21,029	\$20,018	\$7,189	\$29,766

Guaranteed Student Loan Survey
Financial Strength Profiles of 1981-82 Recipients

TABLE IV
Average Income For Financially Dependent Recipients¹

<u>Sector</u>	<u>2 Year/Vocational</u>	<u>4 Year Colleges</u>	<u>Graduate</u>	<u>Total</u>
City University	\$30,573 [24,584-36,561] ² (26) ³	\$33,228 [26,074-40,382] (40)	\$41,426 [27,327-55,525] (8)	\$33,181 [28,666-37,696] (74)
State University	\$30,060 [27,881-32,239] (164)	\$37,029 [35,209-38,850] (948)	\$57,411 [34,915-66,255] (54)	\$36,675 [34,995-38,358] (1166)
Independent	\$31,794 [29,273-34,314] (456)	\$37,915 [35,738-40,001] (1404)	\$48,766 [38,284-59,248] (124)	\$37,186 [35,410-38,962] (1984)
Out-of-State	\$32,612 [24,020-33,215] (42)	\$46,170 [43,981-48,359] (1153)	\$44,060 [39,127-48,992] (166)	\$45,494 [43,526-47,463] (1361)
TOTAL	\$31,384 [29,553-33,215] (698)	\$40,310 [39,082-41,538] (3545)	\$46,659 [41,723-51,594] (352)	\$39,485 [38,394-40,522] (4585)

- 1 All estimates apply to financially dependent students from two parent families
2 [Bracketed figures represent 95% confidence interval]
3 (Figures in parenthesis is number of cases)

Guaranteed Student Loan Survey
Financial Strength Profiles For 1981-82 Recipients

TABLE V
Average Income For All Recipients
(Figure In Parentheses Is Percent Financially Dependent¹)

<u>Sector</u>	<u>2 Year/ Vocational</u>	<u>4 Year Colleges</u>	<u>Graduate</u>	<u>Total</u>
City University	\$19,510 (41%)	\$15,515 (34%)	\$18,518 (19%)	\$17,197 (33%)
State University	\$26,331 (60%)	\$30,946 (85%)	\$24,707 (38%)	\$29,767 (82%)
Independent	\$20,676 (55%)	\$31,122 (81%)	\$23,524 (25%)	\$27,012 (64%)
Out-of-State	\$21,414 (65%)	\$39,939 (92%)	\$27,980 (36%)	\$37,045 (85%)
TOTAL	\$21,532 (60%)	\$33,217 (84%)	\$24,711 (35%)	\$29,766 (72%)

¹ Includes recipients from 2 parent and 1 parent families.

Guaranteed Student Loan Survey
Financial Strength Profiles of 1981-82 Recipients

Table VI
Average Total Family Size

Income Level	-Dependent-		-Independent-		Total
	Two Parents	One Parent	Married	Single	
\$0 - \$10,000	4.7	3.4	3.3	1.0	2.1
\$10,001 - \$20,000	4.6	3.3	3.3	1.0	3.4
\$20,001 - \$30,000	4.6	3.4	3.5	1.0	4.3
\$30,001 - \$40,000	4.8	3.5	3.6	1.0	4.7
\$40,001 - \$50,000	4.8	4.1	3.6	1.0	4.8
\$50,001 - \$60,000	4.9	3.3	3.4	1.0	4.8
over - \$60,000	4.9	3.8	3.7	1.0	4.8
TOTAL	4.7	3.4	3.4	1.0	3.9

Guaranteed Student Loan Survey
 Financial Strength Profiles of 1981-82 Recipients

Table VII
 Average Total Family Members in College

Income Level	-Dependent-		-Independent-		Total
	Two Parents	One Parent	Married	Single	
\$0 - \$10,000	1.5	1.5	1.4	1.0	1.3
\$10,001 - \$20,000	1.6	1.6	1.3	1.0	1.5
\$20,001 - \$30,000	1.6	1.7	1.4	1.0	1.6
\$30,001 - \$40,000	1.7	1.7	1.3	1.0	1.7
\$40,001 - \$50,000	1.8	1.8	1.6	1.0	1.8
\$50,001 - \$60,000	2.0	1.8	1.5	1.0	1.9
over - \$60,000	2.0	2.0	1.7	1.0	2.0
TOTAL	1.7	1.6	1.4	1.0	1.6

ESTIMATED FISCAL IMPACT OF
FEDERAL COST-REDUCTION PROPOSALS

The federal government has recently enacted regulations that will restrict the availability of guaranteed student loans to middle-income students. Additional regulations are being considered which will reduce eligibility still further.

The New York State Higher Education Services Corporation undertook a study to determine the impact of these developments on the Guaranteed Student Loan Program. Its purpose was to assess the estimated loss of loan volume that will be experienced by New York State students during the 1982-83 academic year. The policy options which were considered in this study include:

- I. Needs Analysis Requirement For Students With Incomes Over \$30,000.
This requirement became law in October 1981. It mandates that loan applicants with incomes over \$30,000 demonstrate financial need to be considered eligible for a loan. Because this regulation was enacted after the peak of the 1981-82 loan processing cycle, its full impact will not be felt until the 1982-83 academic year.
- II. Needs Analysis Requirement For All Students
This proposal is an extension of all partial needs analysis requirement stated above. Under this proposal, all loan applicants must demonstrate financial need.
- III. Denial of Loan Eligibility For Students With Incomes Over \$40,000.
This proposal has two components; first, that no loan will be made to a student with family income over \$40,000, second, that all students with incomes over \$25,000 must demonstrate financial need. This is the only proposal where a "cap" is placed on loan eligibility for undergraduates; that is, where loans are denied regardless of financial need.
- IV. Needs Analysis Requirement For All Students and Denial Of Graduate Loans
Under this proposal, all undergraduate loan applicants must demonstrate financial need in a manner identical to that of Proposal 2. In addition, however, no loans would be made to graduate students.

The options delineated above cover the full spectrum of cost reducing plans being considered for the Guaranteed Student Loan Program. The first is a baseline and represents the current set of eligibility requirements. The second, third, and fourth are increasingly severe proposals.

The methodology employed to develop fiscal impact estimates involved two steps. The first was a survey of 15,000 GSL recipients to determine the income and financial strength characteristics of the current population. The second was the development of a computer model to assess the impact of proposed policy options. Using income profiles collected by the survey and actual loan approval volumes for the 1981-82

academic year, a simulation of the GSL recipient population was constructed. The needs analysis formulas were then applied to the simulation to assess loss of loan eligibility by such characteristics as income level, financial dependency, institutional sector and level of study.

Each of the proposals will reduce the total dollar value of loans available to students in two ways. For some students, a proposal will completely deny access to interest subsidized loans. For other students, a proposal will reduce the amount available to be borrowed. Hence, there are three measures to assess a proposal's impact: the reduction in dollar value of loans; the number of students denied loans and the number of students with reduced loans. In light of these three measures, the impact of the four proposals on the loans administered by the Higher Education Services Corporation appear:

	Cost Reduction Proposal			
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>
GSL Dollar Reduction	\$ 145M	\$ 250M	\$ 281M	\$ 479M
Students With Reduced Loans	39,550	66,300	20,005	57,520
Students With Denied Loans	50,155	82,750	116,580	144,670

As can be seen above, all options result in significant reductions in the availability of loans to New York State students. The first option, which represents expected loan volume under current law is a 13% reduction from the \$1,085,000,000 volume approved by HESC during the 1981-82 academic year. The other three options are increasingly severe; with the fourth option, full needs analysis and denial of graduate loans, resulting in a 44% reduction in loan volume from 1981-82. However severe, these options can not be contrasted simply in terms of total dollar reduction. Because each option applies to a different set of eligibility requirements, each option has a significantly different impact across institution types and student characteristics. Remember that the proposed eligibility requirements are complex formulas involving cost of attendance, other forms of aid, financial dependence, income and family structure. The frequency of these characteristics vary markedly by institutional sector, level of study and income; and hence, the impact of an option may not be equitable for the entire population of students. The following paragraphs contrast the four cost reduction options in terms of their effect on the institutional sectors; the various income levels and values of financial dependence.

Impact By Institutional Sector

In the needs analysis formula, one of the most significant determinants of the students financial need is his cost of college attendance. Thus, just as costs vary markedly between institutional sectors, so do the relative impacts of the four cost reducing options. Consider the following table of average 1981-82 costs of attendance for undergraduate four-year institutions:

Average Attendance Costs
For 1981-82 NYSHESC GSLP Recipients

<u>Sector</u>	<u>Average Cost of Attendance</u>
City University	\$5,311
State University	4,300
Private Colleges	7,457
Out-of-State Colleges	7,861
TOTAL	<u>\$6,608</u>

The three thousand dollar difference in cost between the State University and the private college translates into an additional three thousand dollars of financial need for the loan recipient in this institutional sector. The effect of this cost difference can be seen when the total reduction in loan volume that is predicted for the four proposals is presented for each sector.

Estimated Reduction In Loan Volume
As Percent Of 1981-82 Approval Volume

Sector*	Cost Reduction Proposal			
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>
City University	10%	35%	17%	50%
State University	24	33	34	43
Private Colleges	11	22	23	45
Out-of-State Colleges	8	12	26	43
TOTAL	<u>13%</u>	<u>23%</u>	<u>26%</u>	<u>44%</u>

As can be seen above, each proposal has a markedly different effect on each institutional sector. Generally, however, impact is inversely proportional to the cost of attendance. The exception to this rule is the City University. Because of the high proportion of financially independent loan recipients (67% versus 18% for State University), this institutional sector is impacted differently from the norm. For example, proposal I and III have a relatively slight effect on this sector because they impose needs analysis requirements high above the over-all average income of this sector. (Note that the over-all average income at City University is depressed because of the high proportion of self-supporting financially independent students.)

For further illustration of the differences in the impact of the proposals, see the tables at the end of this section.

* Includes appropriate vocational, 2-year, 4-year, and graduate institutions for each sector.

Impact By Level of Study

For purposes of this report, level of study is defined as three categories: Vocational/Two Year, Four Year Undergraduate and Graduate. The category, Vocational/Two Year, includes all nursing, proprietary, business, non-degree institutions as well as the community colleges of the SUNY and CUNY Systems plus all private 2 year colleges. The Four Year category includes the traditional private and public colleges. Graduate includes medical and law schools as well as all other graduate institutions.

In the previous sections of this report, the differences in financial dependence rates and family income between levels of study were noted. In addition, there are significant differences in average cost of attendance between these categories. All of these factors play a role in determining financial need and hence cause substantial differences in the impact of the cost reducing options by the category of level. Average cost of attendance for 1981-82 NYSHEEC GSLP recipients is displayed below:

Average Attendance Costs
For 1981-82 NYSHEEC GSLP Recipients

Level of Study	Average Cost of Attendance
Vocational/2 Year	\$4,793
Four Year	6,608
Graduate	<u>9,971</u>
TOTAL	\$6,704

As with institutional sectors, there are large differences in attendance costs between the various levels of study. These differences, in turn, translate into differences in financial need and loan eligibility through the needs analysis formula. This can be seen in the following table that displays the estimated impact of the four options.

Estimated Reduction In Loan Volume
As a Percent of 1981-82 Approval Volume

Level of Study	Cost Reduction Proposal			
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>
Vocational/2 Year	19%	32%	29%	32%
Four Year	14	20	28	20
Graduate	<u>7</u>	<u>21</u>	<u>18</u>	<u>100</u>
TOTAL	13%	23%	26%	44%

For further illustration of the differences in the impact of the proposals, see the tables at the end of this section.

Impact By Financial Dependence Status

In the needs analysis formula, a student's loan eligibility decreases with increasing total family income. However, cost of attendance financial dependence status and family structure affect the structure of the needs formula so that this relationship between income and loan eligibility is not altogether simple. As stated in an earlier section of this report, the needs analysis requirement proposed in all of the four cost-reduction options uses a different "Expected Family Contribution" schedule for each value of financial dependence. Hence, the financially independent student with a \$10,000 income has an entirely different level of loan eligibility than the financially dependent student from a family with a similar income.

The proportion of financially independent students at the various income levels varies significantly because these students tend to have lower incomes. Consider the following table which illustrates this point:

Financial Dependence Rates By Income Level
1981-82 NYSHESC GSLP Recipients

Family Income	Percent of GSLP Recipients	Percent Of Income Range		
		Dependent	Independent	Total
\$ 15,000	30%	31%	69%	100%
15,001 - 30,000	27	81	19	100
30,001 - 50,000	30	95	5	100
Over 50,000	13	96	4	100
TOTAL	100%	72%	28%	100%

Note that a very high proportion of low income recipients are financially independent and, conversely, a high proportion of higher income recipients are financially dependent on their parents. For this reason, those proposals that restrict loan eligibility at a certain high income level (\$30,000 for Proposal I; \$25,000 for Proposal III) have lesser impact on the financially independent student than on the dependent one. This is illustrated in the following table:

Estimated Reduction In Loan Volume
As Percent of 1981-82 Approval Volume

Financial Dependence	Cost Reduction Proposal			
	I	II	III	IV
Dependent - 2 Parent	18%	19%	37%	32%
Dependent - 1 Parent	3	3	6	20
Independent - Married	17	58	27	87
Independent - Single	1	25	1	67
TOTAL	13%	23%	26%	44%

The table above displays the arbitrary nature of some of the cost-reducing proposals. Consider Proposal III, the effect of applying needs analysis for those students with incomes over \$25,000 and denying loans to students over \$40,000. As with any proposal that denies eligibility at a given income level, it is blind to the student's true financial need. For example, under this proposal, the financially dependent student from a family of five with another sibling in college would be denied loan eligibility if his family income exceeds \$40,000. The typical financially dependent loan recipient with a family income of \$40,000 or greater comes from a large family (average 4.8 members) with more than one child currently in college (average 1.8 children). Under proposal III, this student will be denied loan eligibility but the independent student with an income of \$24,500 and no dependents will be eligible for the maximum loan. Clearly, a proposal that sets arbitrary income thresholds causes an inequitable distribution of funds that is not sensitive to financial need.

Proposal II requires full needs analysis to determine loan eligibility. Because of the severe "Expected Family Contribution" schedules for financially independent students, these students will feel the greatest impact of full needs analysis. Even more severe to the independent student is Proposal IV which denies loan eligibility to graduate students as well as requiring full needs analysis for undergraduates. Since graduate students are predominantly financially independent, this proposal most significantly affects the student who does not rely on his parents for financial support. The question arises, "where will the independent graduate student find financial aid to supplant his lost loan eligibility?" Clearly, he can not rely on his parents. Further, the existence of other available financial aid is limited. Among 1981-82 guaranteed student loan recipients, the graduate student relied on non-GSL financial aid to a lesser degree than his undergraduate counterpart. For graduate students, the non-GSL financial aid accounted for only 9% of his cost of attendance; whereas for the undergraduate, non-GSL aid accounted for 17% of his cost. Correspondingly, the guaranteed loan comprised a larger portion of the graduate's financial aid (39% of cost of attendance) than for the undergraduate (32%). The only remaining source of support is contribution from student earnings. However, the income available to the student is often limited due to the fact that he is generally employed on a part-time or seasonal basis. The average income of the financially independent graduate student is \$8,700. In most cases, the independent graduate student's total adjusted gross income is less than his cost of college attendance (1981-82 average \$9,971).

Analysis of the four cost reduction options with respect to financial dependence status indicates that each impacts the financially dependent student differently from the independent student. The proposals requiring full needs analysis disproportionately affects the independent student. Proposals with income thresholds above which needs analysis is required have little impact on the independent student. Equality of impact for all values of financial dependence is important. If eligibility restrictions favor, say, independent

students over dependent students, then more applicants will be motivated to claim financial independence. Experience with grant programs indicates that this is an actual occurrence that causes a host of reporting and verification problems.

For further illustration of the differences in impact of the proposals, see the tables at the end of this section.

Impact by Income Level

All cost reduction options restrict loan eligibility to higher income students. However, the extent to which each proposal impacts a specific income level varies greatly. For example, the proposals to require needs analysis at all income levels produces a scaled reduction of loan eligibility with respect to a measure of financial strength. Financial strength does not always correspond with family income as other factors, such as family size and structure, reduce a family's funds available for education. Other proposals impose income levels above which there is no loan eligibility regardless of financial need.

An illustration of the correlation of family income and financial strength can be seen in the following table. It shows the percentage of each income level that is financially dependent and from large families (over 4 members) with more than one student currently in college.

1981-82 NYSHESC GSLP Recipients

Income Level	Frequency	Percent of Income Level From Large Family With Multiple College Students
\$ 0 - \$15,000	30%	7 %
\$15,001 - \$30,000	27%	23 %
\$30,001 - \$50,000	30%	39 %
over \$50,000	13%	45 %
Total	100%	25 %

The above table shows how family structure (and hence financial strength) is correlated with total family income. Higher incomes correspond to larger families with increased demand on disposable income. Hence, in real terms, the student with the \$45,000 total family income is not simply twice as financially strong as the student from the family with total income of \$22,000. The needs analysis methodology considers these factors when assessing loan eligibility. Proposals with income "cut-offs" do not. Hence there are substantial differences in impact by income level.

Estimated Reduction in Loan Volume
As a Percent of 1981-82 Approval Volume
Cost Reduction Proposal

Income Level	I	II	III	IV
\$0 - \$15,000	0%	12%	0%	50%
\$15,001 - \$30,000	0%	20%	6%	34%
\$30,001 - \$50,000	25%	25%	49%	38%
over \$50,000	59%	59%	100%	69%

There are two points that are apparent from the table above. First, the higher income recipients have financial need. This can be seen when contrasting proposals II and III. Proposal II requires needs test for loan eligibility; Proposal III denies loans to any student with income over \$40,000. Note the difference in impact for income levels over \$30,000. For these income levels, Proposal III will reduce loan availability to over 50,000 students that are considered to demonstrate financial need under the needs analysis methodology. The second point to be made is that the needs analysis requirement for independent student is extremely severe and will deny and reduce loans to the lower income, self-supporting student. The denial of graduate loans also predominately affects the lower income student so that the combined effect of these two components, as in Proposal IV will impact lower income students almost to the same extent as it will the higher income student.

For further illustration of the differences in impact of these proposals, see the tables at the end of this section.

Proposal I: Needs Analysis for Incomes Over \$30,000

Estimated Impact By Income Level

Income Level	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
\$ 0 - \$15,000	\$ 0	0%	0	0%	0	0%
15,001 - 30,000	0	0	0	0	0	0
30,001 - 50,000	75,619,000	25	27,770	21	23,065	17
over 50,000	<u>69,175,000</u>	<u>59</u>	<u>11,780</u>	<u>23</u>	<u>27,085</u>	<u>52</u>
TOTAL	\$144,794,000	13%	39,550	9%	50,150	11%

Estimated Impact By Financial Dependence

Financial Dependence	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
Dependent (2 Parents)	\$177,993,000	18%	38,520	13%	40,690	14%
Dependent (1 Parent)	2,787,000	3	950	2	925	2
Independent (Married)	22,346,000	17	90	0	7,930	17
Independent (Single)	<u>1,669,000</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>610</u>	<u>1</u>
TOTAL	\$144,794,000	13%	39,550	9%	50,155	11%

Proposal I: Needs Analysis for Incomes Over \$30,000

Estimated Impact By Level and Sector

<u>Type of Institution</u>	<u>Reduction in GSL Amounts</u>		<u>Students With</u> <u>Reduced Loan Eligibility</u>		<u>Students Denied</u> <u>Loan Eligibility</u>	
	<u>Dollars</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
CUNY - two-year	1,566,000	11%	350	4%	743	9%
CUNY - four-year	3,574,000	11%	725	4%	1,590	9%
CUNY - Graduate	904,000	7%	80	2%	245	6%
SUNY - two-year	23,826,000	27%	7,370	15%	9,815	20%
SUNY - four-year	35,806,000	26%	10,705	15%	13,555	19%
SUNY - Graduate	3,445,000	9%	560	6%	740	7%
Private - two-year	14,950,000	15%	4,115	8%	5,700	11%
Private - four-year	29,572,000	11%	9,475	8%	9,765	8%
Private - Graduate	11,256,000	7%	625	2%	2,630	6%
Instate TOTAL	124,899,000	15%	34,000	9%	44,775	12%
Out-Of-State TOTAL	19,895,000	8%	5,555	6%	5,300	6%
GRAND TOTAL	\$114,794,000	13%	39,555	9%	50,155	11%

Proposal II: Full Needs Analysis

Estimated Impact By Income Level

Income Level	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
\$ 0 - \$15,000	\$ 41,365,000	12%	15,875	11%	11,775	8%
15,001 - 30,000	63,952,000	20	10,875	8	20,825	15
30,001 - 50,000	75,532,000	25	27,770	21	23,065	17
over 50,000	<u>69,083,000</u>	<u>59</u>	<u>11,780</u>	<u>23</u>	<u>27,085</u>	<u>52</u>
TOTAL	\$249,931,000	23%	66,300	14%	82,750	18%

Estimated Impact By Financial Dependence

Financial Dependence	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
Dependent (2 Parents)	\$122,368,000	19%	46,380	16%	40,690	14%
Dependent (1 Parent)	2,948,000	3	1,590	4	925	2
Independent (Married)	73,818,000	58	5,420	12	25,015	55
Independent (Single)	<u>50,797,000</u>	<u>25</u>	<u>12,920</u>	<u>17</u>	<u>16,125</u>	<u>21</u>
TOTAL	\$249,931,000	23%	66,300	14%	82,750	18%

Proposal II: Full Needs Analysis
Estimated Impact By Level and Sector

<u>Type of Institution</u>	<u>Reduction in GSL Amounts</u>		<u>Students With</u> <u>Reduced Loan Eligibility</u>		<u>Students Denied</u> <u>Loan Eligibility</u>	
	<u>Dollars</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
CUNY - two-year	5,027,000	37%	1,275	16%	2,395	30%
CUNY - four-year	11,562,000	36%	1,850	11%	5,285	31%
CUNY - Graduate	3,821,000	30%	610	16%	955	24%
SUNY - two-year	30,635,000	35%	11,700	24%	11,980	25%
SUNY - four-year	45,948,000	33%	16,235	23%	17,080	24%
SUNY - Graduate	10,421,000	28%	1,585	16%	2,190	22%
Private - two-year	31,873,000	31%	8,280	16%	12,720	25%
Private - four-year	44,486,000	17%	12,915	10%	15,385	12%
Private - Graduate	36,460,000	23%	4,485	11%	7,250	18%
Instate TOTAL	220,230,000	26%	58,925	16%	75,245	20%
Out-Of-State TOTAL	29,701,000	12%	7,380	9%	7,510	9%
GRAND TOTAL	249,931,000	23%	66,305	14%	82,755	18%

Proposal III: Needs Analysis For Incomes Over \$25,000;
Denial for Incomes Over \$40,000

Estimated Impact By Income Level

Income Level	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
\$ 0 - \$15,000	0	0%	0	0%	0	0%
15,001 - 30,000	17,566,000	6	6,030	4	4,650	3
30,001 - 50,000	146,422,000	49	13,975	10	59,755	45
over 50,000	<u>116,899,000</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>52,175</u>	<u>100</u>
TOTAL	\$280,898,000	26%	20,005	4%	116,580	25%

Estimated Impact By Financial Dependence

Financial Dependence	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
Dependent (2 Parents)	\$237,409,000	37%	18,945	7%	100,955	35%
Dependent (1 Parent)	5,920,000	6	640	.1	2,425	5
Independent (Married)	34,892,000	27	415	1	12,210	27
Independent (Single)	<u>2,677,000</u>	<u>1</u>	<u>5</u>	<u>0</u>	<u>990</u>	<u>1</u>
TOTAL	\$280,898,000	26%	20,005	4%	116,580	25%

Proposal III: Needs Analysis for Incomes Over \$25,000;
Denial for Incomes Over \$40,000

Estimated Impact By Level and Sector

<u>Type of Institution</u>	<u>Reduction in GSL Amounts</u>		<u>Students With</u> <u>Reduced Loan Eligibility</u>		<u>Students Denied</u> <u>Loan Eligibility</u>	
	<u>Dollars</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
CUNY - two-year	2,678,000	19%	220	3%	1,460	18%
CUNY - four-year	5,778,000	18%	420	2%	2,910	17%
CUNY - Graduate	1,782,000	14%	15	0%	540	14%
SUNY - two-year	32,529,000	37%	5,820	12%	15,300	32%
SUNY - four-year	48,984,000	35%	7,800	11%	21,720	31%
SUNY - Graduate	7,602,000	21%	110	1%	2,060	21%
Private - two-year	25,353,000	25%	2,515	5%	11,860	23%
Private - four-year	68,782,000	26%	2,240	2%	31,360	25%
Private - Graduate	25,906,000	16%	285	1%	6,530	16%
Instate TOTAL	219,393,000	26%	19,415	5%	93,800	25%
Out-Of-State TOTAL	61,505,000	26%	590	1%	22,780	26%
GRAND TOTAL	280,898,000	26%	20,005	4%	116,580	25%

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Proposal IV: Full Needs Analysis;
Denial of All Graduate Loans

Estimated Impact By Income Level

Income Level	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
\$ 0 - \$15,000	\$176,147,000	50%	10,960	8%	48,460	35%
15,001 - 30,000	107,075,000	34	9,010	7	32,545	24
30,001 - 50,000	115,495,000	38	27,000	20	33,220	25
over 50,000	<u>80,257,000</u>	<u>69</u>	<u>10,550</u>	<u>20</u>	<u>30,445</u>	<u>58</u>
TOTAL	\$478,975,000	44%	57,520	13%	144,670	31%

Estimated Impact By Financial Dependence

Financial Dependence	Reduction In GSL Amounts		Students With Reduced Loan Eligibility		Students With Denied Loan Eligibility	
	Dollars	Percent	Number	Percent	Number	Percent
Dependent (2 Parents)	\$209,778,000	32%	44,530	15%	63,110	22%
Dependent (1 Parent)	20,126,000	20	1,520	3	5,285	12
Independent (Married)	110,935,000	87	2,145	5	36,095	79
Independent (Single)	<u>138,136,000</u>	<u>67</u>	<u>9,325</u>	<u>12</u>	<u>40,180</u>	<u>51</u>
TOTAL	\$478,975,000	44%	57,520	13%	144,670	31%

Proposal IV: Full Needs Analysis; Denial of All Graduate Loans

Estimated Impact By Level and Sector

<u>Type of Institution</u>	<u>Reduction in GSL Amounts</u>		<u>Students With</u> <u>Reduced Loan Eligibility</u>		<u>Students Denied</u> <u>Loan Eligibility</u>	
	<u>Dollars</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
CUNY - two-year	\$ 5,027,000	37%	1,270	16%	2,400	30%
CUNY - four-year	11,561,000	36%	1,850	11%	5,285	31%
CUNY - Graduate	12,846,000	100%	0	0%	3,900	100%
SUNY - two-year	30,635,000	35%	11,700	24%	11,980	25%
SUNY - four-year	45,948,000	33%	16,235	23%	17,080	12%
SUNY - Graduate	36,633,000	100%	0	0%	10,060	100%
Private - two-year	31,873,000	31%	8,280	16%	12,720	11%
Private - four-year	44,486,000	17%	12,915	10%	15,385	8%
Private - Graduate	158,435,000	100%	0	0%	41,080	100%
Instate TOTAL	377,444,000	45%	52,250	14%	119,885	32%
Out-Of-State TOTAL	101,531,000	43%	5,270	6%	24,785	29%
GRAND TOTAL	\$478,975,000	44%	57,520	13%	144,670	31%

Technical Appendix

- A. Expected Family Contribution Schedules
- B. Survey Instrument

Expected Family Contribution Schedule*

Financially Dependent, Two Parents

Income Level	Family Size					
	3	4	5	6	7	8
0 - 2,500	-750	-750	-750	-750	-750	-750
2,500 - 5,000	-750	-750	-750	-750	-750	-750
5,000 - 7,500	-560	-750	-750	-750	-750	-750
7,500 - 10,000	-190	-600	-750	-750	-750	-750
10,000 - 12,500	160	-240	-620	-750	-750	-750
12,500 - 15,000	560	150	-230	-660	-750	-750
15,000 - 17,500	910	500	130	-290	-620	-750
17,500 - 20,000	1250	850	470	50	-260	-590
20,000 - 22,500	1610	1190	810	390	80	-240
22,500 - 25,000	2010	1540	1150	730	410	100
25,000 - 27,500	2460	1910	1480	1050	740	430
27,500 - 30,000	2940	2330	1840	1370	1060	750
30,000 - 32,500	3140	2500	1990	1490	1170	860
32,500 - 35,000	3850	3090	2490	1920	1560	1240
35,000 - 37,500	4400	3710	3030	2370	1960	1590
37,500 - 40,000	5210	4420	3680	2920	2450	2040
40,000 - 42,500	5680	4910	4190	3360	2830	2380
42,500 - 45,000	6250	5490	4770	3960	3370	2850
45,000 - 47,500	8890	6120	5410	4590	4000	3410
47,500 - 50,000	7410	6640	5930	5510	4520	3920
50,000 - 52,500	8000	7200	6560	5740	5150	4560
52,500 - 55,000	8450	7710	7030	6240	5670	5070
55,000 - 57,500	9010	8270	7580	6800	6230	5670
57,500 - 60,000	9510	8780	8090	7300	6740	6170
60,000 - 62,500	10020	9280	8600	7810	7240	6680
62,500 - 65,000	10520	9790	9100	8310	7750	7180
65,000 - 67,500	10980	10260	9600	8820	8250	7590
67,500 - 70,000	11420	10710	10050	9280	8740	8190
70,000 - 72,500	11870	11160	10490	9730	9130	8650

* Entries for all incomes over \$30,000 from Federal Register, October 23, 1981.

Entries for all incomes less than \$30,000 from CSS Needs Analysis: Theory and Computation Procedures for 1981-82 FAF, Table F.

Expected Family Contribution Schedule*

Financially Dependent, One Parent

Income Level	Family Size							
	2	3	4	5	6	7	8	
0 - 2,500	-328	-750	-750	-750	-750	-750	-750	
2,500 - 5,000	-99	-750	-750	-750	-750	-750	-750	
5,000 - 7,500	130	-500	-750	-750	-750	-750	-750	
7,500 - 10,000	359	-250	-750	-750	-750	-750	-750	
10,000 - 12,500	588	0	-660	-750	-750	-750	-750	
12,500 - 15,000	817	250	-385	-750	-750	-750	-750	
15,000 - 17,500	1046	500	-110	-660	-750	-750	-750	
17,500 - 20,000	1275	750	165	-355	-750	-750	-750	
20,000 - 22,500	1504	1000	440	-50	-592	-750	-750	
22,500 - 25,000	1733	1250	715	255	-249	-696	-750	
25,000 - 27,500	1962	1500	990	560	94	-304	-746	
27,500 - 30,000	2191	1750	1265	865	437	88	-288	
30,000 - 32,500	2420	2000	1540	1170	780	480	170	
32,500 - 35,000	2910	2450	1940	1520	1110	810	520	
35,000 - 37,500	3360	2840	2270	1820	1380	1090	800	
37,500 - 40,000	3970	3380	2740	2220	1720	1410	1120	
40,000 - 42,500	4460	3850	3150	2590	2040	1690	1370	
42,500 - 45,000	5000	4390	3640	3010	2400	2020	1680	
45,000 - 47,500	5590	4490	4240	3540	2840	2410	2030	
47,500 - 50,000	6090	5530	4780	4080	3300	2800	2380	
50,000 - 52,500	8540	5970	5260	4600	3810	3260	2770	
52,500 - 55,000	6980	6420	5710	5040	4280	3740	3230	
55,000 - 57,500	7430	6370	6150	5490	4720	4180	3640	
57,500 - 60,000	7880	7310	6600	5940	5170	4830	4090	
60,000 - 62,500	8320	7760	7050	6380	5620	5080	4540	
62,500 - 65,000	8730	8160	7450	6780	6020	5480	4940	
65,000 - 67,500	9150	8610	7920	7280	8510	5970	5430	
67,500 - 70,000	9500	8960	8270	7530	6890	6370	5830	
70,000 - 72,500	9930	9390	8700	8060	7320	6800	6280	

* Entries for all incomes over \$30,000 from Federal Register, October 23, 1981.

Entries for all incomes less than \$30,000 are estimated values.

Expected Family Contribution Schedule*

Financially Independent, Married

Income Level	Family Size							
	2	3	4	5	6	7	8	
0 - 2,500	-750	-750	-750	-750	-750	-750	-750	-750
2,500 - 5,000	826	-746	-750	-750	-750	-750	-750	-750
5,000 - 7,500	2720	1320	-430	-750	-750	-750	-750	-750
7,500 - 10,000	4614	3386	1843	-45	-750	-750	-750	-750
10,000 - 12,500	6508	5452	4116	2480	182	-750	-750	-750
12,500 - 15,000	8402	7518	6389	5005	3023	461	-750	-750
15,000 - 17,500	10296	9584	8662	7530	5864	3708	742	742
17,500 - 20,000	12190	11650	10935	10055	8705	6955	4530	4530
20,000 - 22,500	14084	13716	13208	12580	11546	10202	8318	8318
22,500 - 25,000	15978	15782	15481	15105	14387	13449	12106	12106
25,000 - 27,500	17872	17848	17754	17630	17228	16696	15894	15894
27,500 - 30,000	19766	19914	20027	20155	20069	19943	19682	19682
30,000 - 32,500	21660	21980	22300	22680	22910	23190	23470	23470
32,500 - 35,000	23330	23690	24010	24330	24850	24970	25290	25290
35,000 - 37,500	24810	25180	25550	25920	26250	26570	26890	26890
37,500 - 40,000	26120	26500	26870	27240	27610	27980	28330	28330
40,000 - 42,500	37570	28000	38430	28860	29240	29610	29960	29960
42,500 - 45,000	28900	29330	29760	30190	30620	31050	31450	31450
45,000 - 47,500	30220	30650	31080	31510	31940	32370	32800	32800
47,500 - 50,000	31550	31960	32410	32840	33270	33700	34130	34130
50,000 - 52,500	32730	33220	33710	34180	34590	35020	35450	35450
52,500 - 55,000	33900	34390	34880	35370	35860	35350	36780	36780
55,000 - 57,500	35080	35570	36060	36550	37040	37530	38020	38020
57,500 - 60,000	36250	38740	37230	37720	38210	38700	39190	39190
60,000 - 62,500	37430	37920	38410	38900	39390	39830	40370	40370
62,500 - 65,000	38560	38090	39580	40070	40580	41050	41540	41540
65,000 - 67,500	39610	40150	40690	41230	41740	42230	42720	42720
67,500 - 70,000	40680	41200	41740	42280	42820	43360	43690	43690
70,000 - 72,500	41710	42250	42790	43330	43870	44410	44950	44950

* Entries for all incomes over \$30,000 from Federal Register, October 23, 1981.

Entries for all incomes less than \$30,000 are estimated values.

Expected Family Contribution Schedule*

Financially Independent, Single

Income Level	Family Size							
	1	2	3	4	5	6	7	8
0 - 2,500	188	-750	-750	-750	-750	-750	-750	-750
2,500 - 5,000	1864	715	-740	-750	-750	-750	-750	-750
5,000 - 7,500	3540	2530	1240	-390	-750	-750	-750	-750
7,500 - 10,000	5216	4345	3220	1789	-29	-750	-750	-750
10,000 - 12,500	6892	6160	5200	3968	2392	-336	-750	-750
12,500 - 15,000	8568	7975	7180	6147	4813	3059	666	-750
15,000 - 17,500	10244	9790	9160	8326	7234	5782	3778	974
17,500 - 20,000	11920	11605	11140	10505	9655	8505	6890	4605
20,000 - 22,500	13596	13420	13120	12684	12076	11228	10002	8236
22,500 - 25,000	15272	15235	15100	14863	14497	13951	13114	11867
25,000 - 27,500	16948	17050	17080	17042	16918	16674	16226	15498
27,500 - 30,000	18624	18865	19060	19221	19339	19397	19338	19129
30,000 - 32,500	20300	20680	21040	21400	21760	22120	22450	22760
32,500 - 35,000	21750	22170	22590	23010	23370	23730	24090	24450
35,000 - 37,500	23220	23650	24070	24490	24910	25330	25740	26100
37,500 - 40,000	24340	24800	25260	25710	26130	26550	26970	27390
40,000 - 42,500	25590	26050	26510	26870	27430	27890	28320	28740
42,500 - 45,000	26720	27180	27540	28100	28560	29020	29480	29940
45,000 - 47,500	28090	28550	29010	29470	29930	30390	30850	31310
47,500 - 50,000	29070	29610	30140	30500	31060	31520	31980	32440
50,000 - 52,500	30230	30770	31310	31850	32390	32890	33350	33810
52,500 - 55,000	31280	31820	32360	32900	33440	33980	34520	35060
55,000 - 57,500	32330	32870	33410	33950	34490	35030	35570	36110
57,500 - 60,000	33380	33920	34460	35000	35540	36080	36620	37160
60,000 - 62,500	34430	34970	35510	36050	36590	37130	37670	38210
62,500 - 65,000	35420	36010	36560	37100	37640	38180	38720	39260
65,000 - 67,500	36350	36940	37530	38120	38690	39230	39770	40310
67,500 - 70,000	37270	37860	38450	39040	39630	40220	40810	41360
70,000 - 72,500	38200	38790	39380	39970	40560	41150	41740	42330

* Entries for all incomes over \$30,000 from Federal Register, October 23, 1981.

Entries for all incomes less than \$30,000 are estimated values.

