

**Written Testimony Before the Senate Governmental Affairs Committee
February 10, 2000**

**Jerry Sheehan Davis, Ed.D.
Vice President
USA Group Foundation**

Good morning, Senators. My name is Jerry Davis. I am vice president for research at the USA Group Foundation in Indianapolis, Indiana. The Foundation is funded by USA Group, the nation's largest administrator of student loans and the largest guarantor in the Federal Family Education Loan Program. The Foundation conducts research on student access and related matters and supports education through grants for a variety of purposes.

My testimony is based primarily on a monograph the Foundation will soon publish, entitled *College Charges, Affordability, and Earnings Outcomes: An Analysis of Some Long Term Trends and Their Policy Implications*. We will make that report available to you when it is published.

I want to do three things. First, I want to give you some new ways of looking at rising college prices, which I hope you will keep in mind when your colleagues and constituents express alarm about tuition increases. Second, I want to tell you what we at USA Group know about student loan debt burdens from our national database and what we expect to learn from a study we are currently funding. Third, I want to direct your attention to some state-by-state differences in college affordability. I believe these differences have some major implications for student aid policy.

It is well-known that college prices have for some while grown faster than the family incomes used to pay them. Previous testimony before this committee has borne witness to this fact, as has a report from the National Commission on the Cost of Higher Education that Congress created in 1997. Fortunately, colleges have responded to concerns over rising tuitions and the annual percentage increases in recent years are considerably less than those of the 1980s. When we factor in the growing amounts of financial aid that colleges themselves award to students, the trends of the 1990s look pretty good. The colleges deserve credit for responding to the concerns of the public and of public policy-makers.

When we look at the charges to students for tuition, fees, room, and board after the aid from their colleges is considered, and compare those charges to family incomes over time, we find that it has taken an increasing percentage of income to cover average charges. That is useful information, but it is not especially helpful to understanding widespread and growing concerns about rising tuitions. So I decided to look at how many days of earnings at various income levels were required to cover average charges.

Assessing the charges in terms of days of earnings represents an attempt to better understand the viewpoints of parents as consumers of education for their

children. If college charges rise but the number of days of earnings it takes to pay for them does not rise because earnings keep pace with the growth, then we would not expect an increase in concerns about college affordability. I first compared the “gross” charges or the “sticker prices” before available student financial aid is considered. It is appropriate to do this when addressing college affordability issues because the “sticker prices” are the ones families initially confront and the mass media discuss. Many students pay less than the “sticker price” because they receive student financial aid from their institutions, the federal and state governments, and from private sources. But when students and parents initially begin assessing whether college is affordable, the “sticker prices” are very important because they are known facts. Whether students will receive financial aid (and in what amounts) is uncertain and unknown until late in the college planning and enrolling processes.

In the monograph, I make comparisons for three income levels, but for purposes of brevity I’ll refer here only to the median income level. Figure One shows that the number of days needed to cover average charges at four-year public colleges decreased from 27 to 23 between 1970 and 1980. Between 1980 and 1990, the number rose by five to 28. Then, between 1990 and 1997, the most recent year for which complete statistics are available, it rose by four more days, to 32. Between 1970 and 1980, the number of days needed to defray average *private* college charges shrunk from 56 to 51. But between 1980 and 1990, the number of earnings days median income families would had to have used to pay for private college charges rose from 51 to 70 days. In the 1990s, the number rose from 70 to 80 days.

Again, these charges are the “gross” or “sticker prices” for the colleges and do not represent what students actually paid after their financial aid awards were considered. For a more accurate assessment of trends in college affordability from the family viewpoint, it is necessary to consider college charges after financial aid. This is not as easy as it may sound because student financial aid is awarded from myriad sources and the students these sources serve change over time.

Given the difficulties in obtaining comprehensive data from all sources for all three decades I was studying, and recognizing that obtaining precise data is not crucial to understanding the long-term trends being analyzed, I decided to consider “net charges” or “net prices” equivalent to the “gross charges” or “sticker prices” minus *only* institutional aid. Institutional aid includes financial aid amounts available through the students’ institutions from endowments, gifts, and other revenue sources. Institutional aid does not include funds from state and federal governments.

Another good reason for doing this is that I wanted to focus on institutional aid to represent trends in college affordability *from the viewpoints of the colleges themselves*. College leaders continually try to respond to public criticism for rising tuitions. They frequently respond by noting that they have increased their institutional aid or “tuition discounts” to help offset the higher “sticker prices” for students who cannot afford the charges. The trends in “net charges” to the days of earnings required to defray them

are slightly different from the corresponding trends in “gross charges.” Figure Two displays the data.

Figure One showed that the “gross charges” at public colleges absorbed four more days of median income families’ earnings in 1997 than in 1990. At the private colleges the difference was ten days. Figure Two shows that, after institutional aid is considered, the “net charges” at public colleges absorbed only *two* more days of earnings in 1997 than in 1990.

Looking at the increased charges in terms of the 250 annual work days, the average “net charges” at public colleges took 0.8 percent more (two days) of median family earnings in 1997 than in 1990. The “net charges” at private colleges absorbed 1.6 percent more (four days) of earnings in 1997 than in 1990.

When I look at the data and find that it took only two more days of earnings to cover “net charges” at four-year public colleges in 1997 than in 1990, and only six more days than in 1980, I find myself wondering what the current fuss over rising college tuitions is all about. But then I have to consider that my parents, who did not finish high school, were willing to make great financial sacrifices to send my sister and me to college. (We completed our undergraduate study before the Higher Education Act created so many federal aid programs.) My sister and I have received countless benefits from our education so it is of great personal value. And I work in higher education. So perhaps my experiences have biased my viewpoint.

Still, it is hard to believe that these data represent a “crisis” of college affordability. It admittedly is becoming harder for median income families to afford college charges from current earnings. But the research reported in my monograph indicates that it is especially harder for lower-income families to cover costs. It would have taken them 42 days of earnings in 1990, but 47 days of earnings in 1997, to cover average “net charges” at a four-year public college. So it is much more difficult for students from these families to pay for college costs. Thus it is appropriate that the federal government has focused its grant aid programs on students from lower-income families.

Comparing college charges to family earnings is meaningful, because families continue to pay the largest share of the college charges levied on students. However, comparing trends in college charges to family earnings, or to student and family financial resources, considers paying for college expenses as consumption of goods and services rather than as an investment. I believe that attending college can more properly be considered an investment in human capital. Therefore, expenditures on tuition and other charges should be considered investing rather than consuming. We can consider funds spent on college as similar to funds spent on investing in a business or some other financial opportunity. Only in the case of college, students are investing in themselves, rather than in the capital needed to start or operate a business or some other enterprise.

I compared trends in college charges to trends in the annual earnings to see whether growth in *marginal earnings* of young college graduates over young high school graduates have kept pace with the growth in four-year college prices for undergraduates. In this “investment model” for thinking about college charges, I compared the additional average annual earnings to the gross and net charges for attending. If the marginal earnings increase as fast or faster than the charges, it is reasonable to conclude that the returns on the investment, *relative to the costs of investing*, are improving. I made no attempt to assess whether investing money in a college education is a better choice than investing in the stock market or some other venture. My sole interest was in determining whether marginal earnings are growing faster than the charges.

I found that, in 1970, among full-time year-round workers ages 25 to 34, the mean earnings for males with bachelors degrees were 33 percent more than the mean earnings for males with only high school diplomas. By 1997, males with bachelors degrees earned 57 percent more. The differences were even more striking for females. In 1970, female college graduates earned 41 percent more than female high school graduates. By 1997, the female college graduates earned 66 percent more. These statistics help to explain why, in spite of rising college charges, more and more Americans continue to enroll in college.

I used the mean earnings for younger workers because I wanted to obtain approximate estimates of changes in the amount of time it might have taken college graduates to recover their investments in college. I wanted to model situations in which potential students look at the price of four years of college, look at the additional earnings they can expect as college graduates, and then consider how long it might take to recover the investment expenditures with their higher earnings. This is a kind of proxy for assessing the relative value of a college degree over time. I fully recognize that students do not pay for college with their additional earnings from a degree. They pay with current personal and family financial resources, employment earnings, grant and scholarship assistance, and student loans. Then they recover those expenditures with increased earnings.

In the monograph, I compare both gross and “net charges” to additional earnings. In the interest of brevity, I will refer here only to “net charges” (“net” after institutional-funded financial aid is considered). Figure Three illustrates the numbers of months it would have taken male and female graduates to recover four years of college costs with additional earnings if they had started college at different times during the past three decades.

In 1997, it would have taken males 21 months to recover their average cumulative “net charges” for four years of attendance at public colleges with their average additional earnings. That is fewer months than in 1970, 1985, and 1990 and only one month more than in 1995. In 1997, it would have taken females 25 months to recover their average cumulative “net charges” at public colleges. *That is fewer months than in any previous year under investigation.*

In 1997, it would have taken females 54 months to recover their cumulative “net charges” at private colleges. Although that was over twice as long as it would have taken to recover “net charges” at public colleges, it represents fewer months than in any previous year under study. The 46 months it would have taken males to recover their average cumulative “net charges” at private colleges in 1997 represented fewer months than in any previous year since 1970.

Between 1980 and 1997, the value of a college degree, in terms of its relative ability to increase both male and female graduates’ mean earnings, grew faster than did average cumulative “net charges.” *Although “net charges” at colleges absorbed somewhat greater shares of family incomes in 1997 than in 1990, those expenses did not grow faster than the payoff to graduates from those families in the form of greater average annual earnings.*

Because not all students complete their education, it is important to examine the trends in relationships between additional earnings and college charges for non-graduates. When I compared the trends in differences in annual earnings between those of high school graduates and those of persons with one to three years of college, I found that the differences were fairly stable over the three decade period. However, between 1990 and 1997, mean annual earnings for younger males with some college rose by 17 percent but mean earnings for younger male high school graduates rose by 20 percent. During the same time period, mean annual earnings for younger females with some college rose by 18 percent but mean earnings for younger female high school graduates rose by 25 percent. *So the relative benefits of having some college education, at least in terms of additional earnings, diminished slightly during the 1990s.*

Given this circumstance, and the knowledge that college expenses increased substantially during the decade, I expected the relationships between college charges and earnings to have become less favorable to students in the 1990s. The graph in Figure Four illustrates that this happened.

Between 1990 and 1995, *regardless of the students’ genders or whether their colleges were public or private*, there were dramatic increases in the numbers of months needed to recover the average charges for two years of college. Two factors contributed to this increase: a diminished pay-off in increased earnings from attending college without getting a degree, and an almost 30 percent increase in net college expenses.

The students who spent only two years in college during the 1990s would, on average, have taken longer than students in earlier years to recover their college expenses. *The value of some college, in terms of its relative ability to increase either male or female students’ mean earnings, did not keep pace with the growth in average cumulative “net charges.” The cost versus benefit ratios, at least in terms of additional mean earnings, diminished for both males and females.*

Here is how the months to recovery of average cumulative “net charges” would have compared in 1997 for college graduates and for students with only some college, by gender and types of colleges:

	Public Colleges		Private Colleges	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
Graduates	21	25	46	54
Some College	38	50	86	112

It would have taken students who did not complete their degrees much longer than college graduates to recover their expenses. This is especially true for female students. Females with just some college would have had to work twice as long as female graduates to recover their “net charges”--- for half as much time spent in college. The relative value of college training and education, at least as measured by additional mean earnings, was severely diminished when students did not earn their degrees. The financial penalty for failure to complete a baccalaureate degree program grew, because it would have taken so much longer to recover the amounts of money spent on college expenses, even “net charges.”

The penalty for failure would have been even greater if students had accepted loans to help meet their college expenses. For example, if the 1997 students borrowed \$5,000 in Federal Family Education Loan Program (FFELP) loans for two years of study, they would have had to repay about \$7,200 in principal and interest. This would have added six months of earnings to the numbers males, and eight months of earnings to the numbers females, needed to recover their expenses from their modest additional earnings.

In 1997, the typical four-year public college graduate had borrowed \$12,000 in student loans; the typical four-year private college graduate, \$14,000. It would have cost about \$17,400 and \$20,300, respectively, in principal and interest to repay those debts. Therefore, the number of months until recovery of expenses would have compared as follows:

	Public Colleges		Private Colleges	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
Graduates	25	30	51	59
Some College	44	56	92	118

In this illustration, the graduates would have borrowed more than twice as much, and would have spent twice as long in college, as the students who spent only two years in college. But it would have taken college graduates only half as long to recover their education expenses with their additional earnings. If male students had borrowed \$5,000 before leaving at the end of two years, it would have taken them from four to eight years to recover their expenses, depending on whether they had attended a public or a private college. It would have taken female students from almost five to nearly ten years to recover their expenses.

Now, to the second set of issues I wanted to cover today: what we have learned about recent trends in student loan debt and current debt burdens. Since many worry about the difficulties students can have in repaying their loans, let me address that first. Our best estimate of the average loan indebtedness (of loans from all sources combined) for 1999 baccalaureate degree recipients is about \$13,000 for public college graduates and about \$15,000 for private college graduates. We have learned in the student loan business that borrowers typically will find themselves in repayment difficulties when their loan payments reach or exceed 8 percent of their monthly earnings. Table One shows the average starting salaries for four-year college graduates in 1999, based on their previous majors. These data were obtained from annual surveys by the National Association of Colleges and Employers.

The starting salaries vary considerably by majors, from \$26,000 for education majors to \$42,000 for engineers. At these starting salary levels, the average monthly payments, on a ten-year amortization schedule, would represent from 4.4 percent to 8.0 percent of the graduates' average monthly salaries. The graduates who are most likely to experience loan repayment difficulties are humanities majors from private colleges and education majors from both public and private colleges. The rest of the borrowers, again on average, would appear not to face much difficulty in repaying their loans. Moreover, since these figures represent starting salaries, their repayment burdens are likely to go down fairly quickly as their earnings increase.

Table One
Average Loan Repayment Burdens for 1999 Baccalaureate
Degree Recipients,
By Majors and Types of Colleges Attended

<u>Earnings</u> Majors <u>Private</u>	<u>Starting</u>	<u>Loan Payments As Pct of</u>	
	<u>Salaries</u>	<u>Public</u>	
Engineers	\$42,000	4.4%	4.9%
Computer Science	\$40,000	4.5	5.2
Sciences	\$40,000	4.5	5.2
Business	\$33,000	5.4	6.3
Humanities	\$28,000	6.5	7.4
Education	\$26,000	7.0	8.0

NOTE: Payment rates assume the current rate of interest, 6.92 percent, an average public college graduate loan debt of \$13,000, an average private college graduate debt of \$15,000 and a ten-year standard amortization schedule.

How have student loan debt levels changed? I cannot tell you about loan debt from all sources, but we do know a great deal about debt from the biggest loan program, the Stafford Loan Program. Several years ago, USA Group began a long-term project that tracks the growth rates in Stafford Loan debt levels. The Foundation will soon publish the latest report on that project. It is by Patricia Scherschel, currently Director of Consumer Product Development at USA Group. Ms. Scherschel found that between 1998 and 1999 average cumulative indebtedness continued to rise, growing by 3.5 percent to 6.8 percent, depending on the borrowers' types of institutions. *The annual growth rates in loan debt for graduate students and proprietary school students have declined in each of the past three years.* However, the rates for four-year college and community college undergraduates rose in 1999, following two years of decline. In spite of these increases, a key measure of borrower stress---the percentage of borrowers who are delinquent in making payments---has been moving downward since 1995. The economy has been good and has boosted starting salaries, so debt payment burdens have eased a bit. Still we do find that a growing number of borrowers are seeking alternative repayment plans that cut their monthly payments. Also, the increasing use of forbearance helps reduce delinquencies. Although the average debt levels continue to rise, it appears that repayment burdens continue to be manageable for most borrowers.

I was asked by the Chairman to discuss what we might have learned about the effects of borrowing on students' choices of college, decisions to drop out, occupational preferences, and decisions to enroll in graduate or professional school. The USA Group Foundation has commissioned a sophisticated statistical study of these effects. It will be conducted by Professor Donald Heller of the University of Michigan. These study results will not be available until early next year. Meanwhile, an excellent study by Dr. Susan Choy for the National Center for Education Statistics revealed that borrowing had no effects on 1992-93 graduates' employment choices but that borrowers were slightly more likely than other graduates to delay continuing their education in graduate or professional school. That study is "dated," and borrowers' debts have grown substantially since 1992-93, so we might see more negative effects now. That is one reason we are supporting Dr. Heller's research.

Policy analysts have worried about and studied the effects of borrowing on student behavior since the early 1980s. It is important to know, as student borrowing patterns and experiences change, whether loan policies are having unexpected and undesirable effects.

But for now, I think the safest thing to say about borrowing to pay for college is that the effects of borrowing are much, much more often positive than negative. Because of student loans, millions of students are able to attend college, graduate, and have productive careers. Undoubtedly there are many students for whom borrowing has negative effects. They would include many of the students I mentioned earlier who start but do not finish college. They would also include the students who incur large debts to attend expensive professional schools and experience difficulties making their loan payments. They would include some women who are single parents, working in lower-paying careers (such as teaching), and trying to make ends meet while making their loan payments.

Finally, I want to return to matters of affordability and call your attention to some research findings that have important implications for student financial aid policy. In the monograph, I compared the basic "net charges" at four-year public colleges to the median family incomes of state residents with college-age children on a state-by-state basis. I computed the number of days it would take median income families to meet those charges. The results are displayed in Figure Five.

There are very wide differences in affordability among states. For example, in 1997, it took fewer than 23 days of earnings to cover the "net charges" for tuition, fees, room, and board at the four-year public colleges in Georgia, Kentucky, Minnesota, New Mexico, Alaska, North Carolina, Utah, and Wisconsin. It took at least one-third more days (31 or more) for the families in Maine, Ohio, West Virginia, Montana, New Hampshire, New York, Oregon, Delaware, Indiana, Rhode Island, Pennsylvania, and Vermont to cover their colleges' "net charges."

On the surface, these variations might seem to reflect only higher charges, but that is not the only explanation. Some states' families are more wealthy than other states' families, so we might expect the states with wealthier families to spend fewer days to

cover “net charges.” But let me assure you that the large majority of the state-by-state differences in affordability are not the consequence of differences in median family incomes. They are the consequence of differences in state and college policies regarding how much students should be charged for their education.

Federal student financial aid policy does not consider state-by-state differences in college affordability, thus creating inequities in the distribution of aid dollars among students throughout the nation. Between two states whose families have similar financial characteristics and ability to pay for college expenses, the students in the state that has decided to charge higher tuitions will collectively receive more federal student aid. This is because most federal aid is need-based and the students in the state with higher tuitions will have greater financial need. Thus state tuition policies have major effects on how federal student aid is distributed and these effects are largely ignored in federal policy-making. Is this what Congress intended?

As I mentioned above, there was, on average, an increase of only two days between 1990 and 1997 in the number of days it took median income families to cover basic charges at four-year public colleges. That difference is relatively small, but it seems to have caused a great deal of concern among families and public policymakers. It is my contention that families and policymakers should be much more concerned about the six, seven, and eight days differences in earnings needed to cover basic charges at public colleges among the different states. Some families are getting a much better deal than are others. Some are getting a much worse deal. We should, as policy analysts, try to learn more about why these differences exist and what might be done to make education more affordable in the less affordable states. I wrote three years ago that the college affordability crisis is not uniform or universal. It remains so today.

Thank you for this opportunity to share my thoughts and work with the members of the Committee. I hope that my efforts have been helpful to you.

