

## **"I worked my way through college. You should too." 1964 to 2002**

*According to the Census Bureau, in October 2000 there were 15,493,000 college students. Of these 9,875,000 were employed, and 5,229,000 of these were employed full-time.*

Sometime in the late 1980s, an old Washington legislator was listening to a budget request for student financial aid submitted by the Washington Higher Education Coordinating Board. From the accounts of those who were present, he reportedly said "I worked my way through college. You should too." In response the staff of the WAHECB prepared an analysis of the numbers of hours a student would have to work to pay their college expenses without financial aid.

The analysis that follows is our somewhat tongue-in-cheek version of that response. Our analyses assume the federal minimum wage less social security taxes and national average students budgets at public and private universities, 4-year colleges and 2-year colleges. Students work 52 weeks per year--no vacations.

What our analysis shows is that to pay the costs of attending college full-time for nine months in 2002-03 students would have to work at one to four full-time jobs. (Remember there are only 168 hours in a week.)

- A public university undergraduate student would have to work 55 hours per week for 52 weeks.
- A public 4-year college undergraduate student would have to work 50 hours per week for 52 weeks.
- A community college student would have to work 42 hours per week for 52 weeks.
- An undergraduate attending an average cost private university would have to work 136 hours per week for 52 weeks.
- A student attending a private 4-year college would have to work 102 hours per week for 52 weeks.
- A student attending a private 2-year college would have to work 75 hours per week for 52 weeks.

And these data are just beginning to capture the very large tuition and fee increases being imposed on students as a result of the recent economic recession. State budgets are in terrible shape with projected deficits in the \$40 to \$50 billion range. Students of state budgets indicate that states will take years to work their ways out of current budget shortfalls. For the next several years public higher education funding will likely absorb a disproportionate share of state expenditures reductions. And, just as surely, tuitions will be increased in public institutions to offset state revenue declines to public colleges and universities.

### **College Student Employment**

Employment is already a fact-of-life for most college students today. Most students are already working, and many are spending too much time working at jobs that curtail their academic performance and achievement.

In this analysis we focus on the hypothetical situation suggested by the old Washington legislator. Here we look at the number of hours that a college student would have to work to pay his or her way through college.

The period of this analysis spans the years from 1964-65 through 2002-03. This period covers the years when that old Washington legislator may have been in college himself, long before his higher education funding cutback votes caused public colleges to substantially raise their tuition and fee charges to students to offset the funding cutbacks he caused.

Obviously the college attendance cost situation faced by students today is far different from that faced by students prior to about 1980. Until 1980 state investment in higher education enabled public institutions to hold tuition rates to what were in hindsight quite modest rates. Then beginning about 1980 states began reducing their investment effort in higher education (as OPPORTUNITY will report in an upcoming issue). Public institutions resorted to raising tuition and fee charges to students to offset losses in state support for higher education. It is a process that continues today.

During this period the federal minimum wage has been kept truly minimum. Moreover, Social Security tax rates have taken an increasing bite out of that minimum wage. Thus between 1980 and 2002, while the minimum wage net of Social Security taxes increased by 64 percent:

- Public university undergraduate attendance costs increased by 326 percent,
- Public 4-year college attendance costs increased by 325 percent,
- Public community college attendance costs increased by 200 percent,
- Private university attendance costs increased by 434 percent,
- Private 4-year college attendance costs increased by 390 percent, and
- Private 2-year college attendance costs increased by 333 percent.

College students and their families have been truly squeezed by this growing gap between available wages and college attendance costs, particularly those who want to try to work their way without incurring debt from education loans. For most the challenge is clearly impossible.

### **Data and Analysis**

Our analysis here is hypothetical: What would it take if one tried to work his or her way through college? How many hours per week would be required to net enough after Social Security taxes were deducted to pay college attendance costs for nine months of full-time study at an average cost public or private 2-year or 4-year college or university?

We assume minimum wage because college students lack skills (although many have experience from earlier jobs) required for better paying jobs available in the economy. Presumably that is why they are in college--to get those skills so they can get the better paying jobs. At least that is what they say in the annual UCLA survey of American college freshmen.

Our quantitative analysis is detailed in a spreadsheet available on our website accompanying the archived version of this article at:

[www.postsecondary.org/r1/r1\\_02.asp](http://www.postsecondary.org/r1/r1_02.asp)

The basic data and calculations by year and institutional type and control are detailed in the six worksheets.

### **Public Universities**

The chart on page 11 shows the number of hours an undergraduate student would have to work each week for 52 weeks to be able to pay college attendance costs from earnings between 1964 and 2002. Over the period shown, the number of hours rose from 22 in 1964 to 55 by 2002.

In 2002-03 the undergraduate student budget for nine months of full-time study is \$13,779. The current federal minimum wage is \$5.15 per hour, with 6.2 percent taken off for OASDI taxes (Social Security), leaving \$4.83 per hour available for college. Thus the student would have to work 2852 hours at a net \$4.83 per hour to accumulate \$13,779. If the student worked 52 weeks per year, the average annual hours worked would be 55 hours per week. (Note that the Bureau of Labor Statistics considers 35 hours per week to be a full-time job.)

As shown in the chart on page 11, an undergraduate could have supported him or herself in college at about 22 hours per week between 1964 and 1981. But after 1981 the hours required suddenly began to grow, steadily and sharply, to 55 hours per week by 2002. This growth corresponds to the cost-shift in the financing of public higher education that began about 1980 and continues today. As the cost of higher education have been shifted from state taxpayers to students, and the federal minimum wage has not kept up with this cost-shift, the number of hours required has more than doubled.

If certain public policy choices had been made, the number of hours required to finance an average cost public university education from earnings need not have risen as much as it did. These choices are:

- Restore state appropriations to public institutions, and/or to
- Reduce the payroll tax on the hourly earnings of college students, and/or to
- Increase the federal minimum wage, probably by at least doubling it.

But none of these things happened. And so the number of hours required to finance a year of average cost public university education increased from 24 hours in 1981-82 to 55 hours by 2002-03. The recent sharp growth is likely to continue for several years as state budget deficits produce further appropriations reductions for public institutions and tuition charges to students are increased to partially offset losses in state revenue support.

### **Public 4-Year Colleges**

The chart on page 12 shows the number of hours a student would have to work each week for 52 weeks to finance a year of full-time study at an average cost public 4-year college. In 1964 the student could have done so on 19 hours per week, but by 2002 this had risen to 50 hours per week. This is about 1.4 full-time jobs, while also enrolled in college full-time.

The data for the calculation for the current 2002-03 academic year are as follows. The national average nine month student budget for a public 4-year college is \$12,515. At a net available minimum wage of \$4.83 per hour (after payroll taxes), the student would have to work 2591 hours. Over 52 weeks this averages out to 50 hours per week.

There are no vacations in this regime. If the student wants to take a two week vacation the number of hours worked for 50 weeks rises to 52. But if the student can get a \$7 per hour job at Wendy's then the number of hours required drops to 37 hours per week.

In this sensitivity analysis the hourly value of labor is very important. The suppression of the minimum wage drives up the number of hours required to meet earnings goals to finance college attendance costs.

As shown in the chart on page 12, a student need only work about 20 hours per week to finance his or her college budget from 1964 though 1981. But after 1981 the cost-shift from state taxpayers to student tuition more than doubled the number of hours required by 2002.

### **Public 2-Year Colleges**

The chart on page 13 shows the number of hours required to self-finance an academic year of full-time study at an average cost public 2-year college. In 1964 it was 19 hours, but by 2002 it had risen to 42. While this is less than the number of hours required at any other type of college or university, it is still seven hours beyond a full-time 35 hour per week job.

The data for this calculation are as follows. In 2002-03 the national average college budget for a student attending a public 2-year college was \$10,458. At a net hourly wage of \$4.83 a student would have to work 2165 hours to finance these costs from earnings. Working 52 weeks per year the student would have to average 42 hours per week.

There are no vacations here either. But if the student wanted two weeks off then he or she would have to work 43 hours per week. Or if the student got a job that netted \$8.00 per hour then the student would have to average only 25 hours per week for 52 weeks. There are choices and options available, but all depend on the availability of jobs. During the recent recession many of these jobs were not available at all, which is why many laid-off workers have returned to community colleges for job skill upgrades.

## **Private Universities**

The chart on page 14 shows the number of hours a student would have to work at minimum wage for 52 weeks to finance nine-months of full-time study at an average cost private university. The hours reach a staggering 136 hours per week--the equivalent of 3.9 full-time jobs. And remember there are only 168 hours in a week.

The data for this calculation for 2002-03 are as follows. The national average undergraduate student budget for a private university is \$34,093. At the available minimum wage of \$4.83 per hour a student would have to work 7058 hours to finance this budget from earnings. (There are only 8760 hours in a year.) Over 52 weeks the student would have to work 136 hours per week.

Back in 1964-65 the student would have had to work *only* 38 hours per week at the then minimum wage less payroll taxes to earn enough to work his or her way through college.

Here the run-up in working hours--which reflects the run-up in the prices charged students by private universities--is not justified by reductions in state appropriations. Private institutions do not receive state funding. Rather the price escalation in private higher education after 1981 was caused by faculty compensation increases exceeding those in public institutions. This was reported in some detail in OPPORTUNITY #59 (May 1997) "Are We Moving Toward Two Classes of Opportunity?" by David Berg. This analysis is available to subscribers for downloading from our website under Archives.

## **Private 4-Year Colleges**

The chart on this page shows that a student would have to work 102 hours per week to finance this year's national average student budget for nine months of full-time study at an average cost private 4-year college. Back in 1964-65 the student would have had to work only 32 hours per week (for 52 weeks) to accomplish the same end.

Here are the numbers. For 2002-03 the national average cost of attendance is \$25,655. At an available \$4.83 per hour minimum wage, a student would have to work 5311 hours to accumulate \$25,655. If the student worked 52 weeks per year he or she would have to average 102 hours per week to work his or her way through college.

Back in 1964-65 the student would have had to work 32 hours per week at the then minimum wage to work his or her way through college.

## **Private 2-Year Colleges**

Although this issue lacks space to show the chart for private 2-year colleges, the chart is available on the archived version of this article on our website. So too is the spreadsheet that contains the data.

For 2002-03 the national average student budget for nine months of full-time study at a private 2-year college is \$18,861. At the available minimum wage this would require 3904 hours which, if spread out over 52 weeks would require 75 hours per week. In 1963-65 the student could have worked just 27 hours per week at the then minimum wage for 52 weeks to finance his or her year in college strictly from earnings.

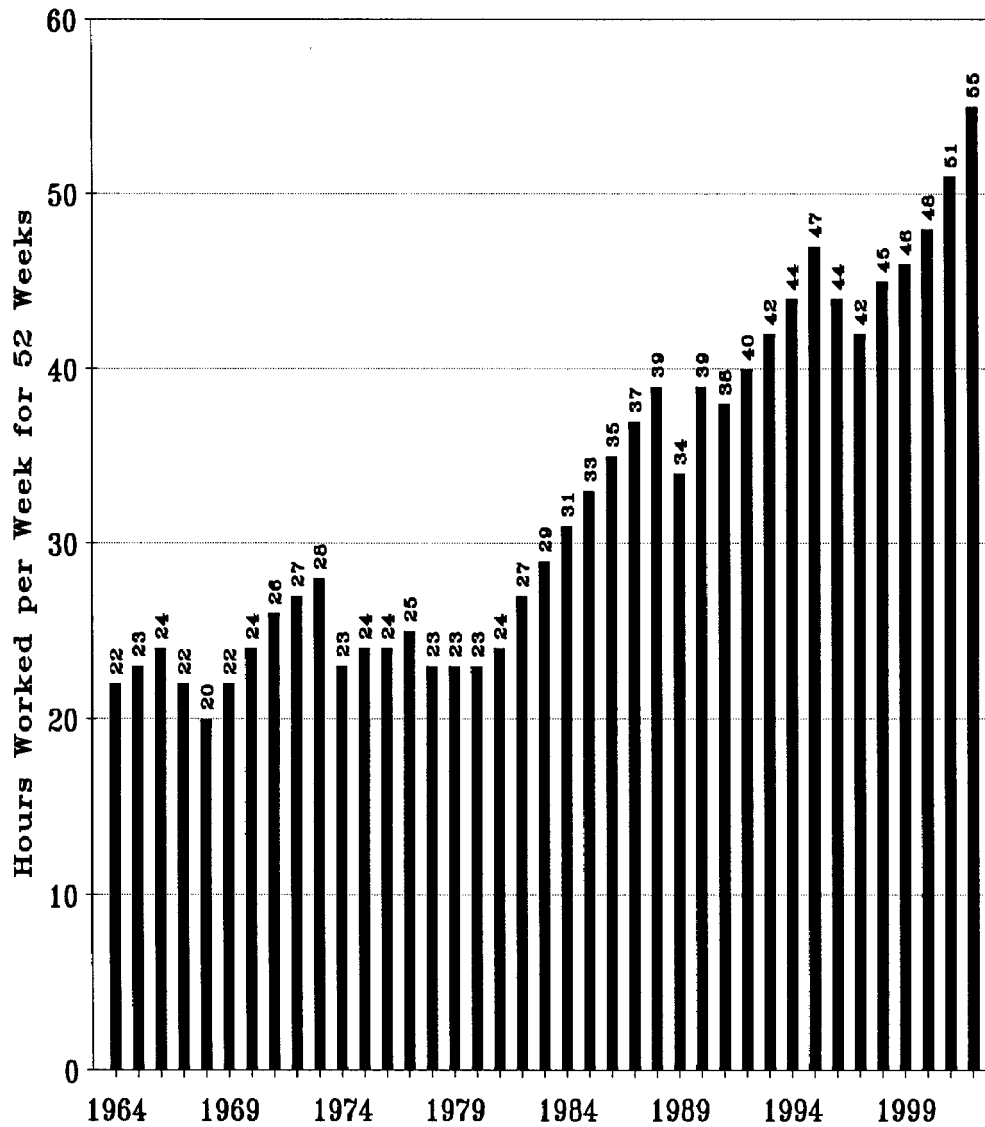
## **Summary**

This has been a slightly tongue-in-cheek analysis of what a student would have to do to work his or her way through college. It is prompted by the badly outdated opinion that "I worked my way through college. You should too." It can't be done today, although before 1980 it could have.

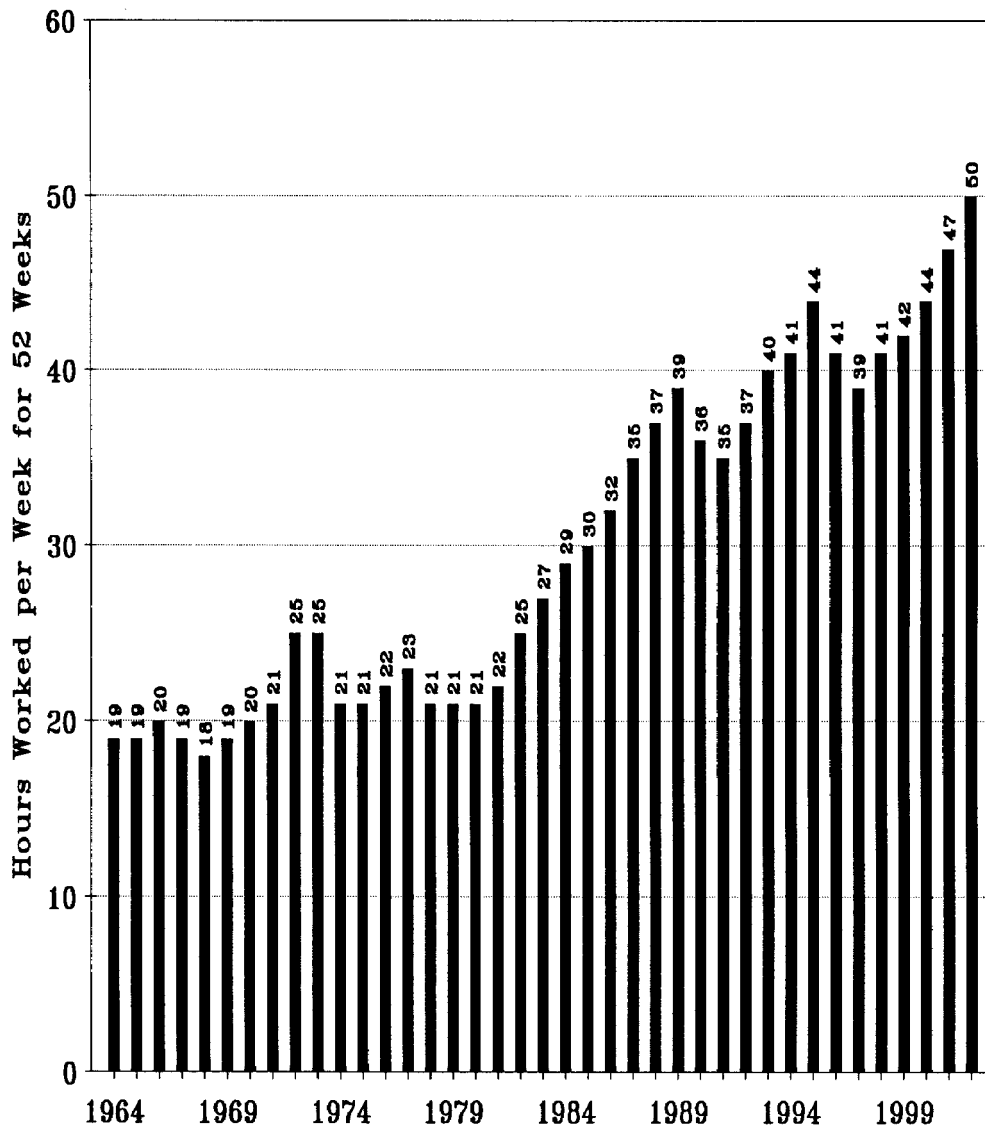
The problem for students in public institutions is the cost-shift from taxpayers to students that began around 1980. Quite suddenly and without precedent, the share of costs of higher education borne by students began to rise and continues to do so today amidst state budget problems. Raising tuition charges to students has been the public institution answer. Private institutions have viewed this as an opportunity to increase faculty compensation.

Clearly students can no longer earn what they need to finance their college budgets. This makes careful public attention to the financial aid system all the more important. Unfortunately, that attention has not been given for more than a decade.

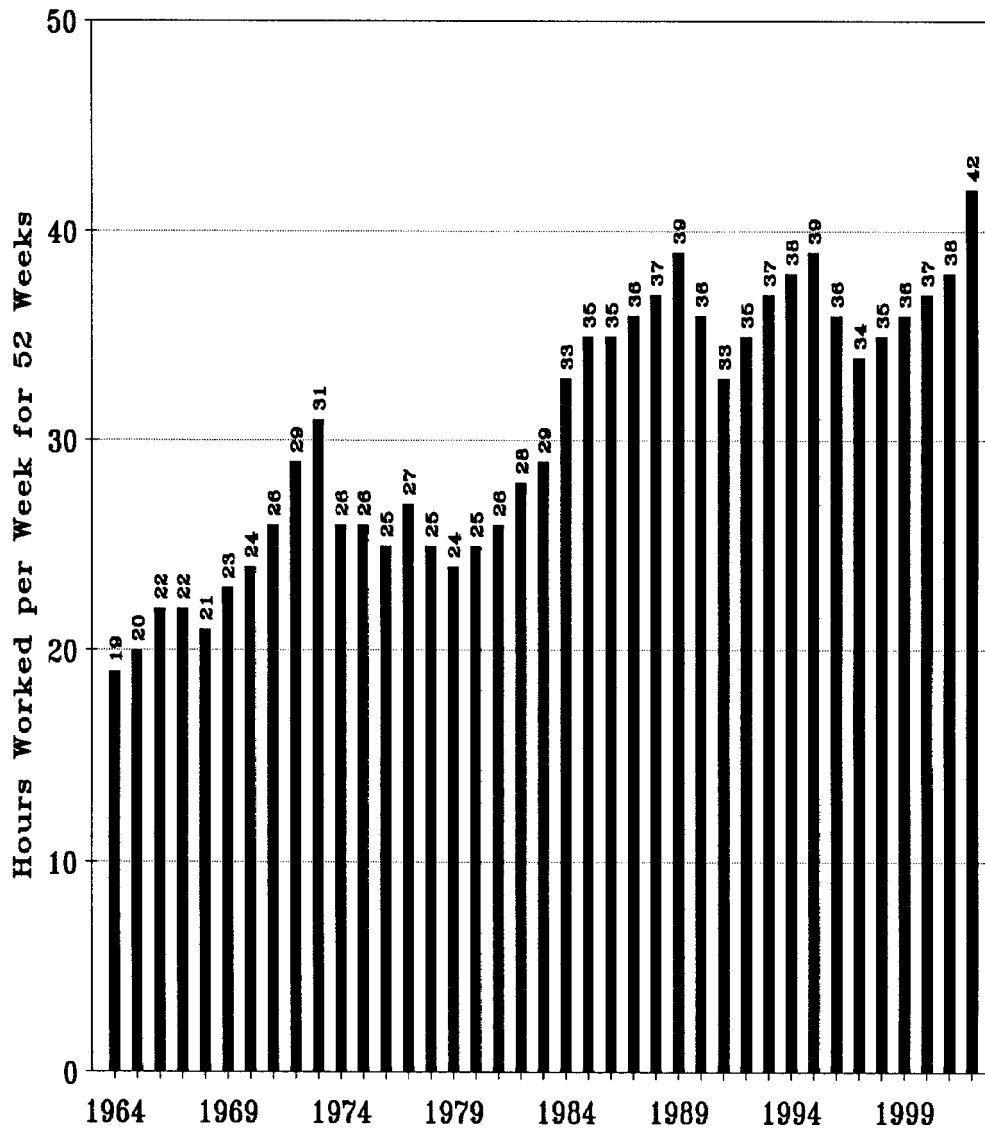
Weekly Hours Worked for 52 Weeks at Minimum Wage  
to Finance Public University Attendance Costs  
1964 to 2002p



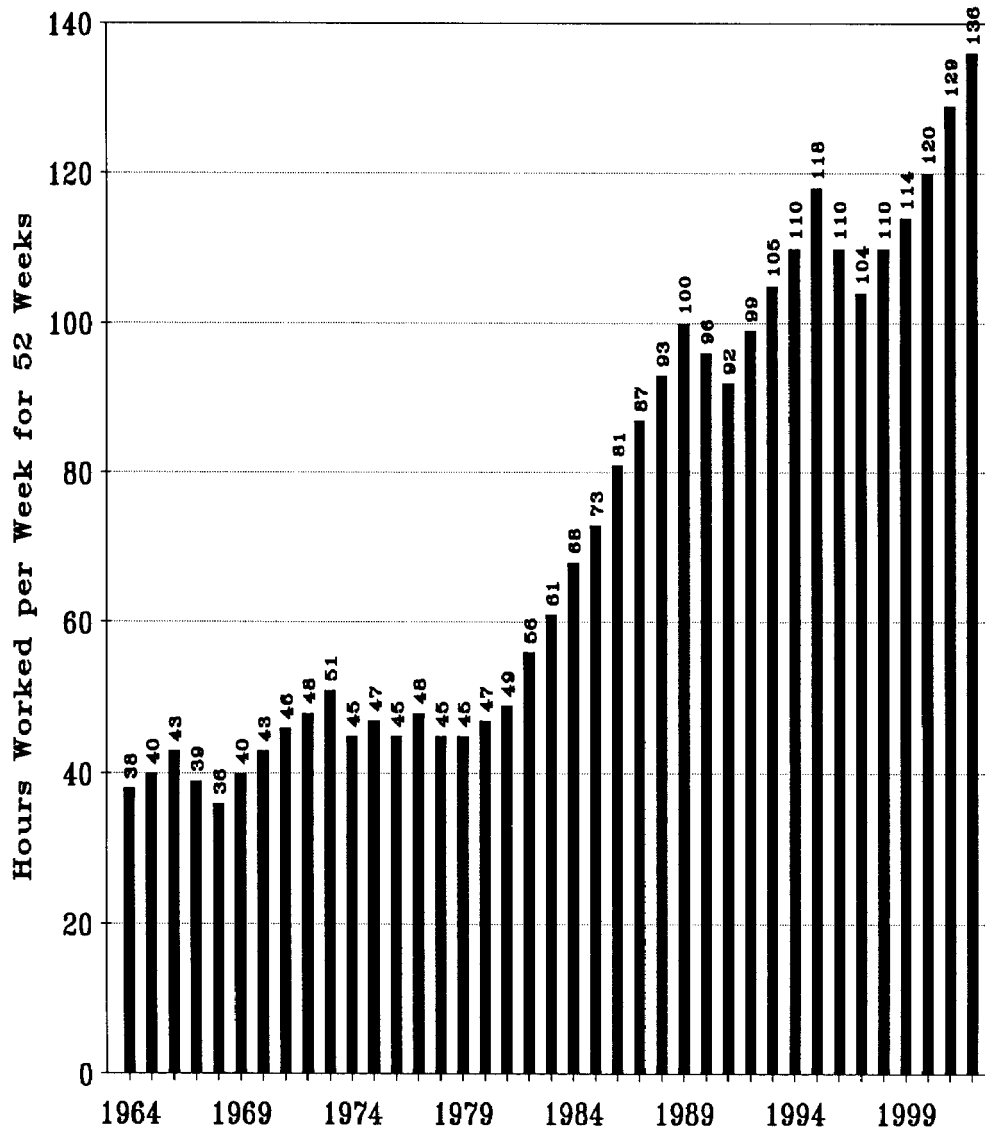
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to Finance Public 4-Year College Attendance Costs  
1964 to 2002p



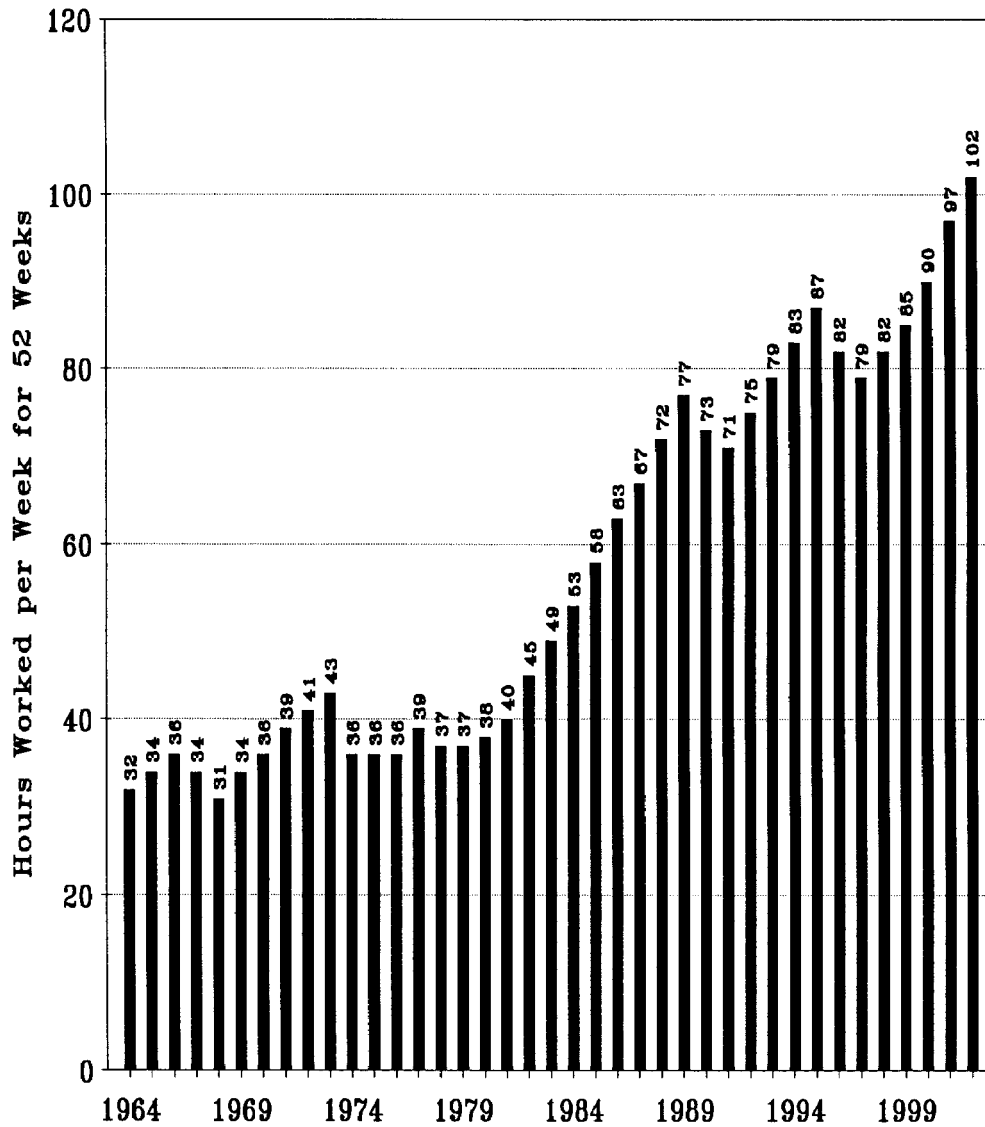
Weekly Hours Worked for 52 Weeks at Minimum Wage  
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1964 to 2002p



Weekly Hours Worked for 52 Weeks at Minimum Wage  
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