

PHOTOCOPY
PRESERVATION

CHAPTER 5

LIVING IN THE NEW ECONOMY

THE CLINTON ADMINISTRATION FIRST came to office on a platform of "Putting People First." And indeed that pledge has been met. While the phrase "the new economy" typically brings to mind technological innovation and globalization, arguably one of the most important outcomes has been the change in the well being of the American people. By virtually any measure, Americans are better off today than they were eight years ago. Furthermore, as we highlight in this chapter, many of these improvements have benefited those who have been among the hardest to reach. Yet despite the dramatic gains, there is still more to do. Through a combination of public policy and continued economic growth, our country can build upon its recent successes and tackle the remaining problems.

Good News from the American Economy

The record setting gains in the stock market and growth in the net worth of wealthy individuals have received much attention in the popular press. What is most noteworthy about this economic expansion, however, is its length and the breadth of its reach. The last few years in particular have brought tremendous gains to the poorest segments of our society.

The gains in employment have been astounding. Since 1993, 22 million new jobs have been created. More Americans are working than ever before; in 1999, 133 million Americans were employed, representing 64.3 percent of the population, up from 61.7 in 1993. The

unemployment rate has fallen to 3.9 percent, the lowest level since 1969, unemployment for blacks has fallen from 14.2 percent in 1992 to 7.0 percent, also the lowest level since 1969 (prior to 1972 unemployment rates were recorded for “blacks and others”) and the unemployment rate for Hispanics at 5.6 percent is also the lowest ever recorded.¹

<insert chart of unemployment rates by race here>

These gains in employment are echoed in growth in income and decreases in poverty. Median household income reached a new high of \$40,800 in 1999, up 2.7 percent in real terms over 1998, and 14.9 percent from 1993. The poverty rate fell to 11.8 percent, the lowest level since 1979, and 3.3 percentage points below the 1993 rate of 15.1 percent. This is the largest 6 year decline in 30 years.

Importantly, these gains were shared across the income distribution. Between 1998 and 1999 real income grew by 4.4 percent at the 20th percentile compared to 3.5 percent at the 80th percentile. And from 1993 to 1999 the respective growth rates were 15.0 and 14.2 percent. In addition, the most disadvantaged subgroups tended to experience the largest improvements in financial well-being. Median income for African American households increased by 7.7 percent between 1998 and 1999 and by 24 percent since 1993. The poverty rate for African Americans is now the lowest ever recorded. Female-headed households are another group on which economic growth has a limited impact. Between 1998 and 1999, however, median income for female headed households increased by 4.8 percent for a total of 18.0 percent since 1993.² This rise in

income and decline in poverty follows large gains in the employment of low-income (below 200 percent of the poverty line) single mothers. [According to a recently released survey, between 1997 and 1999 the number of low-income single mothers who were working increased from 59.7 to 65.2 percent.³] In 1993 just 56.8 percent of female household heads were employed compared to 63.4 percent in 1998 and 65.2 percent in 1999.⁴ Declines in poverty were particularly notable for children. Between 1998 and 1999 the poverty rate for children fell by two percentage points to 16.9 percent, the lowest level since 1979 and the largest percentage point decline since 1966. Poverty among black children declined by an even larger amount in absolute terms, falling by 3.6 percentage points to 33.1 percent. For years poverty in central cities has seemed intractable, yet here too the situation is improving; residents of central cities experienced an above average increase in median income and the largest declines in poverty of any geographic category.⁵

<insert chart of poverty rates by race here>

The strong economy coupled with Administration policies have led to a long list of improvements in the quality of life for Americans. Low interest rates and a strong economy have helped more Americans than ever before become homeowners. In the third quarter of 2000, 67.7 percent of American families owned a home, up from 64.2 percent in the same quarter of 1993 and surpassing the end-of-administration goal set in 1995.⁶⁷ Improvements in job opportunities, in combination with Administration initiatives to hire additional police officers, strengthen gun laws, and increase local resources to improve public safety, have all contributed to a dramatic reductions in crime, with overall crime rates falling to their lowest levels in 26 years.⁸

Our public schools today are showing improvements on several fronts. The average mathematics performance of students at every grade has improved on the National Assessment of Educational Progress tests.⁹ More young people are graduating from high school than ever before, and more are attending college.¹⁰ Average SAT math scores have reached their highest level in 30 years and average verbal SAT scores have held steady despite an increasing number of non-native English speakers taking the exam.¹¹

Strides have also been made along the public health dimension. The birth rate among teenagers declined 17 percent between 1993 and 1999,¹² and smoking among teenagers declined for the first time in nearly a decade.¹³ The fraction of high school students who said they had smoked a cigarette in the preceding 30 days fell from 36.4 percent in 1997 to 34.8 percent in 1999. There is good news for both the youngest and oldest Americans. Infant mortality is down from 8.4 per thousand in 1993 to 7.2 per thousand in 1998. Deaths from heart disease, cancer, strokes and HIV are all down, and life expectancy is up. A child born in 1998 can expect to live nearly 76.7 years, up from 74.9 years just 10 years earlier.¹⁴

While these statistics present a glowing picture of the new economy, more work remains to be done. Despite the tremendous recent gains, the incomes of minorities remain significantly below those of whites and their poverty rates are significantly higher. Infant mortality and life expectancy also differ substantially by race and ethnicity, as do income, wealth, and access to a quality education. Certain areas of the country continue to experience unemployment rates above 10 percent. As the country moves into the new millennium, we must confront these issues.

Helping Families Help Themselves

The new economy has been characterized by new technologies, new methods of communication, and new avenues of trade. However, it has also brought with it new ways of providing for the least well off Americans. With a strong economy and a public policy of making work pay, more Americans than ever before are participating in the labor market, and the number on welfare has fallen dramatically. Low-income families are receiving assistance in making the transition to independence through a network of social programs designed to help families move from welfare to work and to support other low-income working families. By placing the emphasis on helping working families, the Administration has changed the tenor of social welfare policy.

Welfare Reform

One of the most impressive achievements of the past eight years has been the reduction in the number of individuals receiving welfare. The Administration began working towards welfare reform in 1993 by approving a record number of waivers that allowed states to implement changes in their welfare programs on an experimental basis. As of August 1996, 43 states had implemented waiver programs that emphasized work and independence and case loads had begun to fall.¹⁵

These state level changes were followed by the bipartisan Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) signed by the President in 1996. This Act

significantly changed the welfare system on a national level. It replaced the Aid to Families with Dependent Children (AFDC) program with a program of Temporary Assistance for Needy Families (TANF) and, led by a Presidential proposal, established time limits on welfare receipt.¹⁶ With PRWORA, emphasis was placed on helping families leave welfare and enter the labor market. Families are aided in this transition through policies that provide tax credits to subsidize the earnings of low-income workers, assistance with child care, and continued eligibility for health insurance.

TANF differs from AFDC in several fundamental ways. Under the former AFDC program states set eligibility and benefit levels and received matching grants from the Federal government to help with the cost of the program. In contrast, TANF provides states with block grants, used to finance benefits, job preparations, and other worker support programs. Under TANF states have much more flexibility in how the money is spent than they did under the former AFDC program and have used this flexibility to meet the particular demands of their constituencies. States are also eligible for performance bonuses for moving individuals into jobs, reducing the rate of out-of-wedlock-births, and increasing participation in the Food Stamp, Medicaid and Children's Health Insurance programs. Second, the new system contains time limits and work requirements: Federal funds cannot be used to pay benefits to recipients who have received assistance for a lifetime total of 60 months, although states can exempt a portion of recipients from this requirement. Alternatively, states may set even shorter time limits or may use state only funds to continue support beyond five years. In 1999, 38 states used the 60 month time limit, and the remainder implemented other policies.¹⁷ With respect to work requirements, TANF recipients must work in some capacity after two years of receiving benefits. Again, states

have a good deal of flexibility in implementing the rule and particularly in strengthening requirements. In 1999, 28 states had welfare policies that imposed immediate work requirements in lieu of the two year requirement.¹⁸ Finally, a third dimension in which TANF and AFDC differ significantly is the ability of states to design the parameters of the program to best suit the needs of their poor families. While states always had the freedom to set benefit levels, TANF allows them to establish their own ways of determining the incomes of potentially eligible families, and to set income and asset limits for eligibility. The majority of states have used this freedom to reward work by decreasing the implicit tax on earnings. The AFDC program often reduced benefits dollar for dollar for any earnings above \$90 per month if the individual had been enrolled in AFDC and working for one or more years. This 100 percent “tax” created a strong disincentive to work, as many AFDC participants received no increase in income for additional hours of work. Under TANF most states impose a more gradual benefit reduction rate and lower implicit tax rate, to encourage greater workforce participation. Many states are also using the flexibility and resources provided under the welfare reform law and regulations to invest in a wide range of supports to help welfare recipients and other low-income working families enter the work force and succeed on the job.

Since August of 1996 caseloads have fallen dramatically; the average monthly caseload has declined by 6 million, a reduction of 49 percent.¹⁹

<insert chart of AFDC/TANF Recipients here>

Looking back to 1993 to include the reductions that took place during the period of state waivers, the welfare caseloads fell by 7.8 million or 56 percent. Declines in some states have been even more dramatic. In Wisconsin, for example, the number of welfare cases fell by 70 percent between 1996 and 1999, and by 82 percent since 1993. **[checking for updated data]**

The 1996 reforms have undeniably been successful in reducing the number of individuals receiving welfare. However, reductions in caseloads are not the only measure by which to judge the accomplishments of the policy. An important outcome is the well being of individuals once they leave the welfare rolls. Much of what we know about the outcomes for welfare leavers comes from studies undertaken by individual states. To date, over 30 states have conducted studies monitoring the outcomes of those who have left welfare, often including data from the state waiver experiments undertaken prior to PRWORA. Because the available data can differ significantly across states and does not represent nation-wide averages, this Report supplements the state-level information with new results from the 1996 panel of the Survey of Income and Program Participation (SIPP),²⁰ providing some of the first evidence of the effect of welfare reform for a nationally representative sample. The majority of our results from SIPP are based on a sample of individuals who left welfare and are observed for at least 12 months following the exit. Individuals in SIPP are first interviewed between December 1995 and March 1996, and are then re-interviewed every four months. Survey data currently exists for respondents through November 1998 to February 1999, depending on the month of the initial interview. We are therefore examining the experience of some of the early leavers after welfare reform, and are unlikely to observe the effect of the two year TANF time limit that exists for many TANF cases and will certainly not observe the effects of the five year lifetime limit.

When considering the outcomes of the 7.8 million individuals who left welfare, one of the most important issues is the incidence of recidivism—the number of individuals cycling on and off the rolls. Both data from SIPP and a synthesis of state studies of former welfare recipients show that only 25 percent of the leavers return to welfare during the first 12 months after leaving. The majority of those who do return do so quickly; 18 percent of those who exit return within the first 6 months of leaving, while only 7 percent return during the second six month window. One would imagine that the probability of returning would continue to fall with the length of time off welfare. [Look for evidence from MD]

A key component to successful exits from welfare is the ability to obtain a job and remain employed. [Add something about DOL training programs] Efforts to help individuals obtain jobs have tended to use one of two strategies. The “work first” approach aims to get people employed as quickly as possible, assuming that work itself will teach the skills needed to remain in the labor force and eventually move to a better job. In this approach the focus is on maintaining some attachment to the labor force rather than on initial wages. The alternative approach uses more extensive education and training prior to entering the labor market. In this case labor market entry is delayed, but it is hoped that the initial job will be of higher quality. The work first approach is by far the most commonly employed, and initial evidence indicated that it was more successful—employment and earnings were higher in areas that employed this strategy. However, a new study comparing outcomes across counties in California over a nine year period finds that over the long term results for the two methods appear to be similar.²¹

Although the increases in employment were not as dramatic as the declines in case loads, the gains in labor force participation are still substantial. Administrative data from studies of several different states show that between 62 and 75 percent of those leaving welfare were employed at some point in the year after leaving welfare and approximately 40 percent were employed in all four quarters.²² Similar results are observed on a national level. Data from SIPP show that of those observed for 12 months after leaving welfare, 66 percent were employed at some point and 65 percent of this group (43 percent of the total) had earnings in all four quarters of the year. However, many of those working year round are employed less than full-time. Thirty-two percent of welfare-leavers worked 50 weeks or more during the year, and 40 percent of this group (12.8 percent of all leavers) worked 35 or more hours in every week.

Many former welfare recipients appear to be successful in maintaining an attachment to the labor force. In the sample of SIPP leavers who were working at some point during the 12 months following exit, 48 percent did leave a job during that period. However, when examining reasons for leaving a job, the most common explanation was “left for new job” reported by 22 percent of those who left their job. Furthermore, data submitted to the Department of Health and Human Services [is this where the data are submitted?] by 46 states who were competing for a high performance awards for placing former welfare recipients in employment and for job retention show that between October 1997 and September 1998 [update when new data become available in November] 1.3 million welfare recipients went to work and 80 percent of those who found a job remained employed three months later.²³

Importantly, the rates of employment increased even among those who remained on welfare. In 1999, 28 percent of welfare recipients were working, compared to just 7 percent in 1992.²⁴ The development of an attachment to the labor market for those currently on welfare bodes well for future exits.²⁵ For both workers who have left the welfare rolls, and those receiving benefits in addition to their earnings, the importance of the booming economy should not be understated: The longer the economic expansion continues, the more job skills former and current welfare recipients will accumulate, and the better prepared they will be to weather an economic downturn.

In addition to employment status, success after welfare can be gauged by earnings and the potential for earnings growth. For the sample of SIPP leavers, median monthly household income plus food stamps for the year following exit was \$1,605, compared to \$1,509 in the two months preceding exit. For 44 percent of leavers, the total household income plus food stamps in the post-exit year was more than \$50 higher than in the months before leaving, while for 49 percent it was at least \$50 lower. It is important to recognize that credits from the Earned Income Tax Credit program (discussed in detail below) are not included in these calculations. Although benefits from the EITC are not recorded in the SIPP data, the program provides a substantial subsidy to the earnings of low-income workers, and including the effects of the EITC would likely improve observed incomes and poverty rates considerably.

More important in assessing the potential success of the employment relationship is the extent to which earnings grow over time. Because many former welfare recipients find employment in low wage industries such as restaurant/fast food prospects for earnings growth

may not seem extremely bright.²⁶ However, comparing outcomes over just the first 12 months after exit, 39 percent of SIPP leavers had monthly earnings in the second 6 months that were \$50 or more higher than in the first 6 months while 28 percent had a \$50 or greater reduction in earnings over the two 6 month periods. Thus, a relatively large fraction of former welfare recipients did find jobs that provide earnings growth through increases in hours or wages or both.

Making Work Pay

A network of government support programs available to working families facilitates the transition from welfare to work. In the past, families leaving welfare often lost not only their cash assistance and faced explicit payroll taxes, but also faced other implicit taxes on their incomes through the loss of in-kind benefits, such as food stamps and Medicaid, and additional expenses incurred by working, such as the cost of child care and transportation. One study found that the implicit marginal tax rates—the decrease in the amount of government transfers resulting from a one dollar increase in income—for AFDC recipients could easily be well over 50 percent. For a single parent two child family in a typical state, the marginal tax on earnings in a full time minimum wage job was estimated to be 58 percent, before incorporating work related expenses.²⁷ In other words, earning one dollar more in the labor market would increase income by just 42 cents.

The Administration's welfare reform proposals have attempted to reduce these "taxes" by expanding health insurance coverage to include many working families, increasing subsidies for child care, and increasing the rewards from work through minimum wage policies and increases in the Earned Income Tax Credit (EITC).²⁸ The Administration has also worked to help single parents collect the child support payments they are due. These programs also benefit low income working families who were not on welfare. By reaching out to this often neglected group the Administration has worked to ensure that no working families are left behind.

EITC: The EITC is one of the most successful programs targeted at low wage workers and is an important factor in encouraging welfare recipients to enter the workforce.²⁹ Operating through the income tax system, the EITC provides a wage subsidy to low income workers with the amount of the subsidy depending on earned income and whether the family has zero, one, or two or more children. By increasing the wage rate, the EITC creates stronger incentives for individuals to participate in the labor force. For families with two or more children, wages are subsidized by 40 cents for every dollar of earned income until earned income reaches \$9,540 **(check with IRS for 2000)** for a maximum credit of \$3,816. This tax credit is refundable so that even families who pay little or no income tax can benefit fully from the program. Rather than eliminating the credit when earnings surpass this level, the credit remains at \$3,816 until earnings reach \$12,460 and then gradually falls, phasing out completely at earned income of \$30,565.³⁰ This gradual reduction reduces the disincentive to work past the level at which the credit peaks relative to a program that discontinues all benefits immediately when income increases beyond a given level.

<insert chart of the EITC over time here>

The EITC has been expanded greatly since 1993 with increases in both benefits and in the scope of coverage. The 1993 expansions increased benefits for all eligible families, particularly for those with two or more children. The expansion also allowed workers without children to claim a tax credit.³¹ As a result of these expansions, credits paid through the EITC program increased from \$18 billion in 1993 to nearly \$32 billion in 1999, and the number of families receiving assistance from the program increased by one-third, from 15 million to nearly 20 million.³²

This wage subsidy has been effective in attracting more workers to the labor market.³³ One study in particular estimated that the EITC alone was responsible for 34 percent of the increase in annual employment of single mothers over the period 1992 to 1996.³⁴

<insert EITC/Labor force participation rate chart here>

The EITC program also plays an important role in reducing the implicit marginal tax rate faced by those exiting welfare with earnings below the phase-out range.

In addition to increasing the probability of employment, the EITC has done much to improve the well-being of those who take advantage of the program. While the discussion above pointed out the difficulty former welfare recipients have in securing jobs that pay above poverty level wages, when the EITC is taken into account the earnings of many of these new workers

increase substantially. In 1999, the EITC lifted 4.1 million individuals, including 2.3 million children, out of poverty. The program has also been effective in targeting benefits to the most needy. Estimates are that over 60 percent of EITC benefits accrue to families who have pre-EITC incomes below the poverty line.³⁵

Minimum wage: Operating in tandem with the EITC is the minimum wage. While the EITC provides a wage subsidy, the minimum wage laws ensure that the subsidy is based on a fair wage. In 1999, 3 percent of families were headed by a minimum wage worker.³⁶ **[Can anyone help us with data here?]** The real value of the minimum wage declined substantially in the early 1990s, falling to just 61 percent of its 1968 value in 1995.³⁷ Subsequent Administration-backed efforts led to increases in the minimum wage in 1996 and 1997 [edit later: and additional increase of one dollar may pass this fall.] Even with this most recent increase, the minimum wage is equal to only 68 percent [edit later] of its 1968 level.

However when the minimum wage is combined with a possible 40 percent EITC subsidy, the true minimum wage for workers with earnings below \$9,540 is \$7.21, a figure nearly as high as the peak minimum wage rates in the 1960s. Yet despite the generosity of the EITC program an individual working full-time at minimum wage would have a yearly income of just \$14,116 including the EITC, well below the poverty line of \$16,895 for a family of two adults and two children.

<insert minimum wage with EITC chart here>

Child care: For many parents, one of the most difficult barriers to employment is affording quality child care. For low-income families and new entrants to the labor market, the costs associated with child care sometimes make work impossible. Recognizing the cost of child care as a barrier to work, the Administration has fought to make child care more affordable for low-income families, and to provide assistance to a greater number of families. In doing so, it substantially increased funding for child care assistance and combined various child care programs already in existence to create the Child Care and Development Fund (CCDF). The CCDF provides states with block grants to subsidize approved child care arrangements. In 2001 states will have access to more than \$4.5 billion to use to make child care more affordable and to improve the quality of that care.³⁸ The program provides assistance to many. Estimates suggest that over 2 million children will benefit from the program in 2001. Unfortunately, despite the substantial investment many states have waiting lists for benefits and many of those who qualify for the subsidies do not receive benefits. According to one study, 30 percent of families who left welfare and are now working are also receiving assistance with child care. [edit later: Proposal for \$1 billion more in funding]

Food stamp program: The food stamp program supplements family incomes to ensure that low-income families receive adequate nutrition. Benefits are available to families with incomes up to 130 percent of the poverty line. The vast majority of benefits, nearly 90 percent in dollar terms in 1999, go either to families with children or to elderly individuals.³⁹ In 1999, 32 percent of benefits went to working families. Over the past few years, enrollment in the food stamp program has fallen dramatically, from a high of 27.5 million participants in 1994 to 18.2 million in 1999. This decline is notable even among families with children. While asset limits in

the food stamp program result in some poor families being ineligible for benefits , in 1999 only 51 percent of children in families with incomes below the poverty line received food stamps in 1999. Even among the very poorest---children in families with incomes below 50 percent of the poverty line---only 58 percent received food stamps, a decrease of 47 percent since 1993.⁴⁰ Some of this decline is attributable to changes in the law that denied benefits to immigrants and put restrictions on benefits received by able-bodied workers. However, the decline in participation is greater than these specific changes would suggest.

The fall in the number of individuals receiving food stamps is potentially good news; more families may be becoming self-sufficient and no longer in need of government assistance. However, there is concern that many eligible families are not receiving benefits that they need. In particular, it is hard to imagine that those with incomes below 50 percent of the poverty line have sufficient resources that food stamps would not be a valued supplement. Recent economic studies examining the causes of the large declines have found that both the growing economy and changes in welfare programs have contributed to the fall in participation. While results vary substantially across studies, most conclude that the economy is responsible for the majority of the decrease in participation. Furthermore, evidence from the 1993 panel of SIPP shows a similar decline in food stamp participation with welfare well before the implementation of welfare reform. This comparison also suggests that the drop in food stamp participation is not due solely to the institutional changes enacted by PROWRA.⁴¹

The Administration is working to ensure that all those who need assistance have access to food stamp benefits. Recently states were offered the opportunity to receive bonus awards for

levels of food stamp participation and for percentage increases in participation. Twenty million dollars has been allocated for these awards. **[DPC do you have more we can add here?]** 

Child Support Programs: An important component of the Administration's policies to help working families is to ensure that single parents receive the support they are entitled to under the law. Since 1992 child support collections have doubled from \$8 billion to \$16 billion. Furthermore, proposed changes in the welfare law will allow parents receiving welfare benefits to keep a greater share of child support payments than in the past. This change improves the incentives for non-custodial parents to make support payments.

Receipt of child support payments is further aided by policies that reach out to low-income non-custodial parents. The Administration has requested \$125 million for "Fathers Work" grants that, along with responsible fatherhood initiatives funded through the Department of Labor, help these non-custodial parents work, pay child support and reconnect with their children. **[DPC: We are working on this section. This is from the welfare accomplishments document. Do you have more we can add?]** 

Health Insurance Expansions: Historically, AFDC recipients exiting welfare lost their Medicaid coverage when they left welfare. Beginning in the 1980s a series of Medicaid expansions and the implementation of Transitional Medicaid Coverage (TMC) began to provide health insurance benefits for former welfare recipients and low-income families easing the transition to work. Prior to PRWORA children under age six with family incomes below 133 percent of the poverty line and children between age 6 and 19 with family incomes below 100

percent of the poverty line were covered by Medicaid under Federal mandate. Many states opted for even greater coverage, with higher income thresholds and coverage for children of all ages. Adults could also obtain Medicaid up to 12 months through the TMC program or through state medically needy programs. In 1996, PRWORA further expanded Medicaid coverage to single and some two-parent families for families leaving welfare and in 1997, the State Children's Health Insurance Program (SCHIP) was created to target all children in low-income families. Because of the importance of these programs, they are discussed later in the chapter.

Reaching out to Underserved Communities

Providing opportunity and independence for American families often requires more than a strong national economy and responsible welfare policy. In some areas poverty is so entrenched and the local economy so weak that programs specifically targeting these regions are needed. Some of the most intractable poverty is found in our Nation's central cities and rural areas. In 1967, when statistics for these regions were first recorded, the poverty rate for central cities was 15.0 percent compared to a nationwide rate of 14.2 percent. By this measure, central cities were nearly as well off as the rest of the country. In contrast, poverty in rural areas in 1967 was over 20 percent. From 1967 until the early 1990s there was a substantial shift in the incidence of poverty, with a worsening of conditions in the central cities and a slight improvement in non-metropolitan areas. By 1993, the percent of central city residents living in poverty had reached 21.5 percent, its highest level ever, while the poverty rate in non-metropolitan areas declined somewhat to 17.2 percent.

There are several factors that contribute to the plight of these distressed regions; some of these causes are specific to urban or rural poverty while other explanations are common to both areas. Residents of both central cities and rural areas are more likely than the population as a whole to be illiterate, have low job skills, live in female headed households, and have less education. Secondly, residents may lack the social connections to help them find the jobs necessary to escape from poverty [is this ok for rural areas?]. These factors are associated with high levels of poverty regardless of area of residence. Current policies to make work pay, discourage out of wedlock child-bearing, and improve schools in poor neighborhoods, are addressing these issues.

In some respects central cities are more attractive places to live for many low-income workers. Housing in central cities is often less expensive than in outlying suburbs, public transportation is readily accessible, and city governments often provide more generous support services than other areas.⁴² However, without adequate job opportunities, life in central cities can be unsatisfactory. One factor that appears to distinguish the situation in central cities from that in other areas is limited job opportunities. Recent research has shown that most job creation is taking place in suburbs rather than in inner cities. A recent HUD study found that not only was job growth slower in the cities than in the suburbs between 1992 and 1997, but also that the job mix in cities is shifting towards high-tech jobs unavailable to low-skilled workers.⁴³

The difficulty central city residents face in finding employment is further heightened by transportation problems and discrimination. Low-income workers, and welfare recipients in particular, are unlikely to own cars. They must therefore rely on public transportation to

commute to jobs. A recent study found that nearly half of low-skilled jobs in the suburbs were not accessible by public transportation.⁴⁴ Minority workers in central cities are further hindered in finding jobs by discrimination in the housing and employment markets. A recent study found that minorities have difficulty in renting or purchasing housing in the suburbs and are less likely to be hired by white owned firms that predominate in the suburbs.⁴⁵ Furthermore, suburban housing may be more expensive than housing in the central city.

From a policy perspective there are several approaches to addressing this mismatch between where low-skilled workers live and where they work. First, rebuild the economies of central cities. Second, overcome the transportation hurdles of commutes to the suburbs. Third, help low income families obtain housing near available jobs. Finally, improve inner cities schools so that future generations of workers have the necessary skills and opportunities to succeed in life. The Administration has pursued policies along each of these dimensions.

The New Markets Initiative, Empowerment Zones (EZs) and Enterprise Communities (ECs) and the Community Development Financial Institutions Fund (CDFI fund) are important components of the strategy for rebuilding central city economies [**We are hoping to get data on their success**]. The Transportation Equity Act for the 21st Century established a new Job Access and Reverse Commute Program designed specifically to connect low-income persons to employment and support services. The Bridges to Work (BtW) program provides placement, transportation, and retention services in a select group of cities. The Administration has also made it easier for low-income families to own a car by excluding the value of a car from the asset limitations set in the food stamp program. And current welfare grants can be used to purchase a

car **[details]**. To help workers live closer to jobs in the suburbs, HUD's Section 8 program subsidizes families' rents so that private sector rental units near jobs are affordable. The Administration has created two special programs specifically designed to maximize the impact of the Section 8 program on improving employment outcomes for low-income families. The Administration's Moving to Opportunity (MTO) program provides intensive counseling with Section 8 assistance to help families move from high poverty public housing projects private housing on low poverty areas. The Welfare-to-Work Voucher (WtWV) program provides housing subsidy and services to TANF-eligible families to help them obtain or retain employment.⁴⁶

Rural areas also face significant challenges. Because they tend to have smaller, less diversified economies than metropolitan areas, they can be severely affected by the closing of only one or two industrial plants. And while agriculture is no longer as important to most rural areas as it once was, some regions such as in the northern Great Plains continue to experience long-term population declines from continued restructuring in agriculture. Many rural communities suffer from geographic isolation from major markets, making it harder for residents to find jobs and for businesses to reach their customers. Although recent advances in telecommunications may reduce some of this disadvantage, rural communities lag behind urban communities in access to these technologies. In addition, rural governments lack the economies of scale needed to make many public services economical and so rural communities do not possess the full complement of public services taken for granted elsewhere.

[We need to develop this section more] Numerous Federal programs are reaching out to address the problems of rural communities. In particular, there are a number of regional development commissions targeting specific areas of the country. These commissions include the Appalachian Regional Commission, the Denali Commission, the Mississippi Delta Regional Authority and the Interagency Task Force on the Economic Development of the Southwest Border. Some EZs/ECs are also targetted towards rural areas. The universal service telecommunications assistance, established by the Telecommunications Act of 1996 is also beginning to play an important role in helping to reduce the digital divide for rural America.

Box 5 Community Redevelopment Programs

The Administration's community development policies aim to assist distressed communities by encouraging investments from the private sector. These programs provide incentives, such as tax credits, and improved access to credit markets. At the foundation of this policy are EZs and ECs. In 1994, when these programs began, 9 communities (6 urban and 3 rural) were designated as EZs, providing the urban zones with \$100 million in grants and tax incentives and the rural zones with \$40 million over a ten year period. Additionally, 95 ECs were designated which provided \$3 million in grants and tax credits to each community. The EZ and EC programs give communities substantial flexibility in developing new initiatives to assess and solve problems on a local level. The Federal government provides tax benefits and technical assistance to businesses expanding or locating new facilities in the target zones. It provides grants to the communities themselves to support activities such as job training programs, day

care centers, and community technology centers. EZs/ECs can also apply for waivers from Federal regulations to help address specific economic problems.

[we hope to add more information later as results of evaluations become available.]

Through the combination of policies addressing the long term and short term needs of the urban and rural populations, the quality of life for those living in these areas has improved dramatically. The unemployment rate in central cities has fallen from 8.2 percent in 1993 (July) to 4.8 percent in 1999 (July) while unemployment in rural areas has fallen from xx to xx. These increases in employment has brought with them reductions in poverty and an increases in median incomes. The poverty rate in central cities declined from 21.5 percent in 1993 to 16.4 percent in 1999, with the largest drop, a decline of 2.1 percentage points, coming in the past year. In fact, 80 percent of the total reduction in poverty from 1998 to 1999 came from the reduction in central cities.⁴⁷ Poverty in rural areas has also fallen substantially, from 17.2 percent in 1993 to 14.3 percent in 1999.

<insert metro/nonmetro poverty chart here>

Median household income in central cities has also increased, rising 5 percent in real terms from 1998 to 1999, compared to a 2.1 percent increase for median incomes in metropolitan areas as a whole.⁴⁸ For African Americans the gains were particularly striking. After adjusting for inflation, median income for African American households in central cities increased by 13.9 percent in the past year. Along with these economic gains has come a decline in the number of

individuals on welfare. Caseloads in the largest central cities have declined by 40.6 percent from 1994 to 1999.⁴⁹ Median household income in rural areas increased less dramatically than that in cities, rising just 0.9 percent in real terms between 1998 and 1999.

Despite these dramatic improvements, there is more to do. Poverty rates and unemployment are higher in central cities and rural areas than elsewhere, and rural areas have shown smaller gains. In 1999 the national poverty rate was 11.8 percent compared to 16.4 percent in central cities and 14.3 in rural areas. Furthermore, although dramatic, the 40.6 percent reduction in welfare in central cities was substantially smaller than the 51.5 percent decline nationwide. There continues to be a mismatch between the skills of the urban work force and the demands of urban jobs, and a limited number of jobs available in rural areas. The Administration's New Markets Initiative, EC/EZs and the CDFI fund provide hope for a fundamental change in the plight of inner cities, but these initiatives must be backed with other programs that focus on the future.

Education in the New Economy

In the New Economy, investments in human capital play an ever-greater role. The most direct way in which we invest in human capital is through education and training. Last year's Economic Report focused on the demand for educated workers and on post-secondary education and training. This year we examine America's public elementary and secondary schools, which are crucial to the development of our future workforce. We note recent changes in how we educate our children and ways in which we may best improve the quality of schooling we offer.

There are many components to a quality education. While certainly parents, family, and communities play a crucial role, the discussion here is limited to features of the educational system more directly under the control of Federal, State and local governments. We highlight in particular those aspects which current research suggests are most important and those which are stimulating new policy initiatives. The analysis examines the effect of class size, teacher quality, the infrastructure of schools and equipment, and curriculum changes.

A Role for Federal Education Policy

The Federal government has long sought to improve access to education for the nation's poorest children and to help states improve the overall quality of their public schools. Federal funds are primarily targeted to leveraging reforms, expanding new programs,⁵⁰ increasing access to technology,⁵¹ and to schools and school districts serving poorer and disabled students.⁵² Because they are targeted at these important areas, Federal investment in schooling can have a larger impact than the magnitude of the funds would suggest.

In the United States, primary responsibility for elementary and secondary education rests with states and to local school districts. Our public education system is extremely decentralized, and the Federal role is limited; excluding school-based nutrition programs, the Federal government provides just over 6 percent of the funding for K-12 education.⁵³ Federal spending in the poorest schools does reduce inequalities across school districts, but it does not fully

compensate for the overall pattern of funding disparities related to local property tax bases and state funding for schools.⁵⁴

<insert school district revenue by income chart here>

The largest single Federal program for kindergarten through 12th grade (K-12) education is Title I,⁵⁵ which allocates funds based on child poverty rates.⁵⁶ The targeting of Title I funding towards schools serving poorer children increased significantly with the passage of the 1994 Elementary and Secondary Education Act. In the 1997-98 academic year, 96 percent of schools in the highest-poverty quartile received Federal Title I funds, up from 79 percent in 1993-94.⁵⁷ This quartile of schools served 49 percent of the nation's poor children in 1997-98, and received 43 percent of all Federal funds for K-12 education.⁵⁸ These redistributive aspects of Title I funding are typically significantly larger than any redistributive efforts on the state level.⁵⁹

Reducing class size

For decades, many believed that broad-based educational spending programs, like reducing class size, were ineffective in improving student achievement. However, even the most ardent critics of spending programs now acknowledge that class size reductions are beneficial, especially for disadvantaged students.

Much of evidence concerning the potential effectiveness of reductions in class size comes from a class size reduction experiment in Tennessee. To determine the extent to which smaller

class sizes would improve academic achievement, the state authorized and financed an experiment in which students and teachers were randomly assigned to classes with standard or smaller numbers of students. The results showed significant improvements for children in smaller classes: Students enrolled in smaller classes from kindergarten through grade 3 did better on standardized tests of reading and math than students who were not in smaller classes even after returning to larger-sized classes in later grades. These students also scored higher on their SAT and ACT exams in high school, and were more likely to take such college-entrance exams than students enrolled in larger classes in grades kindergarten through grade 3. The results were especially strong for minority students—being in a small class in elementary school narrowed the difference in the black/white probability of taking a college entrance exam in high school by 54 percent.⁶⁰

The quality of this experiment persuaded many scholars that reductions in class size can improve outcomes for children. Teachers in smaller classes spend more time on individual instruction and review and less time on student discipline and routine administrative tasks.⁶¹ Teachers of small classes may also know their students better, interact with them more frequently and individually, and provide more frequent and in-depth feedback.⁶²

While students appear to do better in smaller classes, reducing class sizes is expensive. Fully funding reductions in class sizes in grades 1-3 nationwide to 18 students per class would cost more than 5 billion dollars per year.⁶³ Despite the expense, the expected gains in students' future earnings are large enough to offset this investment.⁶⁴ However, paying for such reductions in class size is hampered by the current distribution of students and resources. A disproportionate

share of the cost of class size reductions is need for schools serving poor students, since these schools generally have larger classes than more wealthy schools. Furthermore, there is little room at the state level for a reallocation of funds to assist poor schools. The majority of the inequality across school districts is attributable to differences in resources at the state level. Such cross-state differences can be best addressed through Federal programs.⁶⁵ In 1998, the Administration proposed a seven-year Class Size Reduction Initiative to reduce class sizes nationwide in early grades to 18 students per class. In its first year, the program spent a total of \$1.2 billion. These funds enabled school districts to hire 29,000 new teachers, reducing class sizes from an average of 23 students per class to an average of 18 students per class for 1.7 million children. In its second year, the program spent \$1.3 billion, primarily to maintain these lower class sizes **[Ed Dept: any new numbers on what the funds bought in year two?]**.⁶⁶

The need for well-qualified teachers

Reducing class sizes requires an increase in the number of teachers. This increase in demand is in addition to an already predicted surge in the number of teachers needed over the next decade. Between July 2000 and July 2008, the population aged 5-17 will increase by more than a million,⁶⁷ while about three-quarters of a million teachers are expected to retire.⁶⁸ Other teachers will leave the field for other occupations. Without considering the effects of reducing class size, the United States will need approximately 2 million new teachers over the next 8 years.⁶⁹ Currently most occupations are seeing much sharper increases in starting salaries than the teaching profession, leading to an increase in the gap between starting salaries for new

teachers relative to other occupations also requiring a college degree.⁷⁰ This trend will make it difficult to find qualified applicants for the millions of new positions becoming available.

Furthermore, the learning experiences of children do depend substantially on the quality of the classroom teachers. With sudden increases in the demand for teachers due growing student enrollments and reductions in class size, it is a challenge to maintain a consistently high level of quality in all classrooms. In 1996 California began a massive class-size reduction program in the early grades, spending \$1.5 billion per year with the goal of reducing class sizes statewide from an average of 28 students per class to a maximum of 20. By the 1998-99 school year, over 92 percent of California's students in grades K-3 were in classes of 20 students or fewer.⁷¹ However, in these grades, where the class size reduction program was targeted, the percentage of teachers who were fully credentialed fell from 98 percent in the 1995-96 school year to 87 percent in the 1998-99 school year. This fall in the credentials of teachers was even greater in schools with the largest proportions of low-income children.⁷² The success of nationwide reductions in class size thus depends on attracting and retaining qualified teachers, and training those teachers who are currently uncredentialed.

Box 5-x: Investing in Teachers

The level of teacher pay is often cited as an obstacle in recruiting and retaining highly skilled teachers. Simply raising teacher pay will help schools recruit more and better teachers. However, because raising teacher pay across the board may still not adequately reward the best teachers, changes in the structure of teacher compensation have also been suggested as a way to

attract more highly motivated and skilled teachers to the profession,. One of these proposals suggests paying teachers based on performance, with performance measured by classroom observations and/or improvements in student achievement over the course of a year. Performance based pay would mean a significant departure from current teacher pay systems, which generally base teacher pay on education, experience, and responsibilities. Teachers with similar education and experience can differ widely in the quality of the instruction they offer yet the current system provides no reward for exceptional teachers. Tying teacher compensation to performance would also be likely to attract people to the teaching profession who feel that they are likely to be rewarded for their hard work. The growth of the standards movement has also made implementing incentive pay systems more feasible, as educational objectives are now more clearly defined and progress towards them is more clearly assessed.

Nonetheless, there are good reasons to be cautious in implementing such performance-based pay systems for teachers. Students' achievement depends on many factors over which teachers have little or no control, such as family circumstances and previous education. Thus, incentive systems must reward teachers for the progress of students over specific periods, rather than for absolute levels of student achievement. Student learning involves the cooperative effort of many people, and so incentives must be designed to create cooperative, not competitive environments between teachers. Performance-based pay systems also run the danger of focusing attention too narrowly on a few easily measurable indicators of educational achievement, when what is really desired is broader progress in many areas, some very difficult to measure. Another concern is that incentive pay might undermine aspects of teaching which motivate teachers now.⁷³

This Administration has supported investments in teachers. The Teacher Quality Enhancement Grant program has helped to prepare about 3,000 new teachers for high-need school districts and has improved the preparations of about 17,000 other new teachers. The Preparing Tomorrow's Teachers to Use Technology program has supported the implementation and infusion of technology into the preparation and field experiences of 400,000 future teachers. Federal funding for the continued professional development of experienced teachers has increased from \$335 million for Eisenhower Professional Development grants in 1993 to \$1,000,000 for Teaching to High Standards grants in the President's 2001 Budget Request.⁷⁴

The Need for New Schools

All students need safe, healthy, and modern places to learn. Communities across the country are struggling to address urgent safety and facility needs. Based on a 1998 study, the average public school was 40 years old and even older, on average, in minority or poor districts.⁷⁵ Many such older buildings require extensive upgrades of their electrical systems in order to install computers, upgrades made even more expensive for some schools by the presence of asbestos in their walls.⁷⁶ Older buildings may also require extensive renovations to be accessible to disabled students.

Increasing enrollments and reductions in class sizes will increase the number of classes per school, putting further pressure on aging educational facilities. The Department of Education estimates that \$127 billion is needed to bring American's schools into good overall condition.⁷⁷ Already, 39 percent of public schools in the U.S. contain temporary additions, one-fifth of which are in less than adequate condition. Schools with more minority students and schools with more

poor students⁷⁸—the very schools whose students would benefit most from reduced class sizes—are more likely than other public schools to have temporary buildings. Their temporary buildings are also most likely to be in less than adequate condition.⁷⁹ To help address these problems, current Administration spending proposals include \$25 billion in school modernization bonds and \$6.5 billion in loans and grants for urgent school renovation to help communities build and modernize 6,000 schools and make emergency repairs to another 25,000 over the next five years.⁸⁰

New Educational Technology and Internet Access

As workplaces require more computer literacy from their workers, schools must prepare their students to enter the labor force with increasing familiarity with these technologies. Internet access can also be a tremendous resource in classrooms, giving students new incentives for learning and communicating, and connecting them to the resources of libraries, museums, and educational materials from around the world.⁸¹ Tremendous advances in increasing access to technology within American classrooms have taken place over the past 8 years, and Federal programs, especially the E-rate program, have played a large role.

Between 1994 and 1999, tremendous strides were made in connecting public schools to the Internet. The number of public schools with some connection to the Internet nearly tripled between 1994 and 1999—by 1999, 95 percent of public schools had some connection to the Internet and 98 percent of public secondary schools were connected. The increases in Internet

connectivity were even sharper for classroom connections: increasing from 3 percent of public school classrooms in 1994 to 63 percent in 1999.⁸²

<insert internet access chart here>

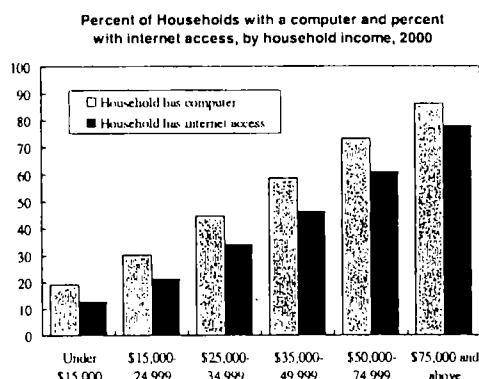
For computers to improve the quality of instruction, teachers must know how to use the technology and how to integrate its use into classroom instruction. Approximately one-half of the public school teachers with computers or Internet access in their schools report using these resources for classroom instruction.⁸³ Teachers who have received more professional development in using computers and the Internet, younger teachers, and teachers in schools with fewer poor students were more likely to report using computers and the Internet. Only one-third of teachers with access to computers and the Internet said that they felt well or very well prepared to use computers and the Internet, and only one-fifth felt very well prepared to integrate educational technology into the classroom.^{84 85} Clearly, more investment in teacher preparation is needed. The Federal government has helped with its Preparing Tomorrow's Teachers to Use Technology grant program, which supports 1,350 partnerships among colleges, educational agencies, high tech companies, and non-profit organizations. These partnerships are training 400,000 new teachers to be better able to integrate technology into the classroom. An additional \$150 million has been requested for this program in the Administration's 2001 budget.⁸⁶

The Federal government has helped local school districts make the transition to the digital age. Through its E-rate program, the Federal government has spent \$5.3 billion as of September 2000 to connect school and library computers to each other and to the Internet.⁸⁷

These funds have been targeted to poor students: Schools with 75 percent or more of their students receiving free school lunches receive approximately ten times as much funding per student from the program as schools with the smallest percentage of poor students. Most of the funds have gone to establishing within-building connections between computers.⁸⁸

Schools are reducing the Digital Divide

Since 1993 computer use in America has grown at an enormous rate, revolutionizing the way Americans communicate, work and do business, and computer knowledge and access are increasingly important for success in today's society. Currently more than one-half of all US households have computers, and more than two-fifths have Internet access at home. However, Internet access is not spread evenly among Americans. Its use varies greatly with income and education--people in households earning more than \$75,000 per year are almost 4 times as likely to use the Internet as people in households earning less than \$15,000 per year.



Adults with college degrees are nearly 6 times as likely to use the Internet as adults who have not completed high school. There are also large differences by race. African Americans and Hispanics are substantially less likely than white and Asian Americans to use the Internet. While some of this difference is due to differences in income and education, a recent study finds

that approximately one-half of the racial difference in access is not explained by these factors. As the level of technological literacy required by employers rises, there is an increased risk that individuals from disadvantaged groups who already face obstacles in the workplace will fall even further behind.

There is, however, good news along this front. African American, Hispanic, and lower-income Americans are connecting to the Internet at faster rates than whites, Asians, or wealthier Americans. The most notable changes are occurring among school aged children, suggesting that the widespread availability of computers in the classroom is playing a role. Across all income and demographic groups, children aged 9-17 are more likely to use the Internet than are older Americans. Over the last few years Internet usage has grown faster among African American and Hispanic children than among white children, and faster among children in households earning less than \$35,000 per year than among children from higher income households. Between 1998 and 2000, the gap in Internet usage between black and white children decreased by 9 percent, although the gap in Internet usage between Hispanic and white children grew by 9 percent. The gap between Internet usage among children from households earning less than \$35,000 per year and children from more wealthy households was unchanged.⁸⁹

Other Federal programs have also helped schools purchase new educational technology. In 1997-98, the most recent year for which such data is available, the Federal government spent \$688 million on increased access to technology in schools, in addition to the E-rate program funds. These funds were used primarily for the purchase of computers and for professional development in using new technology. During the 1997-98 school year, Federal funds paid for

one quarter of new computers in schools. Federal funds were especially important in the acquisition of technology in high poverty schools, accounting for nearly 60 percent of funds for new computers in high-poverty elementary schools.⁹⁰

<insert new computer funding chart here>

Institutional Change

Large investments in education are taking place—in hiring new teachers, in educational technology, in connecting schools nationwide to the Internet, and in professional development for teachers. Yet the changes in American public schools which have happened over the past decade go far beyond increasing these investments. Dramatic changes are also taking place in the way that school resources are used. In the last decade, major system level strategies for delivering education have emerged, including standards-based accountability, whole-school reform, school choice plans, and increasingly shared decision-making.

One of the most significant state-level strategies today is standards-driven accountability. It is hoped that establishing clear performance outcomes and systematically testing student progress will stimulate teachers and students to focus their efforts in the right direction. Spurred in part by the 1994 Elementary and Secondary Education and Goals 2000 Acts, state after state has implemented standards for what all students need to learn in school. These standards have been followed by an increase in standards-based assessment, giving policymakers, parents, and students themselves more information for decision making.

Forty-nine states now have adopted statewide standards for what students should be studying in English, mathematics, science, and history and the social studies—thirty states have implemented these standards since 1994.⁹¹ Forty-eight states have adopted state tests to assess student performance against these standards in reading and math—seventeen also assess student performance against science and social studies standards. Thirty-six publish some form of report card for each school, measuring school performance against a number of indicators, including assessment tests.⁹²

By implementing challenging tests with real consequences, schools can raise the expectations—and the motivation levels—of students, teachers, and parents.⁹³ For many years, opinion surveys have shown that Americans believe our nation's schools are doing poorly—but that their own local schools are doing far better than the average.⁹⁴ Experts warn that parents may not realize when their own children are falling behind. Standards-based assessments can provide parents, teachers and other local decision-makers objective information about how well students are learning—not only in comparison to other students in the same school, but to students at other schools as well.⁹⁵ Furthermore, evidence suggests that those countries and regions with standards and external assessments of student achievement have historically done better on comparison tests of student achievement.⁹⁶

The Federal government has played an important role in spurring the standards movement by providing funds for developing voluntary national standards, granting more than \$1 billion to help state and local education agencies in every state implement school reforms

through the 1994 Goals 2000 Act.⁹⁷ In addition, the 1994 Elementary and Secondary Education Act (ESEA) tied state standards implementation to continued receipt of Title I funds for poor schools. The legislation required that standards used in schools receiving Title I funds are the same standards used in schools not receiving Title I. This meant that states had to implement standards for all schools, or risk losing millions of dollars in Title I funds. The Federal government has also increased its assessment of American students' progress, better enabling us to evaluate these state-level reforms.⁹⁸ In recent years, the Department of Education has expanded the National Assessment of Educational Progress (NAEP) to track student performance in each state. From the NAEP, we now have a tremendously valuable set of baseline indicators for 1990-1996 against which we will be able to measure student progress this decade and in future. This will help us evaluate student performance across states with widely differing state tests. Furthermore, amendments to the Individuals with Disabilities Education Act of 1997 required that children with disabilities be included in state-level assessments programs, allowing us to measure the performance of these children also.⁹⁹

Along with implementing standards, schools and teachers have also made progress in developing and refining curricula. Over the past decade, educational researchers have formed a consensus on how best to teach young children to read, ending the unproductive "reading wars." This consensus was summarized in the National Reading Panel's recent "Teaching Children to Read," and in the National Research Council's "Preventing Reading Difficulties in Young Children." These reports stress the importance of explicit instruction in the building blocks of written language (phonics), within the context of a broader educational program that interests

children in reading for a variety of purposes and gives them ample opportunities to practice their reading skills.¹⁰⁰

Giving Schools the Freedom to Innovate

A persistent thread in the last decade of educational change has been the call for parental choice. Critics have argued that public schools have little incentive to improve because they have a near-monopoly on schooling. Allowing parents to choose among alternatives would create a marketplace for education in which competition for per-pupil funds would force schools to improve.

Many states have answered these critics by allowing parents, teachers, or other interested parties to establish independent schools chartered by state or local education agencies. These charters give schools autonomy over their operations, and exempt them from certain state and local regulations (although not from standards-based assessment). Beginning with Minnesota in 1991, the number of states allowing such charter schools swelled to 36 states and the District of Columbia by the end of 1999. By the beginning of the 2000-2001 school year, there were 2,069 charter schools in operation nationwide and the number of such schools was growing by about 30 percent per year.

Although charter schools represent only 2 percent of all US public schools,¹⁰¹ their rapid growth has made them the recipients of a great deal of attention, especially in areas where a significant percentage of students now attend these schools. Charter schools tend to be about

one-third the size of nearby public schools. Most enroll students of similar racial and ethnic backgrounds as the students in their surrounding districts, although school districts with charter schools tend to have larger minority student populations than the national average. Most reported that they became charter schools to “realize an alternative vision of schooling.” Nearly 90 percent reported that chartering agencies monitored their students’ achievement and their school finances.¹⁰²

Charter schools have great potential as laboratories of educational innovation, allowing individual schools to experiment with a variety of different educational methods and student populations. It is hoped that successful charter school innovations will eventually spread back to the broader public education community.

Helping Students Make the Transition from Secondary School to College or the Workplace

Other Federal programs are helping primary and secondary school students make the transition from secondary school to good jobs or further education. The Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR-UP) partners nearly half a million students in high-poverty middle schools with local colleges and universities. These programs provide entire classes of students and their families with academic enrichment programs; information about college options, financial aid, and necessary preparations for college; and in some cases college scholarships. TRIO programs, such as Upward Bound, help 730,000 low-income, first-generation college, and disabled students prepare for and succeed in college. After 6 years of seed money from the Federal government, all states have instituted

local school-to-work programs to benefit secondary school students as they prepare for their working lives.¹⁰³

Over the past 8 years, Federal assistance to help Americans invest in college educations has also increased. Direct Pell grants have increased from a maximum of \$2,300 per student per year to \$3,300, while the Hope and Lifetime learning tax credits also reduced the cost of education for American families. Fees and interest rates on student loans have been reduced, while the restructuring of the Federal student loan program has saved billions in taxpayer dollars.¹⁰⁴

Innovation and Access in Health Care

Another major aspect of any individual's well being is his/her health status. The quality of medical care available in the United States is the best in the world.¹⁰⁵ This excellent ability to treat medical conditions has been enhanced by recent medical innovations. In addition to the primary benefit of a better and longer life, improved health can also increase the number of healthy days for employees and improve productivity, which in turn contributes to economic growth.

While new treatments can provide better care, they are often very expensive, and thus drive medical spending higher. This high medical spending has prompted the health care system to evolve processes designed to encourage utilization of the most cost-effective treatments.

Further, this high cost makes health insurance coverage both very important, and expensive and hard to obtain for some families. In this section, we will illustrate the value of some medical innovations of recent years. We will also discuss the challenges the health care system faces in determining how to apply technology appropriately, and how the health care delivery system has tried to address that challenge. Finally, we will review the effectiveness of the health insurance system and issues that any proposal to change the health insurance system must address.

Innovation

Dramatic innovations in the medical care—often driven by computerization or pharmaceutical research—have led to improvements such as treatments for previously untreatable conditions, less invasive procedures and more accurate diagnostic techniques. For example, the development of minimally invasive laparoscopic surgery was made possible by advanced digital technology. Using new robotic and computer-generated positioning of instruments and advances in high-resolution three-dimensional video camera, surgeons can now perform a wide range of operations with few tiny incisions. During the 1990s, Magnetic Resonance Imaging (MRI), which provides very high resolution anatomical and pathological images to enable more accurate diagnosis, was widely diffused in the United States and radically improved. When doing brain surgery, new highly computerized open MRI can provide continuous pictures to guide the surgeon. A treatment of Alzheimer's disease, which afflicts four million Americans, was not available until the introduction of new drugs in 1993 that enhance cognitive function and delay disease progression.¹⁰⁶ These improvements are not isolated cases. The number of new drugs approved mirror this trend—from 1995 to 1998, an average of 37.5

new drugs per year were approved, up from 25.2 per year from 1989 to 1994, and 22.8 per year from 1985 to 1989.¹⁰⁷

Costs and value of innovative treatments

By requiring fewer medical inputs to produce the same or better health outcomes, medical innovations can be cost-saving. For example, techniques developed and widely diffused between 1972 and 1990 have made cataract surgery a ten-minute outpatient procedure, eliminating one week of post-operative hospitalization. As a result, the treatment cost has declined. Many pharmaceuticals are also cost-saving innovations. Drug therapies for peptic ulcers and depression, for example, can substitute more expensive abdominal surgery and psychotherapy and are therefore making the treatments for these conditions cheaper.

However, as innovations produce better care, they can also increase costs, by requiring more intense and expensive inputs to produce better outcomes, such as MRI and the treatments for heart attacks and premature births. From 1975 to 1995, intensive cardiac interventions such as catheterization, coronary bypass, and angioplasty were developed and diffused, with usage 4 to 15 times higher for heart attack patients¹⁰⁸. This was reflected in an average annual real increase of 4 percent in the cost per heart attack treated. Although the costs increased, heart attack mortality rate was significantly reduced, and innovations in the acute management were estimated to account for about 55 percent of the declining mortality^{109,110}. *[consider automatic implantable cardiac defibrillate, which is a computerized chip for irregular heart-beat problem]*

Whether the rapid innovations are worth the increased costs depends on the value of the resulting health improvements. Research indicates that better medical interventions have provided significant health improvements. In addition to the contribution of technology to heart attack treatments, other estimates looking at congestive heart diseases also found medical technology played a large role in decreased mortality (43 to xx%). Between 24 and 41 percent of elderly people's decline in functional disability has been attributed to innovations in medical care. These innovations have contributed to overall advances in health: between 1990 and 1998, life expectancy at birth rose approximately 1.3 years, and life expectancy at age 65 rose 0.6 year. The rate of chronic disability declined 1.3% annually between 1982 and 1994.¹¹¹¹¹²¹¹³ Another study sought to estimate the overall value of innovations relative to their costs between 1970 and 1990. It concluded that the lifetime value of higher quality and longer life outweighed the higher health expenditures. In sum, medical innovations are cost-effective on average, and new technology has made the production of health more efficient¹¹⁴.

The health care system has provided stronger incentives for innovations that produce *better* health outcomes rather than less expensive treatments. One reason for this is that people prefer the best possible treatment, and thus, patients and physicians rarely choose technology that produces 1970s results at lower cost to the latest technology that produces better results at higher cost. Second, malpractice lawsuits may enforce the latest technology as the standard of care. The legal criteria to establish a medical negligence is the conventional standard of care, and thus most physicians would not use outdated technology.¹¹⁵ Finally, the pace of basic scientific discovery and information technology developments can spillover into medical treatments,

creating an increasing rate of medical innovation independent of health care system. Therefore, without cost constraints, cost-increasing innovations for better health will dominate cost-saving innovations.

Studies suggest that medical innovations have been the main force in rising health care expenditures in the last two decades, accounting for more than 50 percent of the long term growth^{116, 117}. Rising health expenditures can create access barriers indirectly for everyone, by driving up health insurance prices. However, because innovations are beneficial, a system that simply focuses on 'containing cost' would eliminate beneficial interventions. Thus, medical innovations present two challenges: determining the situations where innovations are likely to improve outcomes that can justify the additional cost, and structuring a system that utilizes medical technology in a efficient manner to improve health outcomes as much as possible.

Delivery system innovation

The new economy involves not only technological but also organizational innovations, and managed care has evolved as a cost-saving organizational innovation that attempts to address rising health expenditures. Because health insurers pay for most health care, the incentives embedded in the health insurance system strongly influence the efficiency of the whole health care system. Before the 1990s, the predominate health insurance arrangement was fee-for-service (FFS), where patients face low co-payments and providers are reimbursed on a cost-based method after each medical encounter. This system provides great flexibility to those who determine the course of treatment for a medical condition, which is desirable given the

complexity of medical needs and variability of appropriate responses. However, because the system reimburses on the basis of utilization, it also provides few direct incentives to use the most cost-effective health care technologies and practices. Specifically, physicians have incentives to overprescribe services and procedures, and patients have incentives to oversubscribe to those services. To address these problems, health insurers sought to change the structure of the incentives in the health insurance system so that providers choose the services efficiently.

Managed care employs two mechanisms to alter providers' incentives: first, it uses prospective payment, which aims to pay providers a fixed payment for a pool of patients. Under this fixed payment, providers have the greatest incentive to reduce treatment costs, as they retain all savings above the costs. The second set of tools managed care plans use is non-financial utilization management, such as command-and-control type regulation, gate-keeping, and monitoring physicians' performance to reduce low-valued services. In addition, managed care can influence the expected profitability of new technology by reducing reimbursement and restricting utilization. Hospitals and physicians would in turn slow down the rate of acquiring and using new and expensive technologies because of lower expected profitability. By balancing patients' desire for better health and the cost-reduction incentives of providers, managed care can encourage more cost-effective utilization of technology, and promote innovations that improve health and reduce costs¹¹⁸.

However, while addressing incentive problems in traditional health insurance practices, managed care creates different problems. These include incentives for structuring insurance

plans to select healthy patients and the under-provision of services¹¹⁹. Fully prospective payment provides a strong incentive to select healthy patients whose health care costs will be low, rather than actually improving efficiency. Furthermore, providers have an incentive to restrict even services that are cost effective because they receive no additional revenue from providing that service. When patients lack information about the effectiveness of alternative treatments, and are thus unable to press for better treatment, this problem can be severe. Therefore, the optimal incentive likely lies between fully retrospective (FFS) and fully prospective payment, and involves partial cost-sharing by providers and patients via copayment and coinsurance. Unfortunately the ideal incentive design is still unknown. As managed care plans evolve to allow patients more choices, the ability to influence utilization is undermined. Consolidation among physicians and hospitals in the 1990s created organizations that pay providers by salary or by FFS, so that fewer physicians and hospitals actually operate on a fixed payment basis. Consequently, current managed care plans are quite different from the original plans, because both sets of tools managed care uses to influence cost-effectiveness have been significantly relaxed.

Empirical evidence suggests that managed care slowed the growth in total health expenditures in the last two decades. These reductions were achieved by reducing utilization of more expensive procedures, and by paying lower physician and hospital fees.¹²⁰ However, further reductions in utilization may not be feasible, and managed care's ability to restrict fees in the future is not certain^{121, 122}. Thus, there is uncertainty whether the observed effect on expenditures will continue.

If technological progress remains the key force driving expenditures, managed care's effect on the rate of health expenditure growth will depend on its ability to influence the types of innovation. If managed care can increase cost-saving innovations, then the rate of growth may be slowed. However, if patients continue to value health highly and are willing to pay for any innovations, managed care may be unwilling or unable to impose cost-saving innovations. The evidence of managed care's impact on the types and rate of technology adoption is mixed. Some researchers found that increased managed care enrollment not only lowers the adoption of cost-increasing technologies, but also reduces utilization of the new technologies^{123 124}. One study found evidence of more cost-effective diffusion of expensive technology in areas with a high concentration of managed care, while a different study found no effect. Thus, managed care's longer-term impact on health expenditures is uncertain.

Pharmaceutical Innovation and Costs

[still considering which, if either of these boxes to use. We will polish after decision based on fit and main content. Suggestions welcome.]

While medical advances open the doors for new and improved treatments, they also contribute significantly to the increases in health care costs. Pharmaceutical innovations illustrate this phenomenon. The rate of pharmaceutical innovations has been high: the number of new drugs introduced per year peaked at 53 in 1996, and continued at a fast pace, with 30 or more new drugs each year since 1996. These new drugs improve existing drug therapies or provide entirely new options for treating conditions. A few examples of the benefits of drug advances are new immunosuppressive agents that increase graft survival, and cholesterol

reducing drugs that reduce the risk of heart attack. However, the accelerating innovation rates have been accompanied by an accelerating cost of drugs: spending on prescription drugs increased at an annual rate of 12 percent between 1993 and 1998, far faster than the 5 percent increase in overall health expenditures.¹²⁵

This growth in spending is due to a number of factors. One of these is that these new drugs are replacing cheaper older drugs. New drugs are priced two to four times higher than old drugs within the same disease subcategory. This higher cost of new drugs accounts for about 40 percent of the increase in drug costs. A second factor is that new drugs have very high utilization rates, and thus even without a price increase, they push medical spending higher. This accounts for about 40 percent of increased drug spending. Higher prices for existing drugs accounts for about 20 percent of the increase in the drug spending.

Because drugs provide improved health benefits while at the same time escalating costs, an important issue is how to evaluate whether those extra costs are better spent on drugs or other alternatives. Medical researchers attempt to estimate the cost effectiveness of a drug by measuring the benefits in terms of quality adjusted life years (QALY), which capture the gains from both longer life and quality of life. By comparing the cost per QALY of alternative treatments, the treatments can be ranked by their cost effectiveness. One study reviewed 228 cost-utility analyses and found that median cost per QALY was \$11,000. While there is no standard threshold for cost effectiveness, \$50,000 to \$100,000 has often been used as a benchmark in the U.S.¹²⁶

However, cost-effectiveness does not mean cost saving. It appears that pharmaceutical innovations have concentrated on new and more expensive remedies, whether or not even if they are cost-effective. This continues to put pressure on health care costs, and thus on health insurance, pushing access to the benefits not only of pharmaceuticals, out of the reach of some. Thus, the health care system must develop a greater understanding of how to create incentives

Online Medical Information

Information asymmetry has been a long-recognized problem in medical care. Patients often do not know as well as the physicians and therefore cannot participate actively in medical decision making. Instead, patients have to rely heavily on physicians for information and treatment decisions. The other related problem is the lack of quality information. Because quality of care is hard to measure and information is costly, patients often do not make conscious choices of health plans and providers based on cost-quality comparisons. Internet can play an important role on bridging the information gap, as it has become increasingly powerful in processing and disseminating information. Such reduction in information cost can significantly change the relationship between patients and providers.

What's available

There are more than 2 million websites available providing medical-related information¹. The high capacity of internet has made available a wide coverage of diseases and conditions, both common or rare ones even to physicians. It also provides a very broad scope of services from

¹ Haven't found an overall estimate yet. Informally, a search of 'health information' returns 2+ million related sites.

diseases/diagnosis/treatments, prevention/public health/health behavior, alternative therapies, to discussion forum and support groups. Information on providers' quality is also growing. Quality measures are available within seconds such as physicians' training, experience, litigation history, and hospital and health plans' performance on selected diseases/conditions and patient satisfaction. Sponsors of the websites include government (AHQR), medical professional organization (AMA, AHA), health plans, employer health coalitions, and other non-for-profit organizations. However, a majority of the owners are commercial, for-profit business².

Utilization pattern

About 60 million³ (or 22 million⁴) Americans (*% of population age xx-xx?*) searched for health information on line in 1998 and the number is expected to increase in 2000. One survey analyzed patients' purposes for seeking medical advice online and found that they were mostly for therapy, diagnosis, patient education, and prognosis information⁵. Analyzing the content of inquiries made to a university hospital website, most of requests (40%) could have been answered by a librarian (*to clarify when get the full article*); 28% can be answered by a physician via email; and 27% are cases that physician visits are necessary in order to make consultation. In few (5 out of 209?) instances patients attempted to self-diagnose⁶.

² "High Volume Medical Web Sites," Delaware Medical Journal, 72(1): 21-9, Jan 2000.

³ "Use of the web for medical information by a Gastroenterology Clinic Population," JAMA, 284 (15): 1962-1964, Oct 2000.

⁴ "High Volume Medical Web Sites," Delaware Medical Journal, 72(1): 21-9, Jan 2000.

⁵ "Requests for medical advice from patients and families to health care providers who publish on the WWW," Archives of Internal Medicine, 157(2): 209-12, Jan 1997

⁶ Patients looking for information on the internet and seeking teleadvice: motivation, expectations, and misconceptions as expressed in emails sent to physician," Archives of Internal Medicine, 135 (2): 152-6, Feb 1999.

Potential impacts

The critical role of online medical information is whether it is supplementing physician's role or substituting physicians. One advantage of making medical information easily available is that it can encourage better utilization of physician visits. As shown earlier, much of patient education can be achieved by information online or email answers by physicians or trained professionals. Improved patient knowledge can encourage shared decision making, which enhances patient preferences and reduces human errors. In addition, better medical knowledge can reduce patients seeking care in the wrong department (such as ER), and increase patient's health awareness and healthy behavior.

There are also many potential barriers. Internet can reduce information cost but can not enable people to comprehend complicated medical knowledge. To the extent that patients use these information to self-diagnose and self-treat, although limited studies suggest the incidence is small, more detailed information can be harmful. The quality of information provided varies a lot, and many search engines are not very effective. There are also potential commercial interests to influence the content of websites. It is questionable whether patients have the ability to distinguish the quality of information and health vs. commercial interests. (induced demand on treatments, drugs?) In addition, readability is a concern. One study showed the average medical information on selected websites was written at a 10th grade level, which is not comprehensible to the majority of patients⁷. Moreover, patients from different socio-economic background may not have equitable access to information, and privacy protection is still a

⁷ Graber MA, et al, "Readability levels of patient education material on the World Wide Web, Journal of Family Practice, 48(1): 58-61, Jan 1999.

serious problem. Although online information can potentially redirect a better patient-physician relation, there remains a lot to be done.

Improving health insurance coverage

As noted, the health care system in the United States is capable of providing the highest quality health care in the world. However, that health care can also be very expensive, particularly treatments for non-routine health care. Even routine health care costs are beyond the means of some people. Thus, health insurance is an important means of ensuring people can get health care. However, about 43⁸ million Americans were without coverage in 1999. In this section we will discuss the current state of the health insurance system, and some approaches that have been considered for extending health insurance to more people.

The health insurance system

The American health insurance system relies primarily on employer-sponsored health insurance--about 63⁹ percent of all Americans (74¹⁰ percent of all insured people) are covered by an employer-sponsored program. One reason for the dominance of employer-sponsored group insurance is that the Federal tax code favors employer-sponsored insurance. Insurance premiums paid by firms on behalf of employees are not included in the employees' taxable income, and in certain arrangements such as flexible spending accounts employees can make contributions to their health care expenses with pre-tax dollars. Because equivalent subsidies do not exist for

⁸ Census on uninsured, p2.

⁹ Census on uninsured, p1.

employees who obtain insurance on their own, this system disadvantages people who do not have employer-sponsored insurance.

There are several valuable aspects of this system. One benefit is that it encourages substantive risk pooling among a firm's employees, enhancing insurance affordability and availability for all risk categories. In addition, firms can hire benefits administrators who can evaluate different health insurance policies and act on behalf of the employees to ensure quality plans are offered. Insurance companies are able to provide lower premiums to large employers, in part because of the lower administrative cost resulting from economy of scale.

Unfortunately, the tax code's treatment of employer-sponsored insurance also possesses some inherent weaknesses. One problem is that the tax-preferred treatment of health insurance provides less of a benefit to low-income people who have a lower marginal tax rate and are most in need of affordable insurance (See chart). In addition, those who do not obtain health insurance through their employer must pay for insurance with after-tax dollars. This includes not only the unemployed and the self-employed, but also people who work for employers that do not offer health insurance, and people who have access to employer-sponsored health insurance but are unable to enroll because their share of the premium is unaffordable.

<insert chart on tax benefit by income here>

People without employer-sponsored health insurance and who do not qualify for publicly funded programs must enter the individual insurance market if they want coverage. This market

¹⁰ Census on uninsured, p14.

can present problems that limit affordable access. Some insurers may chose not to cover people with pre-existing health problems, or sell policies that omit coverage for those conditions. Insurers may also charge different premiums based on an individual's perceived risk; for example, older people may have to pay significantly higher premiums because they are more likely to experience health problems. In some cases, these premiums can be unaffordable. In addition, the cost of administering individual policies leads to higher administrative costs.

Publicly provided health insurance programs—Medicare, Medicaid, and the State Children's Health Insurance Program (SCHIP)—provide an important source of coverage for many people. Created in 1965, Medicare and Medicaid provide health insurance for elderly and low-income Americans. Over 36¹¹ million individuals received medical insurance through Medicare in 1999.¹²⁷ Medicaid offers Federal assistance to States that provide medical care to low-income Americans. Historically, eligibility for Medicaid was linked to eligibility for cash welfare. Beginning in the late 1980s, Medicaid has shifted toward a more general health insurance program that includes low-income working people.¹²⁸ The 1996 Personal Responsibility and Work Opportunity Reconciliation Act, particularly, delinked eligibility for Medicaid from that for cash assistance, and has broadened Medicaid coverage to include more low-income families. Medicaid served over 28¹¹ million people in 1999. In 1997, the Federal government created SCHIP to target the growing number of uninsured children in families that have too much income to be eligible for Medicaid but too little to afford private insurance. Through SCHIP states can provide health insurance to eligible children through Medicaid, a separate state non-Medicaid program, or a combination of both.

¹¹ Census on uninsured, p14, Table A-1.

<insert chart on health insurance coverage by income here>

A significant number--42.6 million people—remain uninsured (See chart) Not surprisingly, health insurance coverage is significantly related to income and employment status. In families with income below the poverty line, 39¹² percent of adults did not have health insurance. In contrast, in households with income greater than 300 percent of poverty, only 9¹³ percent of adults are uninsured. Fifty-three percent of uninsured non-elderly people are in families with incomes below 200 percent of poverty. The source of coverage also varies with income. More than 80 percent of individuals in households with incomes over 300 percent of poverty receive health care coverage through an employer. Medicaid is the source of coverage for about 40% of people below the poverty line. Employees of small businesses (less than 100 employees) are also less likely to have insurance: ~~one-fourth~~ of small business employees are uninsured, compared to ~~one-eighth~~ of the employees in firms with 100 or more workers. This may be because small businesses are unable to take advantage of risk pooling as effectively as larger businesses, leading to higher premiums. Part-time employees are much less likely to have coverage—22¹⁴ percent of people in households with only part-time workers are covered. This is due in part to firms' restricting eligibility to exclude many part-time and temporary workers from health insurance coverage.¹²⁹

¹² Urban Institute, p.3.

¹³ Excel,

¹⁴ Census on uninsured, p5.

There are also significant differences in health insurance coverage across different racial and ethnic groups. Approximately 11¹⁵ percent of non-Hispanic whites, 21 percent of blacks, 33 percent of Hispanics, and 21 percent of Asians and Pacific Islanders were uninsured in 1999.¹³⁰

Options and issues in health insurance reform

Three approaches to subsidizing health insurance to extend coverage are often considered. One of these is providing an "above-the-line" deduction of premiums for insurance purchased in the non-group market, which enables people to deduct the full amount of their premiums from their taxable income, and thus is comparable to the subsidies offered to employer-provided insurance. A second approach is to provide tax credits, which directly reduce tax payments, for health insurance premiums. A third approach is to extend government-provided insurance to more people, like SCHIP, which funds state insurance programs for children in low-income households. All of these proposals seeking to expand health insurance coverage must address the possibilities of crowding out current health insurance and exacerbating adverse selection while effectively reaching the uninsured.

Tax and direct subsidies for expanding health care coverage can crowd out existing health insurance by leading people to drop their current coverage in favor of a more heavily subsidized alternative. Crowding out can also occur involuntarily; a new subsidy may prompt an employer to stop offering coverage and thus encourage its employees to use the new publicly-financed insurance or tax subsidy. When crowding out occurs, government expenditures go not just to the newly insured; some fraction of the money goes to people who had coverage and are

¹⁵ Census on uninsured, p2, Table A.

now switching to a newly subsidized plan. If crowding out is severe, the cost to the government of each net newly insured person increases. Moreover, some employees may lose coverage and be unable to find replacement coverage, reducing the net increase in coverage, or possibly leading to a net decrease.

The mid-range of studies of the Medicaid child eligibility expansions of the late 1980s and first half of the 1990s found that about 10 to 20 percent of the increase in Medicaid coverage was due to a reduction in private insurance coverage. Most of these studies examined Medicaid expansions that did not contain anti-crowd-out provisions. Because Medicaid covers mostly low-income people who are less likely to have private insurance, crowding out might be expected to be modest. However, if eligibility for the subsidy is extended up the income scale to reach additional uninsured, more crowding out might occur since the eligible population is more likely to include people with coverage. Crowd out might be limited by excluding those who already have insurance from eligibility for the new subsidy. However, this penalizes people who already purchased health insurance.

Tax credits and tax deduction plans that subsidize non-group health insurance may produce adverse selection in the individual's choice of health insurance. Unlike crowding out, where the decision to change insurance does not depend on health status, adverse selection occurs when relatively healthy, low-risk individuals believe the cost of insurance is greater than the benefit, and therefore leave the risk pool. As these healthier people with lower health care costs leave the original pool, the average cost per person remaining in the pool will increase. When the medical costs of the remaining participants rise, resulting in higher premiums, still

more people will leave that risk pool. The result is a spiral of rising premiums for those remaining and declining enrollment. People who still desire to purchase health care insurance may experience prohibitively high premiums.

Adverse selection can affect both the group and the non-group markets. The existing tax subsidy for employment-based group health insurance encourages healthy workers to remain in the group pool, because of the less favorable tax treatment for non-group purchased insurance. If a tax credit or above-the-line deduction for non-group insurance is available, non-group insurance may be more attractive, thus leading to adverse selection in the group insurance risk pool. Proposals to reduce the rating variability in the individual market must also be careful to employ pooling mechanisms so as not to drive out the healthy individuals.

Studies of insurance choices by employees offered multiple health insurance plans have shown that adverse selection occurs in the group market. One study of government employees found that premiums for plans with more generous benefits increased much faster than premiums for plans with less generous benefits. The study attributed the variability in premiums to the poorer health status of the people selecting the plans with generous benefits; healthy people opted out of the expensive plan. A second study, where employees were offered a choice of several plans, found that healthy employees were less likely to choose the more generous benefit plan, and that the premium for the most generous plan became so expensive that the employer dropped it.

Finally, the tax policies' and direct subsidy programs' design details will elicit different usage rates. For example, a tax credit that is available only after premiums are paid may not help individuals who do not have the funds to pay up front costs. A subsidy that directs people to an insurance policy with a small co-payment may be desirable to prevent over-utilization by the insured. However, for individuals at low-income levels, even such modest costs may dramatically decrease enrollment and utilization. This may especially affect families without health problems, who may choose to forgo health insurance to pay for items such as food and housing. In addition, a complex application process designed to determine eligibility for government-provided health insurance may have the unintended side effect of inhibiting participation by otherwise qualified individuals. Tax deductions, because they provide only limited benefits to those with low income, are not likely to lead to a significant expansion of health insurance coverage.

Meeting the challenge of covering more people

The Administration has taken steps to extend coverage to more people. Particularly noteworthy successes have been the expanded eligibility for Medicaid and the creation of the SCHIP. In addition, the Health Insurance Portability and Accountability Act of 1996 limits exclusions for pre-existing conditions in employer health insurance plans and for people converting to individual insurance. The health continuation rules enacted under COBRA (Consolidated Omnibus Budget Reconciliation Act of 1986) enable workers to purchase continued coverage for a limited time when they change jobs or lose eligibility for health

insurance. The Administration's Family Care proposal would extend publicly provided insurance to the parents of children covered by SCHIP, covering more low and moderate income families.

Although much has been done to ensure access to health care for millions of individuals, a number of challenges lie ahead. Prescription drugs have become a significant health care expenditure for many, particularly for the elderly. Helping individuals afford needed prescription medications is a priority. We must also contend with the growing elderly population and the forecasted increase in the need for long-term care. And finally, we must continue to work towards providing access to the health care system for the millions of Americans who remain uninsured.

Building Livable Communities

As the new economy presents greater options and opportunities for Americans, it also poses critical challenges for ensuring the livability of our existing and developing communities. Throughout much of the 20th century the population has shifted from central cities to suburbs, and this trend has accelerated in the last decade.¹³¹ From 1990 to 1999 the suburban population grew by nearly 19 percent, compared to population growth of only 6 percent for central cities. This rate of increase is striking, relative to rates of growth during the 1980s: 15 percent in the cities and only 13 percent in the suburbs. However, the new economy has witnessed a change in

the pattern of job location as well. While central cities still face the challenges of growth, they are no longer the source of the majority of job growth. Rather, new jobs and new industries are also springing up on the fringes of cities, often in "technology parks" or "research corridors." In 1997, 57 percent of metropolitan-area jobs were located in suburbs, up from 55 percent in 1992.

These suburbs have the potential to offer the best of both worlds to American families: the amenities and quality of life people seek beyond the central cities, and the availability of jobs formerly associated with the central city.¹³² However, there are also drawbacks to this trend, and communities must invest now in developing plans to channel this growth to ensure that rapid growth does not spoil the attractive aspects of the area.¹³³ With new growth comes the need to grow in a manner consistent with social well being and environmental quality.

Economic Forces Driving Suburbanization

Economists have noted the positive relationship between the density of economic activity and productivity.¹³⁴ In the past, many gains from agglomeration were due to access to natural resources and means of transportation. In contrast, the agglomeration economies of today are often based on the clustering¹³⁵ of firms in the same industry which gain from sharing ideas, consumers, and specialized pools of skilled workers. Familiar examples include the mutual funds cluster in Boston, the oil and gas cluster in Houston, and the electronics cluster in Silicon Valley. Often freer from traditional ties to specific locations, new economy firms are able to choose from a wider array of potential business sites.¹³⁶ It is important to recognize that rapid

growth does have to be unplanned growth; rather, smart growth principles can accompany and inform this economic development strategy.

With current development occurring on the outskirts of cities, rather than in the central cities themselves, development is now consuming land at a rate twice that of population growth. An average of 2.3 million acres of land is being consumed annually, and a significant share of this is residential development on lots of one acre or more in fringe suburbs or smaller cities. Such growth is commonly known as "sprawl."

Given the outward expansion of these new suburbs, it is not surprising that rural areas just beyond the edge of urban settlement have seen high growth. In metropolitan counties that were primarily rural in 1990, population rose by 20 percent from 1990-99--a much higher rate than that in any other type of county. Such areas are becoming low-density urban areas as farmland is converted to other uses. This process is not new, but contributes greatly to the average annual loss of 4.4 million acres of farmland since 1990, much of it in highly productive areas such as California's Central Valley or the Florida Peninsula.

Several economic explanations exist for this form of suburbanization. First, for many of these young, growing firms, urban areas may exhibit diseconomies that offset any benefits associated with the central city. The building stock in most central cities is old, and it may be costly to upgrade existing facilities to current technological standards. Although efforts are underway to deal with these problems, such as the President's Partnership to Advance Technology in Housing (PATH) which works with the building industry to develop provisions

that make building codes more receptive to rehabilitation, rents in revitalized or redeveloped urban areas may still be too expensive for new firms to afford to locate there. Similarly, the unintended consequences of environmental cleanup laws may also have discouraged reusing urban properties due to fear of cleanup liability.¹³⁷ Despite the more than \$2.3 billion in leveraged economic development occurring at brownfields through the national Brownfields Initiative,¹³⁸ designed to support the cleanup and reuse of sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

For these reasons it may be more cost-effective to “start from scratch” in outlying areas. For example, firms in new “edge cities” may be more attractive to workers seeking to live near work and avoid the congestion and pollution of an urban area. Also, by locating near similar firms, firms can generate new externalities and benefit from shared resources. In the most well-known examples, firms in Silicon Valley, California; Cambridge, Massachusetts; and the Research Triangle of North Carolina benefit from access to pools of specialized high-tech labor.

Sprawl, defined as dispersed development beyond metro centers, often stretches along established highways and throughout rural areas. Identified by low-density residential and commercial settlements, sprawl often requires reliance on automobiles for transportation, including long-distance commutes. Jurisdiction over transportation routes and systems are often fragmented among different local and state governments, resulting in little coordinated influence on land use decisions. Facing such problems may require regional commissions concerned with the spillover effects that community decisions have on neighboring municipalities. Often, sprawling communities are divided by great fiscal disparities and distinctly zoned land uses.¹³⁹

Planners with an interest in regional growth may be better able to work with communities to accommodate new growth collaboratively.

Challenges of new growth.

The rapid economic growth of technology centers in edge cities and suburban areas provides benefits to local communities in terms of jobs and tax revenues. For example, between 1995 and 1999 sales tax revenues in the city of San Jose increased by 40 percent. However, this growth can also bring significant costs.¹⁴⁰ Many suburban communities are becoming increasingly congested and are in danger of losing the very attributes that make them attractive places to live and work. Increasing population strains public resources like schools and parks. Affordable housing is moving farther away from jobs, increasing average commuting distances. However, commuting is only one factor in increasing congestion. Four out of five household trips are now for non-commuting purposes, and distances between home, shopping, schools, recreation, etc. are increasing¹⁴¹. The resulting traffic problems, worsened by limited public transportation, often make driving difficult and time-consuming and increase the demand for new road construction; however, transit-oriented development can help.

Unplanned growth affects environmental quality,¹⁴² as evidenced by water quality, air quality, and land use patterns.¹⁴³ Increases in paved surfaces, including roads, buildings, and parking lots, can contribute to deterioration of water quality and an overall loss of greenspace. This loss of greenspace leads to less effective natural drainage, poorer water quality, and a dramatic increase in the potential for flooding in some areas. For example, residents along

California's Russian River experienced four major floods in 3 consecutive years. Hydrologists attribute such events in part to urbanization's effects on stream flow: downstream runoff into streams and rivers increases as impervious surfaces from development increase.¹⁴⁴ Impervious surfaces can be defined as any impenetrable material that prevents infiltration of water into the soil. Increased traffic not only affects commuting and quality of life, but also ambient air quality, as emissions can lead to elevated levels of ozone and particulate matter. While national air quality trends have improved over the last 10 years, as of September 1999, 121 metropolitan areas still did not meet the national standards for air pollutants. This pollution affects the health of residents, especially those in sensitive segments of the population. For example, incidence of pediatric asthma, aggravated by particulate matter, sulfur dioxide, and ozone, has increased 55 percent between 1982 and 1996.

Economic Dimensions and Solutions

One of the difficulties with ensuring appropriate development is that the costs and benefits of development are typically borne by different entities; decisions benefiting private individuals may have adverse public effects, but private decision makers are unlikely to weigh these social costs. For example, individuals may prefer homes on large private lots, distant from both city centers and major highways. However, these homes require new roads, more driving, and the installation of public utilities. If a large number of individuals chose to live in such homes, the negative externalities that the decision generates – increased traffic, air pollution, and impervious surfaces, and increased local property taxes – can outweigh the benefits individuald

receive. The results of such decisions are evident in many areas of the country, and are particularly vivid in Atlanta Georgia, despite planning efforts to remedy them.

Atlanta, Georgia: Challenges to Smart Growth

Ranked by some as the nation's most sprawl-threatened large city, Atlanta continues to expand at a phenomenal pace. From 1980 to 1998 the Atlanta area's population grew almost 68 percent, with almost all of this growth occurring beyond the city limits. According to some studies, the Atlanta metropolitan area loses 500 acres of greenspace, forest, and farmland each week. This means that greenspace is disappearing to development faster than in any metropolitan area in history, and the city is suffering its consequences: water quality of the Chattahoochee River and Lake Allatoona is deteriorating, and air quality is in violation of clean air standards. Traffic congestion costs from lost time and wasted fuel are estimated at an overwhelming \$1.5 billion a year. With an average work commute by car of 37 minutes (which is estimated to stretch to 45 minutes in 20 years, given continued growth), Atlanta residents may enjoy new economy benefits, but are clearly suffering the resulting costs of seemingly boundless sprawl. Motorists in Atlanta lead the nation in miles driven per person per day, totaling over 100 million miles logged daily by its drivers.

The Atlanta Regional Commission (ARC) is attempting to limit and coordinate this expansive growth. To help this coalition of regional governments, the Georgia Regional Transportation Authority (GRTA) was created by the state government in 1999, with broad powers to manage transportation and air quality projects and land use in air pollution non-attainment areas, and

particularly Atlanta. Atlanta metro governments are opposing a perimeter highway proposal for the reason that it threatens urban investment and encourages further sprawl. The ARC, supported by the state government, is trying hard to provide and encourage alternatives to single-motorist car transportation. The ARC and GRTA are also seeking to encourage development that incorporates elements of smart growth by revitalizing older community and emerging activity centers to promote greater livability, introducing modal choices, and advocating increased mixtures of land uses and housing types¹⁴⁵.

However, the momentum of sprawl continues and Atlanta faces a serious challenge to channel future growth toward building sustainable, attractive communities.¹⁴⁶

The true economic cost of building a new home should include the costs of the associated externalities created by developers and homeowners, but quantifying these social and environmental burdens more difficult than identifying the private costs of development. There are, however, positive steps that can be taken in this direction. For instance, the additional tax revenue received from new development does not cover the installation of roads and water utilities and the provision of public services to new residents. If new development were required to bear the full cost of services, including infrastructure, the resulting pattern of development would be less like urban sprawl. Many governments have begun to assess impact fees on new construction so that the financial burdens of infrastructure and public service provision are included in development decisions.

Communities are beginning to use other kinds of economic incentives¹⁴⁷ to achieve outcomes more consistent with smart growth. For example, some communities, such as South

Bend, Washington, have imposed fees on impervious surface area to encourage development with less detrimental effects on water quality and flooding potential. Other communities are using road pricing to improve traffic patterns. San Diego charges solo drivers in the express lanes of I-15 higher prices during congested times than during off-peak hours. The use of electronic transponder technology to identify motorists and collect tolls makes this system possible without the significant slowdowns caused by toll collection plazas. Other communities use transferable development rights to provide incentives for maintaining land in agriculture and other uses that maintain open space and provide ecological benefits.

The Clinton-Gore Administration's 30-point Livable Communities Initiative¹⁴⁸ is encouraging "smart growth." It sets forth several principles to align Federal policy efforts with smart growth priorities, and to encourage greater planning and coordination over larger regions to resolve existing negative externalities. The Livable Communities Initiative seeks to sustain prosperity, expand economic opportunity, enhance the quality of life, and build a stronger sense of community. Dedicating funds for regional smart growth efforts, including Better America Bonds for state, local, and tribal governments; the initiative aims to preserve green spaces, ease traffic congestion, restore senses of community, promote collaboration among neighboring municipalities through regional governance, and enhance economic competitiveness. In addition, such smart growth efforts attempt to counter various socially undesirable effects of sprawl: racial segregation, concentrated poverty, decreased personal interaction, and a less active civil society. Initiatives on the state and local levels are beginning to have real impacts on communities. Examples of such progress are found in the State of Maryland¹⁴⁹ and the City of Chattanooga, Tennessee.¹⁵⁰

Examples of Smart Growth

Many governments are making significant efforts to encourage smart growth. For example, Maryland has established the following goals in its smart growth program: to preserve its most valuable remaining natural resources, to support existing communities and neighborhoods by targeting state resources to development in areas where the infrastructure is already in place, and to save taxpayer dollars by avoiding the unnecessary cost of building the infrastructure required to support sprawl. The program also ensures that the State will regularly evaluate the program's effectiveness. Earning Federal grant money, reprioritizing within the state budget, and designing financial incentives for businesses, local governments, and homeowners, the State has been able to leverage funds necessary to emerge as a leader in the smart growth community, while preserving local decision-making authority.

Similarly, the smart growth success of Chattanooga, Tennessee, affirms the conviction that Americans can enjoy both economic prosperity and a high quality of life. Chattanooga's economy had historically been based on iron foundries, textile mills, and chemical plants, which were not providing the growth and employment the city required. However, through thoughtful economic development efforts, Chattanooga has become a model for other cities seeking environmentally sound urban renewal. Through extensive grants from private foundations, along with Federal and local public funds, Chattanooga has relied upon successful public-private partnerships throughout their visionary redevelopment process. The city now prides itself as a

“laboratory” for sustainable development projects involving rezoning, reclamation, revitalization, and redevelopment. Illustrating how older cities can thrive in the new economy, Chattanooga boasts a 22-mile “Riverwalk” with picnic areas, the world’s largest freshwater aquarium, a sculpture garden, waterfront housing developments, an electric-bus public transit system, footbridges, and an arts district.

Many of the areas of new and rapid growth are characterized by the combination of an educated workforce that places emphasis on the quality of life, and favorable economic conditions. Therefore, they have both the constituency to demand change, and the resources necessary to implement it. There is evidence that business and community leaders are already recognizing the costs and impacts of sprawl and acting to mitigate the negative effects. In areas such as the Washington, DC Beltway, Boston, San Francisco, and Seattle, leaders are acting to improve land use and transportation decisions and enhance environmental quality. The success of these endeavors will depend on the ability of these communities to make hard choices and find creative solutions to the challenges of urban sprawl.

¹ <http://www.bls.gov/news.release/empsit.nr0.htm>

² Census data

³ Urban institute, Snapshots II special calculation

⁴ BLS data table

⁵ See Poverty Memo to the President, 9/25/2000

⁶ <http://www.census.gov/hhes/www/housing/hvs/historic/hist14.html>

⁷ updated numbers from HUD comments.

⁸ The number of violent crimes per thousand persons has fallen from nearly 49.1 in 1993 to 32.1 in 1999.

<http://www.ojp.usdoj.gov/bjs/pub/pdf/cv99.pdf>

⁹ Education Dept., “NAEP 1999 Trends in Academic Progress: Three Decades of Student Progress,” NCES 2000-469, page 23.

¹⁰ [http://nces.ed.gov/quicktables/Detail.asp?SrchKeyWord=dropout&Key=125&optSearch=Exact&quarter=&topic=All&survey=All&sortby=\),](http://nces.ed.gov/quicktables/Detail.asp?SrchKeyWord=dropout&Key=125&optSearch=Exact&quarter=&topic=All&survey=All&sortby=),) (<http://nces.ed.gov/pubs99/condition99/indicator-53.html>)

¹¹ College board news, October 16, 2000

¹² Chart provided by DCP. Check original source

¹³ <http://www.cdc.gov/tobacco/ccmm4933.pdf>

-
- ¹⁴ Health, United States, 2000
- ¹⁵ Third annual report to congress <http://www.acf.dhhs.gov/programs/opre/director.htm>
- ¹⁶ Presidential proposal from OMB
- ¹⁷ TANF report to Congress.
- ¹⁸ TANF report to Congress
- ¹⁹ <http://www.acf.dhhs.gov/news/stats/3697.html>
- ²⁰ SIPP Analysis from Richard Bavier of OMB.
- ²¹ Hotz paper on California Riverside vs. other counties.
- ²² <http://aspe.hhs.gov/hsp/leavers99/ombsum.html>, "Leavers and Diversion Studies: Summary of Research on Welfare Outcomes Funded by ASPE
- ²³ TANF report to Congress, page 73
- ²⁴ See ASPE comments for 28 percent figure
- ²⁵ See Blau child care paper, footnote 9 for evidence of serial correlation in employment.
- ²⁶ Bauner and Loprest, page 6
- ²⁷ Giannarelli and Steuerle (1995) table 2
- ²⁸ TANF Report to Congress, August 2000 (<http://www.acf.dhhs.gov/programs/opre/annual3.pdf>)
- ²⁹ CEA white paper
- ³⁰ Green Book 2000, page 808.
- ³¹ CEA white paper and 2000 Green Book.
- ³² Hotz and Scholz, 2000 "The Earned Income Tax Credit." Paper presented at the NBER Conference.
- ³³ Eissa and Leibman QJE May 1996. Eissa and Hoynes NBER #6856, 1998, Ellwood, 1999 mimeo, Kennedy School, and Meyer and Rosenbaum, 1999 NBER # 7363 (and more)
- ³⁴ Meyer and Rosenbaum, "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers." NBER 7363, Sept 1999.
- ³⁵ Scholz and Levine, 2000. "The Evolution of Income Support Policy in Recent Decades," University of Wisconsin, Madison.
- ³⁶ Our calculations from BLS: "Characteristics of minimum wage workers: 1999 annual averages."
- ³⁷ Spreadsheet from Patrick (DLX)
- ³⁸ From Anna Richter opd
- ³⁹ <http://www.fns.usda.gov/fsp/menu/faqs/faqs.htm>
- ⁴⁰ Our calculations from Census income report
- ⁴¹ Analysis by Richard Bovier of OMB
- ⁴² Glazer and Kahn, "Why do the poor live in cities."
- ⁴³ Stoll, Holzer and Ihlanfeldt, "Racial Residence," Journal of Policy Analysis and Management, Vol 19 #2, 2000, and web article.
- ⁴⁴ Stoll
- ⁴⁵ Holzer and Raphael, J of Urban Economics(?), Holzer QJE
- ⁴⁶ This paragraph constructed from HUD comments.
- ⁴⁷ Census poverty book, P60-210
- ⁴⁸ Census income book, P60-209
- ⁴⁹ Brookings, "Unfinished Business: Why Cities Matter to Welfare Reform", July 2000
- ⁵⁰ <http://www.ed.gov/offices/OUS/Budget01/BudgetSumm/sum-a.html#overview>
- ⁵¹ <http://www.ed.gov/Technology/budget.html>
- ⁵² <http://www.ed.gov/offices/OUS/fedrole.html>
- ⁵³ <http://www.ed.gov/offices/OUS/fedrole.html>
- ⁵⁴ Study of Education Resources and Federal Funding: Final Report, August 2000, page xii
- ⁵⁵ <http://www.ed.gov/offices/OUS/PES/hlights.html> first paragraph
- ⁵⁶ <http://www.ed.gov/pubs/NatAssess/sec6.html>
- ⁵⁷ Study of Education Resources and Federal Funding: Final Report, August 2000, page xiv
- ⁵⁸ Study of Education Resources and Federal Funding: Final Report, August 2000, page xi
- ⁵⁹ Study of Education Resources and Federal Funding: Final Report, August 2000, page xvii
- ⁶⁰ Krueger & Whitmore, "The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR: (NBER W7656, April 2000).
- ⁶¹ Betts and Shkolnik, "The Behavior Effects of Variations in Class Size: The Case of Math Teachers", Educational Evaluation and Policy Analysis (Summer 1999), p 193.

- ⁶² Carolyn Evertson, "Professional Development and Implementation of Class Size Reduction", The CEIC Review, March 2000, p. 8 (<http://www.temple.edu/LSS/ceicclasssize.pdf>)
- ⁶³ Brewer, Krop, Gill, & Reichardt, "Estimating the Cost of National Class Size Reductions Under Different Policy Alternatives" Educational Evaluation and Policy Analysis (Summer 1999), p. 183.
- ⁶⁴ Kreuger, "An Economist's View of Class Size Research," the CEOC Review, March 2000, p.20.
- ⁶⁵ Grissmer, Flanagan, Kawata, and Williamson, "Improving Student Achievement: What NAEP State Test Scores Tell Us." (RAND, July 2000), pages iv and 23.
- ⁶⁶ Ed Dept, "The Class-Size Reduction Program: Boosting Student Achievement in Schools Across the Nation. 9/00, page 1-2, and phone call to ed dept. on result of second year.
- ⁶⁷ <http://www.census.gov/population/projections/nation/summary/np-t3-a.pdf>, page 3 and <http://www.census.gov/population/projections/nation/summary/np-t3-c.pdf>, page 3
- ⁶⁸ NCES (1999-026), Predicting the Need for Newly Hired Teachers in the US to 2008-9, page 11.
- ⁶⁹ NCES (1999-026), Predicting the Need for Newly Hired Teachers in the US to 2008-9, page 9.
- ⁷⁰ National Association of College and Employers, Salary Survey, Fall 2000
- ⁷¹ CSR Research Consortium, Class Size Reductions in California: Summary of the 1998-99 Evaluation Findings, June 2000, pages 2-3.
- ⁷² CSR Research Consortium, Class Size Reductions in California: Summary of the 1998-99 Evaluation Findings, June 2000, page 7.
- ⁷³ Various papers at <http://www.wcer.wisc.edu/cpre/teachercomp>
- ⁷⁴ Ed. Dept, "Challenging the Status Quo: the Education Record, 1993-2000" (<http://www.ed.gov/inits/record/legacy.pdf>) pages 15-18 and A-1-A-3.
- ⁷⁵ NCES (2000-032), "Condition of America's Public School Facilities: 1999" (<http://nces.ed.gov/pubs2000/2000032.pdf>), page 37-38
- ⁷⁶ Benton Foundation, "The E-Rate in America: A Tale of Four Cities", February 2000, pages 18-19.
- ⁷⁷ NCES (2000-032), "Condition of America's Public School Facilities: 1999" (<http://nces.ed.gov/pubs2000/2000032.pdf>), page iv
- ⁷⁸ NCES (2000-032), "Condition of America's Public School Facilities: 1999" (<http://nces.ed.gov/pubs2000/2000032.pdf>), page 12
- ⁷⁹ NCES (2000-032), "Condition of America's Public School Facilities: 1999" (<http://nces.ed.gov/pubs2000/2000032.pdf>), page 12
- ⁸⁰ <http://www.ed.gov/inits/construction/package.html>
- ⁸¹ <http://econ161.berkeley.edu/TotW/encyclopedia.html>
- ⁸² NCES (2000-086), "Internet Access in US Public Schools and Classrooms: 1994-99" (<http://nces.ed.gov/pubs2000/2000086.pdf>), page 1-2.
- ⁸³ NCES (2000-102), "Teachers' Tools for the 21st Century: A Report on Teachers' Use of Technology" (<http://nces.ed.gov/pubs2000/2000102A.pdf>)
- ⁸⁴ NCES (2000-090), "Teacher Use of Computers and the Internet in Public Schools" (<http://nces.ed.gov/pubs2000/2000090.pdf>)
- ⁸⁵ NCES (2000-080), "Teacher Quality: A Report on the Preparation of Qualifications of Public School Teachers" (<http://nces.ed.gov/spider/web spider/1999080.shtml>)
- ⁸⁶ Ed. Dept, "Challenging the Status Quo: the Education Record, 1993-2000" (<http://www.ed.gov/inits/record/legacy.pdf>) pages 28-29.
- ⁸⁷ <http://www.sl.universalservice.org/apply/funds.asp>
- ⁸⁸ Ed. Dept. "E-Rate and the Digital Divide: A Preliminary Analysis From the Integrated Studies of Educational Technology", September 2000.
- ⁸⁹ This all comes from the Commerce Department (NTIA) report released in mid-October—"Falling through the net: towards Digital Inclusion" <http://search.ntia.doc.gov/pdf/fttn00.pdf>
- ⁹⁰ Ed Dept, "Study of Education Resources and Federal Funding: Final Report", August 2000, page xxx and xxxi
- ⁹¹ <http://www.ed.gov/offices/OUS/eval/exsum2.html>
- ⁹² Achieve, Inc. 1999 Annual Report: "Better Standards, Better Schools"
- ⁹³ Bishop, "Why do Students Learn More When Achievement is Examined Externally?" emailed from author.
- ⁹⁴ <http://www.pdkintl.org/kappan/kpol0009.htm>
- ⁹⁵ Murnane and Levy, Teaching the New Basic Skills, 1996, around page 82.
- ⁹⁶ John Bishop, "The Effect of National Standards and Curriculum-Based Exams on Achievement", (AEA, May '97)
- ⁹⁷ NCTM, also preamble to the Economics Standards article published in AEA May '97

⁹⁸ <http://www.ed.gov/offices/OUS/eval/exsum2.html>

⁹⁹ <http://www.ed.gov/offices/OSERS/IDEA/Brief-2.html>

¹⁰⁰ National Reading Panel, "Teaching Children to Read", April 2000 <http://www.nationalreadingpanel.org>
National Research Council, "Preventing Reading Difficulties in Young Children," March 1998,
<http://stills.nap.edu/html/prdyc/>

¹⁰¹ Divide number of charter schools by total public schools from table 90 of NCES "Digest of Education Statistics 1999", Table 90.

¹⁰² The State of Charter Schools 2000, Fourth-Year Report, <http://www.ed.gov/PDFDocs/4yrrpt.pdf> and
<http://www.edreform.com/pubs/chglance.htm>

¹⁰³ Ed. Dept, "Challenging the Status Quo: the Education Record, 1993-2000"
(<http://www.ed.gov/inits/record/legacy.pdf>) pages 36-37, and 2000 ERP, page 155.

¹⁰⁴ Ed. Dept, "Challenging the Status Quo: the Education Record, 1993-2000"
(<http://www.ed.gov/inits/record/legacy.pdf>) pages 40-41.

¹⁰⁵ WHO study

¹⁰⁶ Although the effectiveness on the new drugs is still limited, the potential savings from can be 93,000 and 76,000 for an improved quality-adjusted life-year for mild and moderate patient respectively.

¹⁰⁷ Kaiser drug study, exhibit 3.24.

¹⁰⁸ Triplett, p.44.

¹⁰⁹ Heidenreich, P and McClellan, "Biomedical Research and Then Some: The Causes of Technological Change in Heart Attack Treatment," April 2000.

¹¹⁰ Triplett, p.15.

¹¹¹ Heidenreich and McClellan, 2000.

¹¹² Health Statistics 2000, Table 58.

¹¹³ Health Statistics 2000, p. 160.

¹¹⁴ : Cutler, David-M, Richardson, Elizabeth, "The Value of Health: 1970-1990," American Economic Review, 88(2), May 1998, pages 97-100.

¹¹⁵ Newhouse, How much welfare cost, JEP, 1992, p16.

¹¹⁶ Newhouse, Cutler and McClellan, Fuchs.

¹¹⁷ Peden, Edgar A, Freeland, Mark S "Insurance Effects on US Medical Spending, 1960-1993," Health Economics, 7(8): 671-87, December 1998.

¹¹⁸ Baker, Managed Care and Diffusion of NICU, 2000.

¹¹⁹ Newhouse, Joseph, "Reimbursing Health Plans and Health Providers: Efficiency in Production Versus Selection," Journal of Economic Literature, Sep, 1996.

¹²⁰ Luft, Miller, "Managed Care Performane Since 1980," JAMA 1994. Or "Use of Preventive Services by managed care enrollees: An updated perspective," Health Affairs, 19(1): 102-116, Jan/Feb 2000.

¹²¹ Cutler, "How Does Managed Care Do It",, 2000.

¹²² Altman, Cutler, Zeckhauser, "Enrollee Mix, Treatment Intensity, and Cost in Competing Indemnity and HMO Plans," NBER #7832, August 2000.

¹²³ Cutler and McClellan, "The Determinants of technological change in heart attack treatment," NBER #5751, 1996.

¹²⁴ Baker and Spetz, Joanne, "Managed care and medical technology growth," NBER #6849, 1999.

¹²⁵ HHS, p.88.

¹²⁶ Newmann, Peter, et al, "Are Pharmaceuticals Cost-effective? A Review of The Evidence," Health Affairs, 19(2), 92-109, 2000.

¹²⁷ These statistics for Medicaid, SCHIP and Medicare are based on publicly available estimates by the Health Care Financing Administration.

¹²⁸ Lara Shore-Sheppard, Thomas Buchmueller, and Gail Jensen, "Medicaid and Crowding out of private insurance; a re-examination using firm level data." *Journal of Health Economics*, 19 (2000), 61-91

¹²⁹ Ellen O'Brien and Judith Feder, *Employment-Based Health Insurance Coverage and Its Decline: The Growing Plight of Low-Wage Workers*, Kaiser Commission on Medicaid and the Uninsured (Menlo Park: The Henry J. Kaiser Family Foundation, 1999).

¹³⁰ Hoffman and Schlobohm, *Uninsured in America*. (more recent data from March 2000 CPS should be substituted)

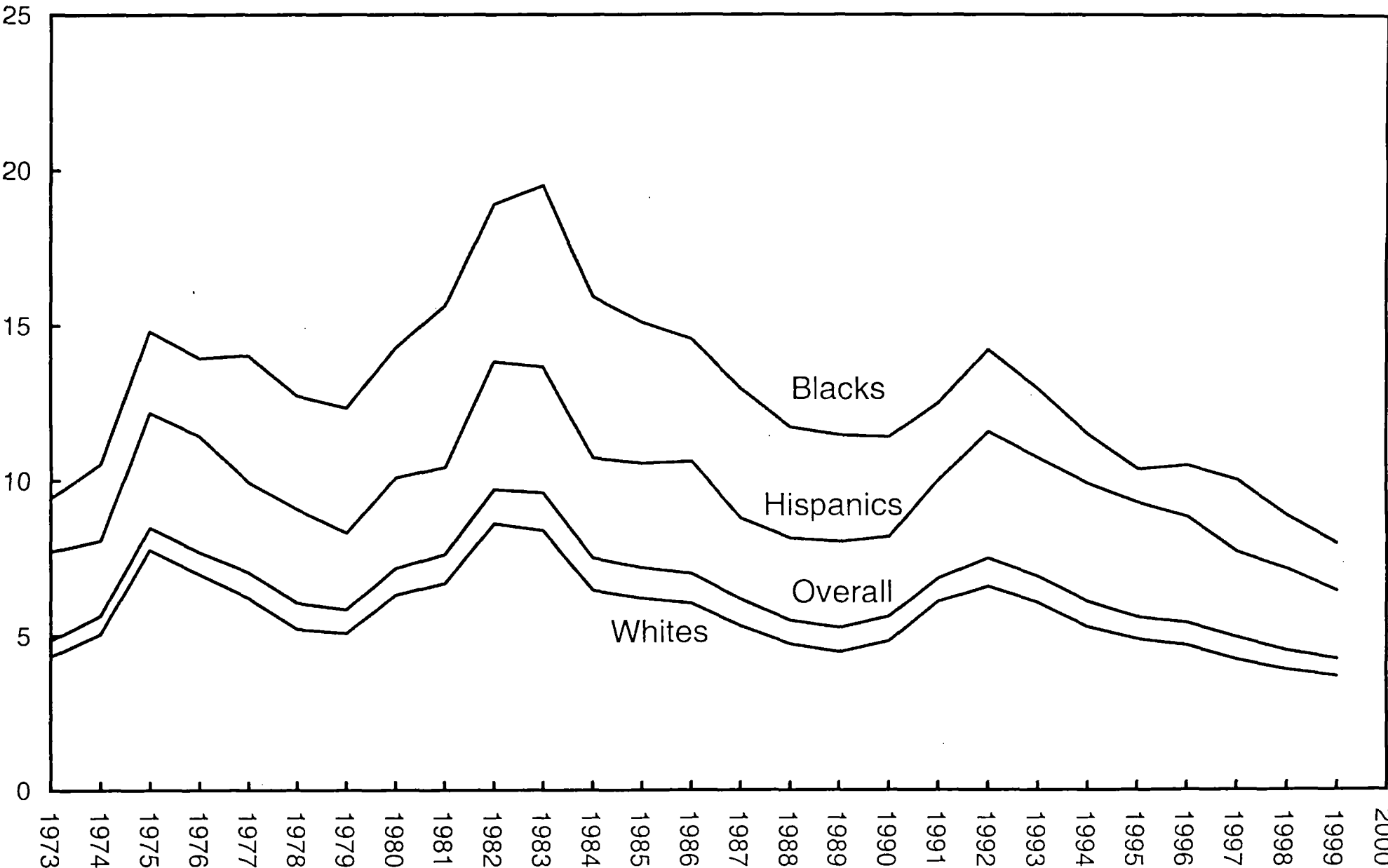
¹³¹ State of Cities 2000

-
- ¹³² Glaeser papers (including NBER W-7790, "Consumer City", July 2000); Florida working paper and book proposal; Herzog/Schlottman papers
- ¹³³ Oregon Department of Land Conservation & Development
- ¹³⁴ Ciccone & Hall, "Productivity and the Density of Economic Activity," AER.
- ¹³⁵ Porter
- ¹³⁶ NALGEP (1999) "Profiles of Business Leadership on Smart Growth: New Partnerships Demonstrate the Economic Benefits of Reducing Sprawl."
- ¹³⁷ EPA comments
- ¹³⁸ EPA comments
- ¹³⁹ Planning Commissioners Journal transportation rsch conference's "Sprawl Guide"
- ¹⁴⁰ Center for Agriculture in the Environment. 1999. "Living on the Edge: The Costs and Risks of Scatter Development. Also Snyder & Bird's "Paying the Costs of Sprawl: Using Fair-Share Costing to Control Sprawl."
- ¹⁴¹ WH Task Force on Livable Communities
- ¹⁴² Ross C. DeVol. 1999. America's High Technology Economy: Growth, Development, and Risks for Metropolitan Areas. Milken Institute.
- ¹⁴³ Smart and dumb growth cycles from RochesterEnvironment.com
- ¹⁴⁴ Albion Monitor
- ¹⁴⁵ DoT comments
- ¹⁴⁶ Source: Sierra Club's 1998 Sprawl report, Atlanta Regional Commission, Turner Foundation, CNN review of NALGEP study, Demographia, US News, WRAL
- ¹⁴⁷ Congestion, etc. paper
- ¹⁴⁸ Administration report, Center for Neighborhood Technology's Strategies for Livable Communities, and Congress for the New Urbanism
- ¹⁴⁹ Maryland data (state site, etc.)
- ¹⁵⁰ Chattanooga data (Chamber of Commerce, city site, etc.) and interview with mayor's COS

Chart 5-x Unemployment Rate by Race, 1975-2000

Everyone is finding jobs now. The Black unemployment rate is the lowest it has ever been.

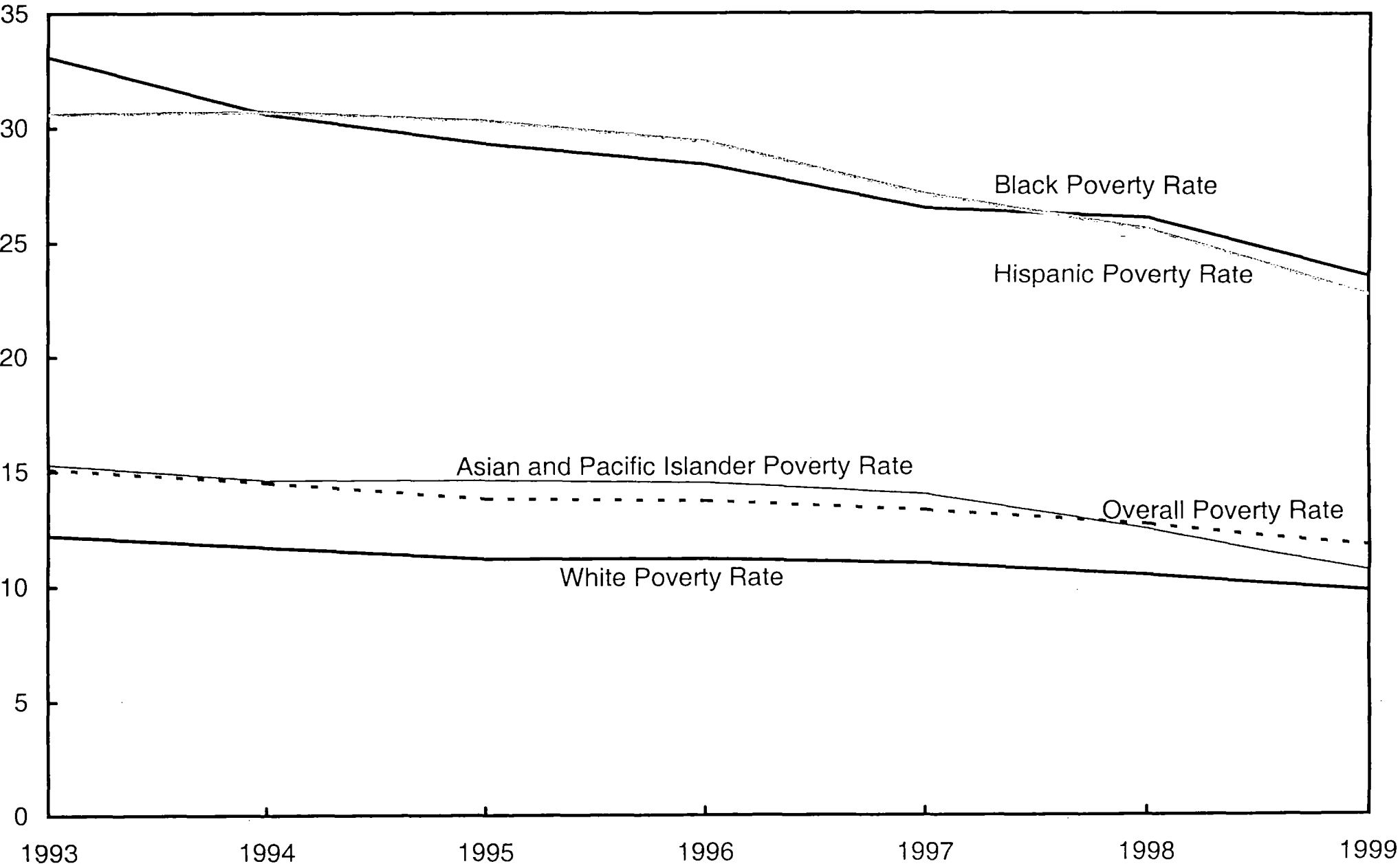
Percent of Labor Force Unemployed



Source: Department of Labor (Bureau of Labor Statistics)

Chart 5-x **Poverty Rates by Race, 1993-1999**
Fewer people are poor now. Poverty reductions have been most dramatic for Blacks.

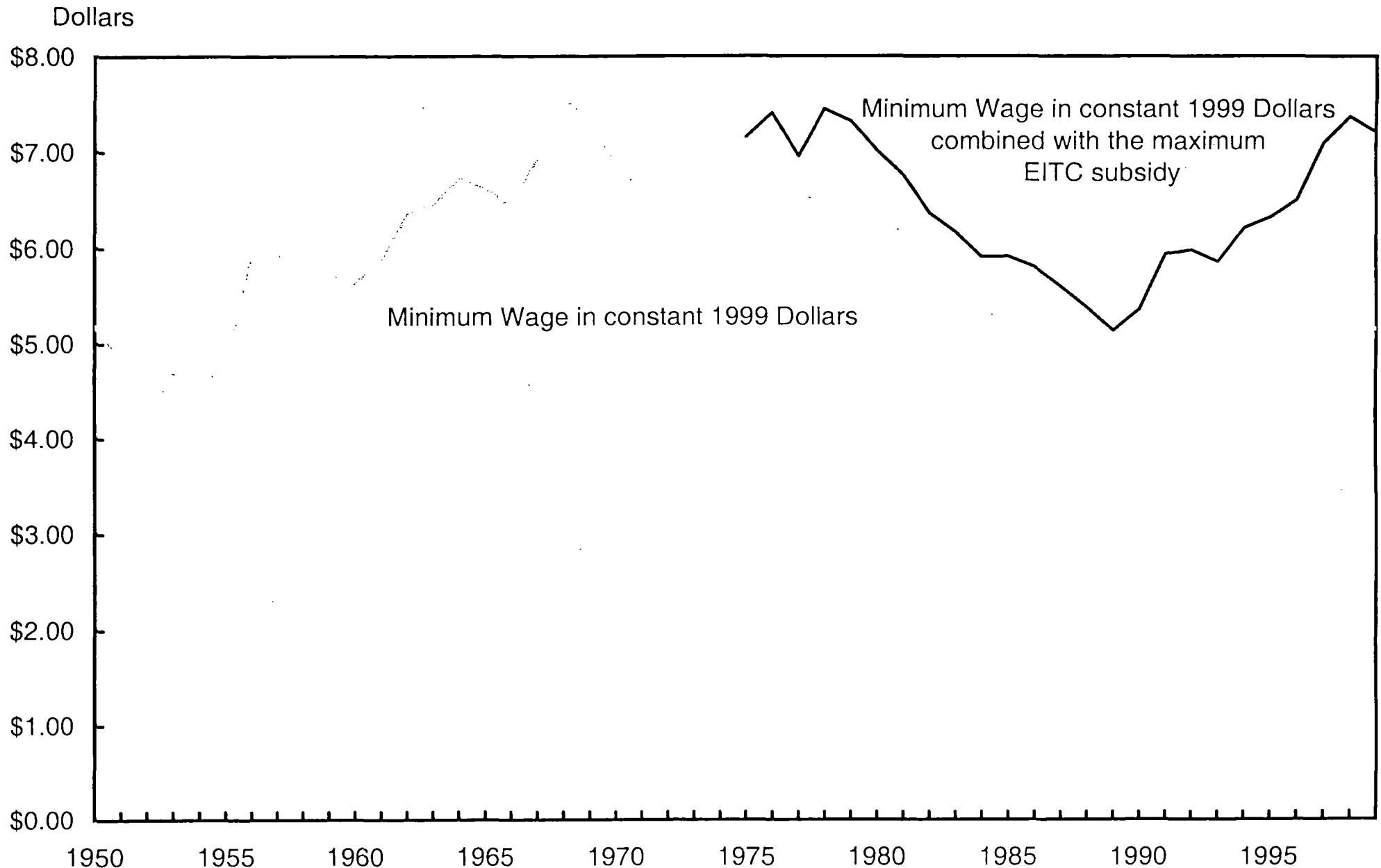
Percent of Population in Poverty



Source: Department of Commerce (Census Bureau)

Chart 5-x The Minimum Wage over time, combined with the EITC

The Minimum Wage is nearly as high as it has ever been, when combined with the maximum EITC subsidy (for people with 2 or more qualifying children).

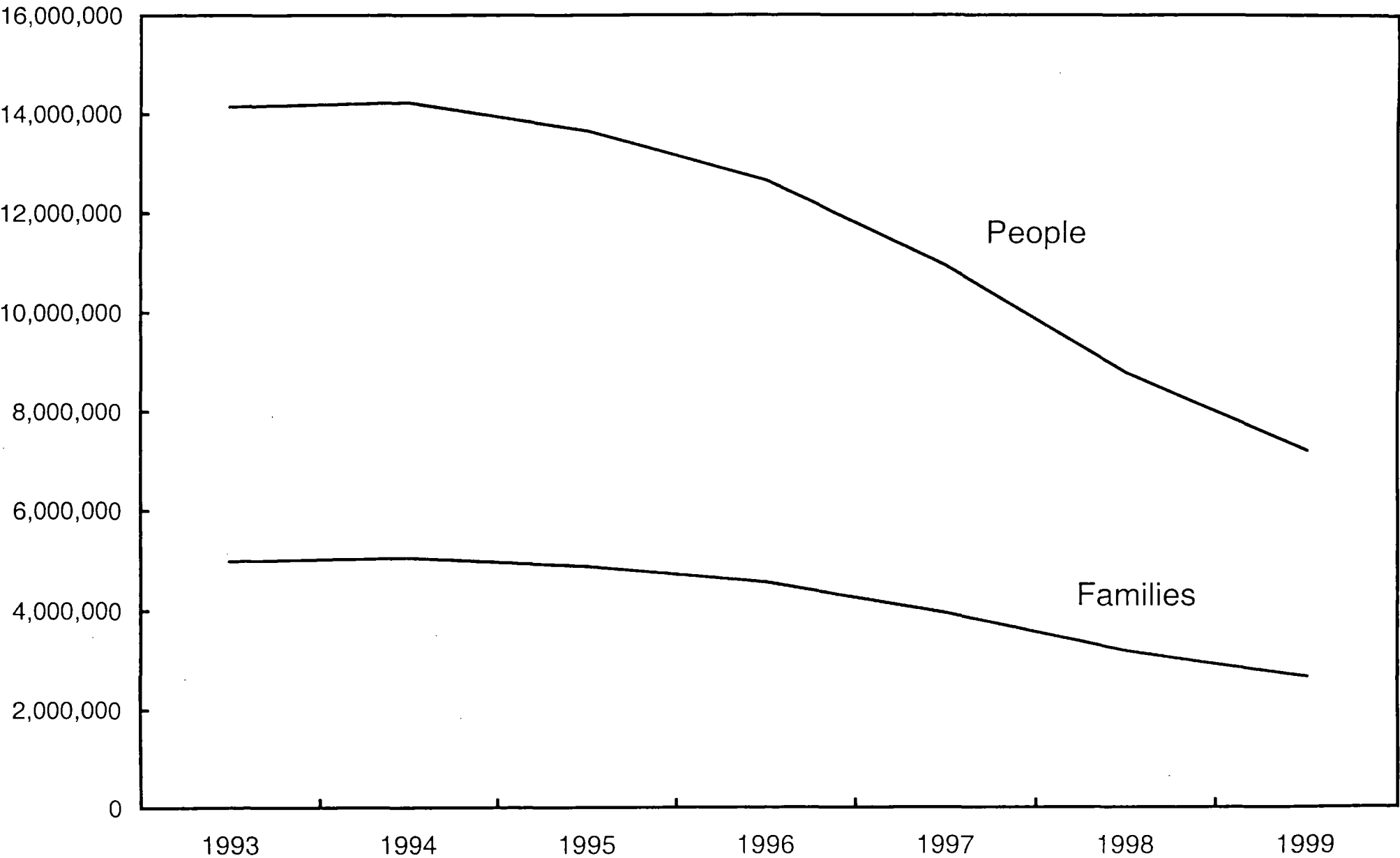


Source: Joint Committee on Taxation

Chart 5-x **AFDC and TANF Recipients, 1993-1999**

The number of total families and people receiving AFDC/TANF has been dropping rapidly.

Number of families/recipients

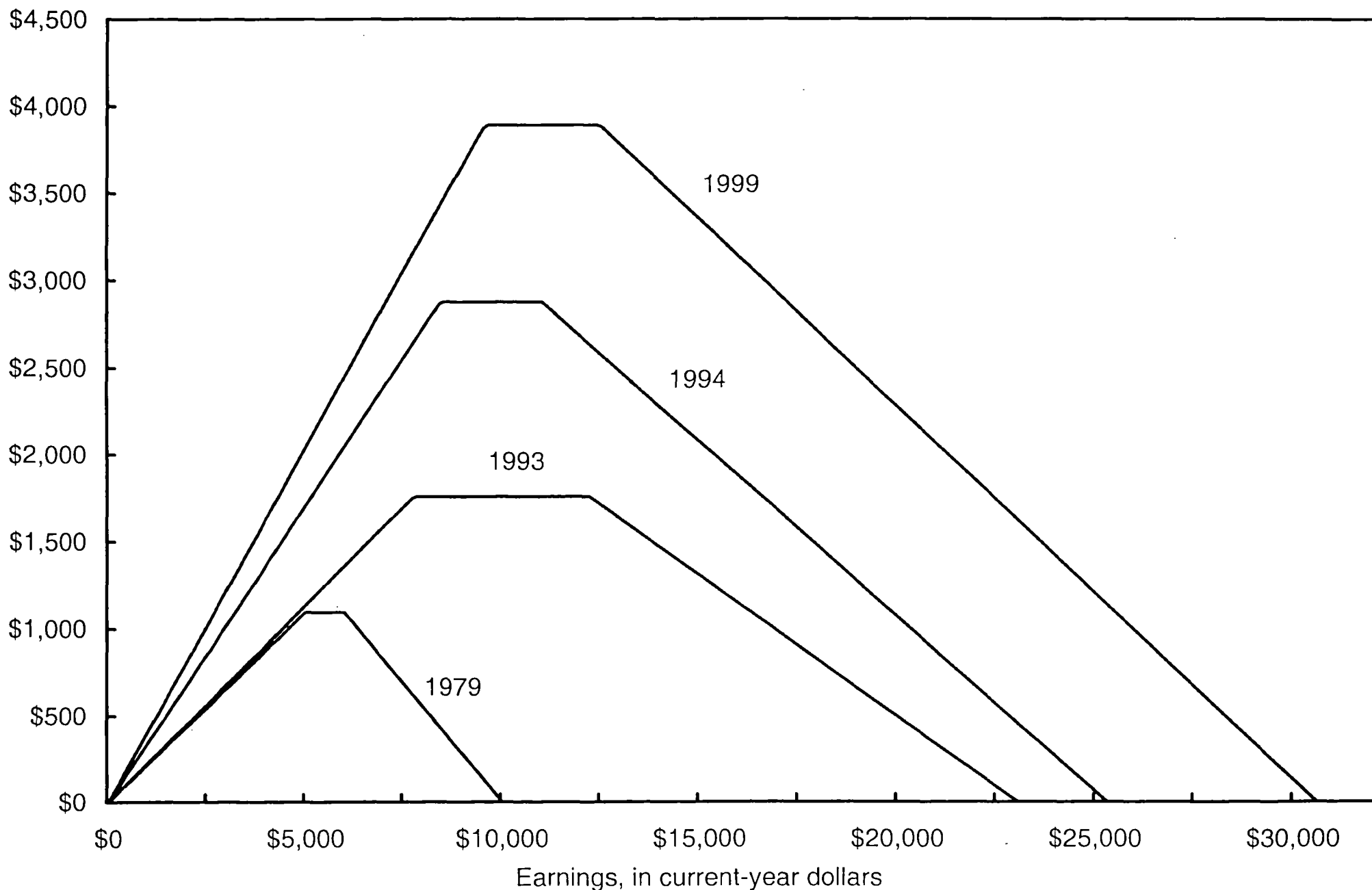


Source: Department of Health and Human Services

Chart 5-x Maximum EITC Benefit by Current-Year Earnings, Selected Years

The EITC has expanded over time, especially in this administration.

Benefit Level for a family with two eligible children, in constant dollars



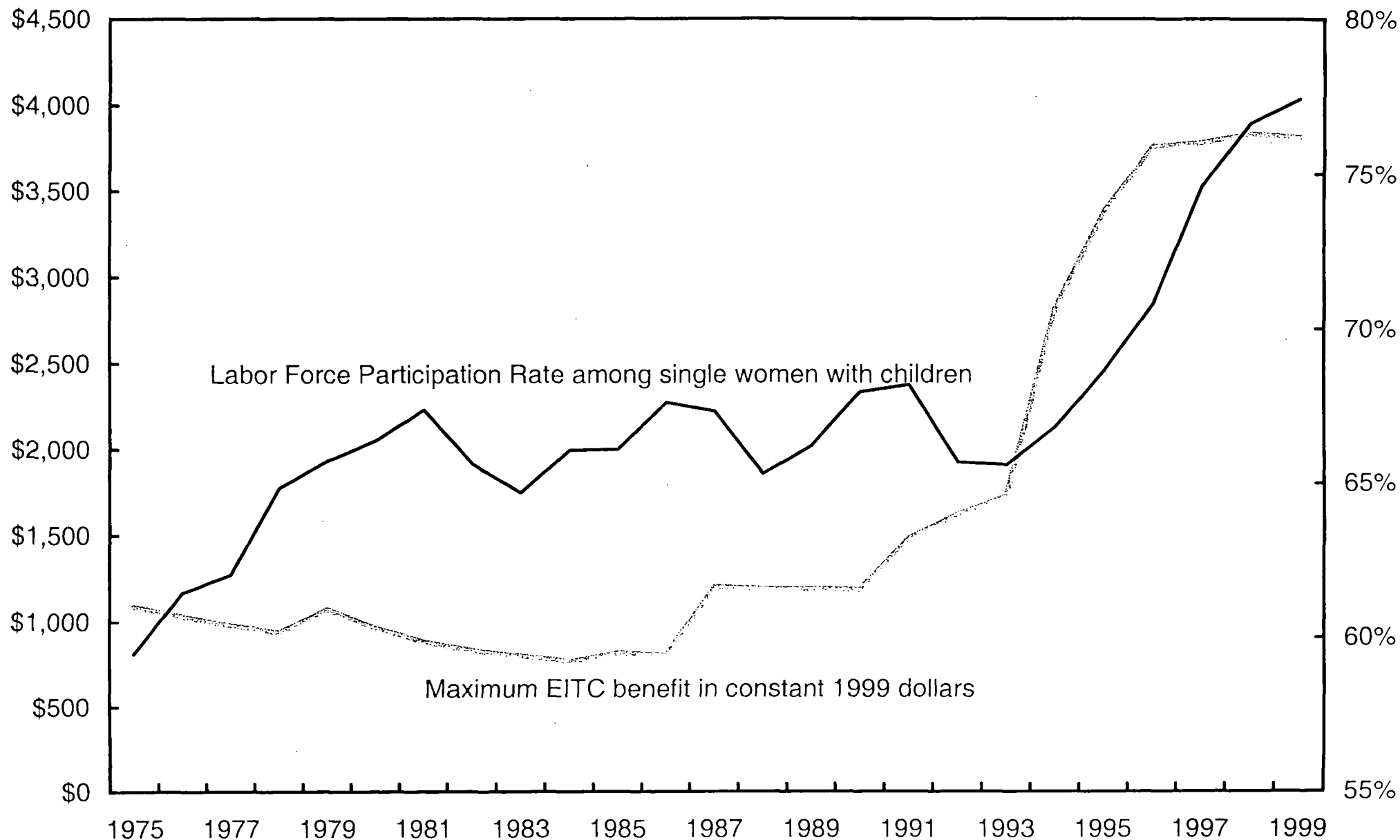
Source: Joint Committee on Taxation

Chart 5-x Maximum EITC Benefits and the Labor-Force Participation of Single Mothers

The leap in the labor force participation of single women with children closely followed the increase in the Maximum EITC benefit.

Maximum EITC Benefit in 1999 dollars

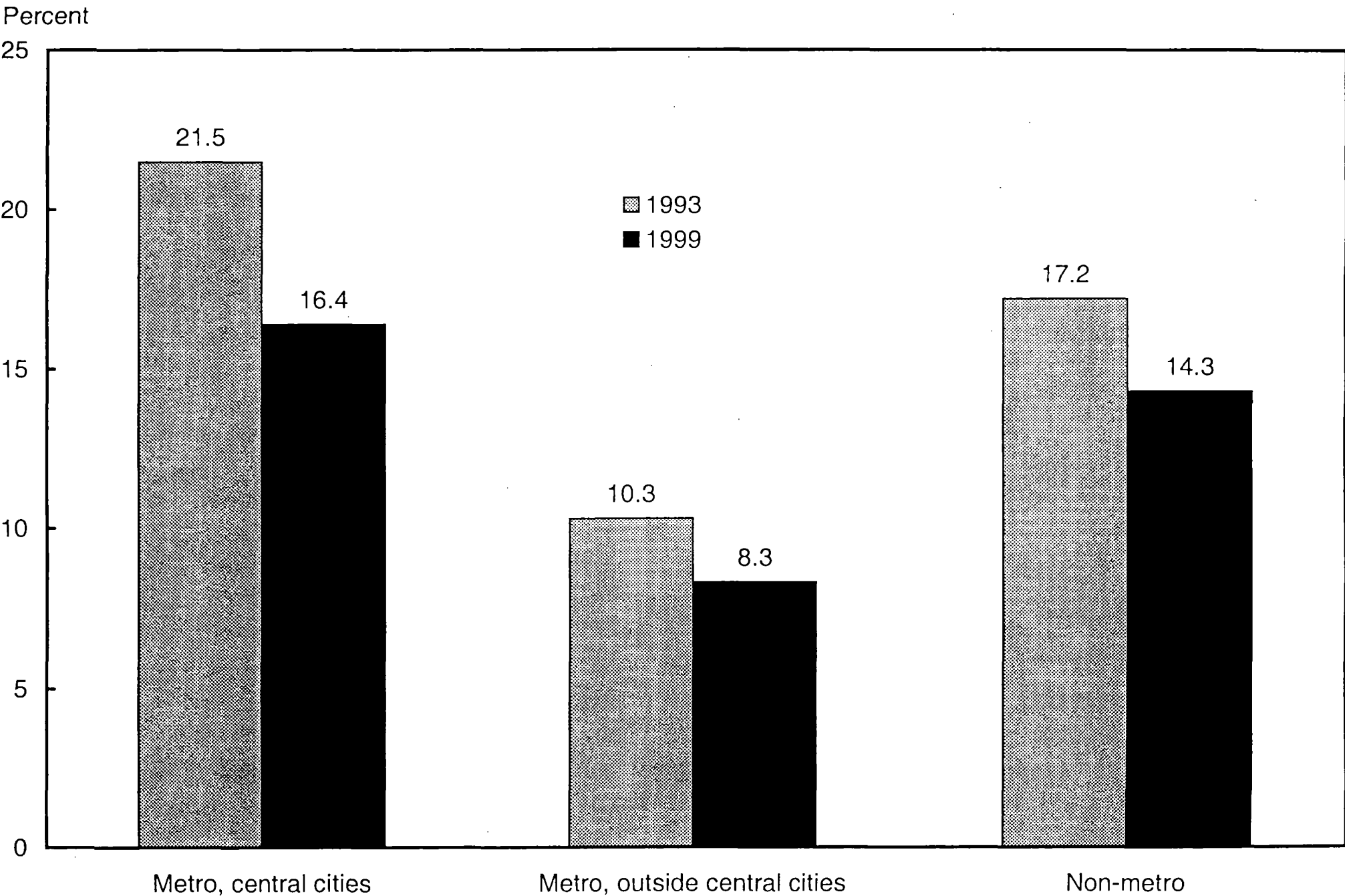
Percent of single mothers in the labor force



Sources: Department of Labor (Bureau of Labor Statistics), Joint Committee on Taxation

Chart 5-x **Poverty Rates, by Type of Area, 1993 and 1999**

The decline in poverty rates has been especially dramatic in Central City areas.

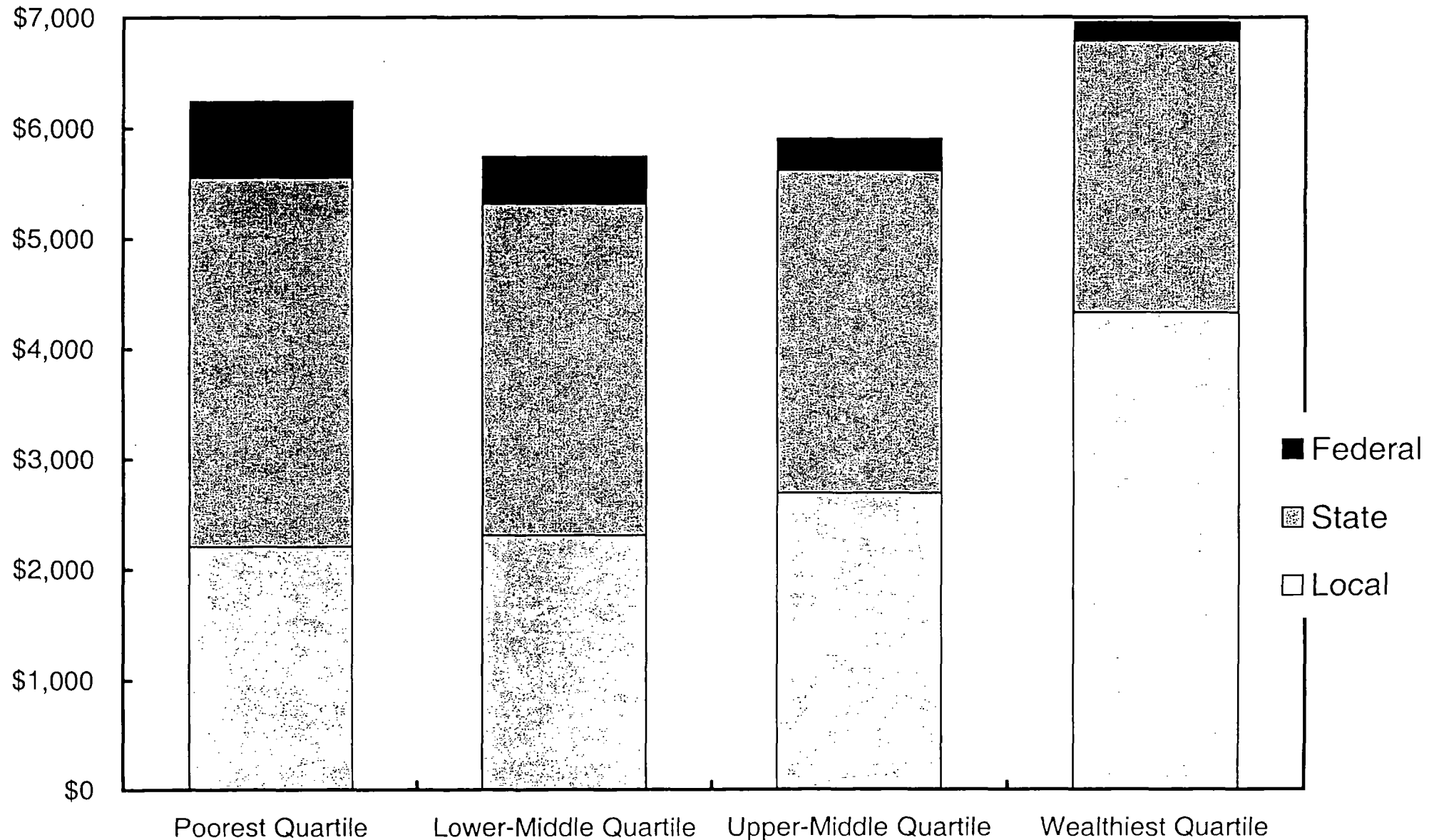


Source: Commerce Department (Census Bureau)

Chart 5-x Revenues per pupil by school district poverty quartile, 1994-1995

Rich school districts get money from local governments. Poor school districts rely more on state and federal government money.

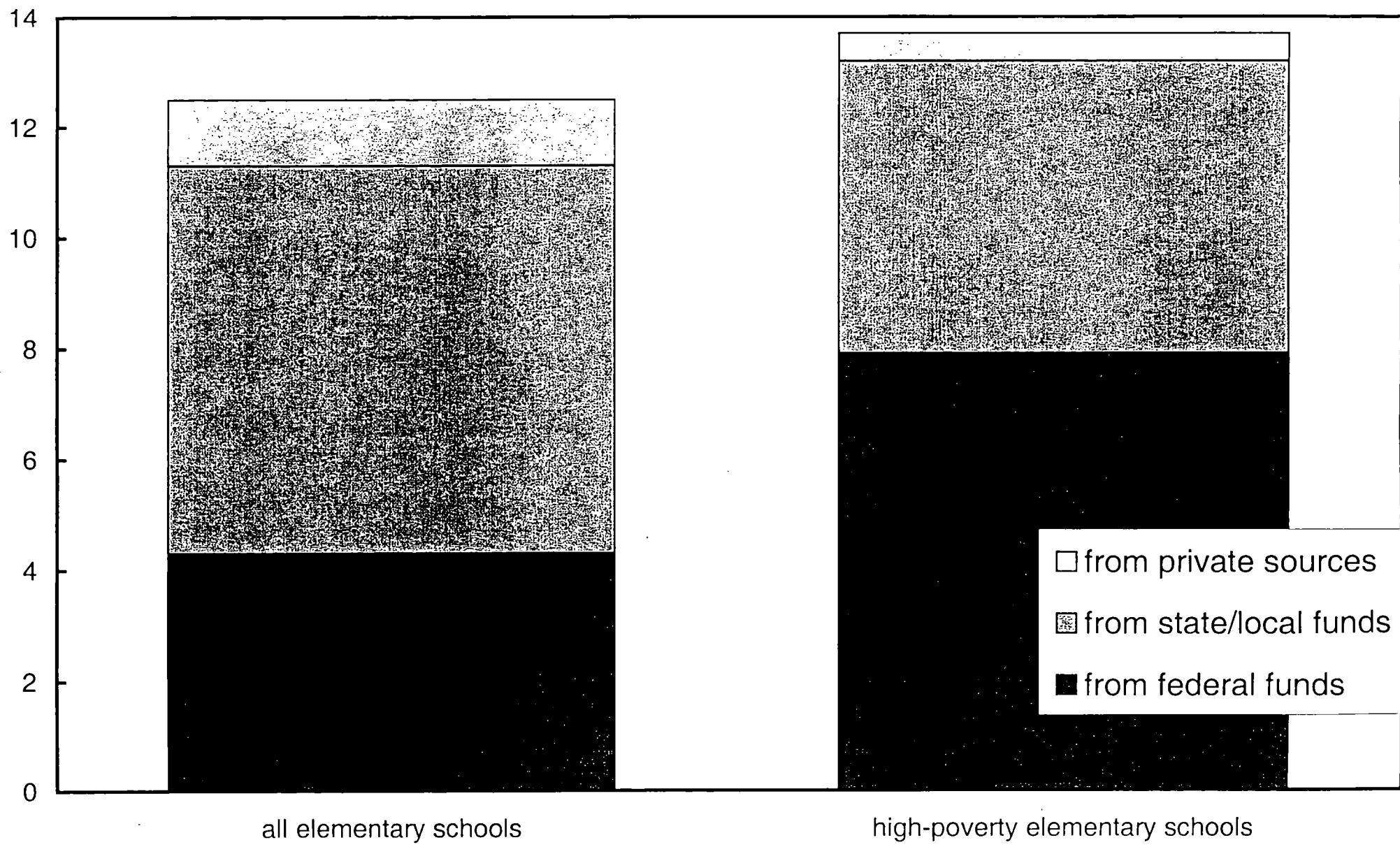
Revenue per pupil



Source: Education Department

Chart 5-x Number of New Computers Received by Elementary Schools in 1997-98
High-poverty elementary schools get fewer computers from private sources. They get more computers from the federal government.

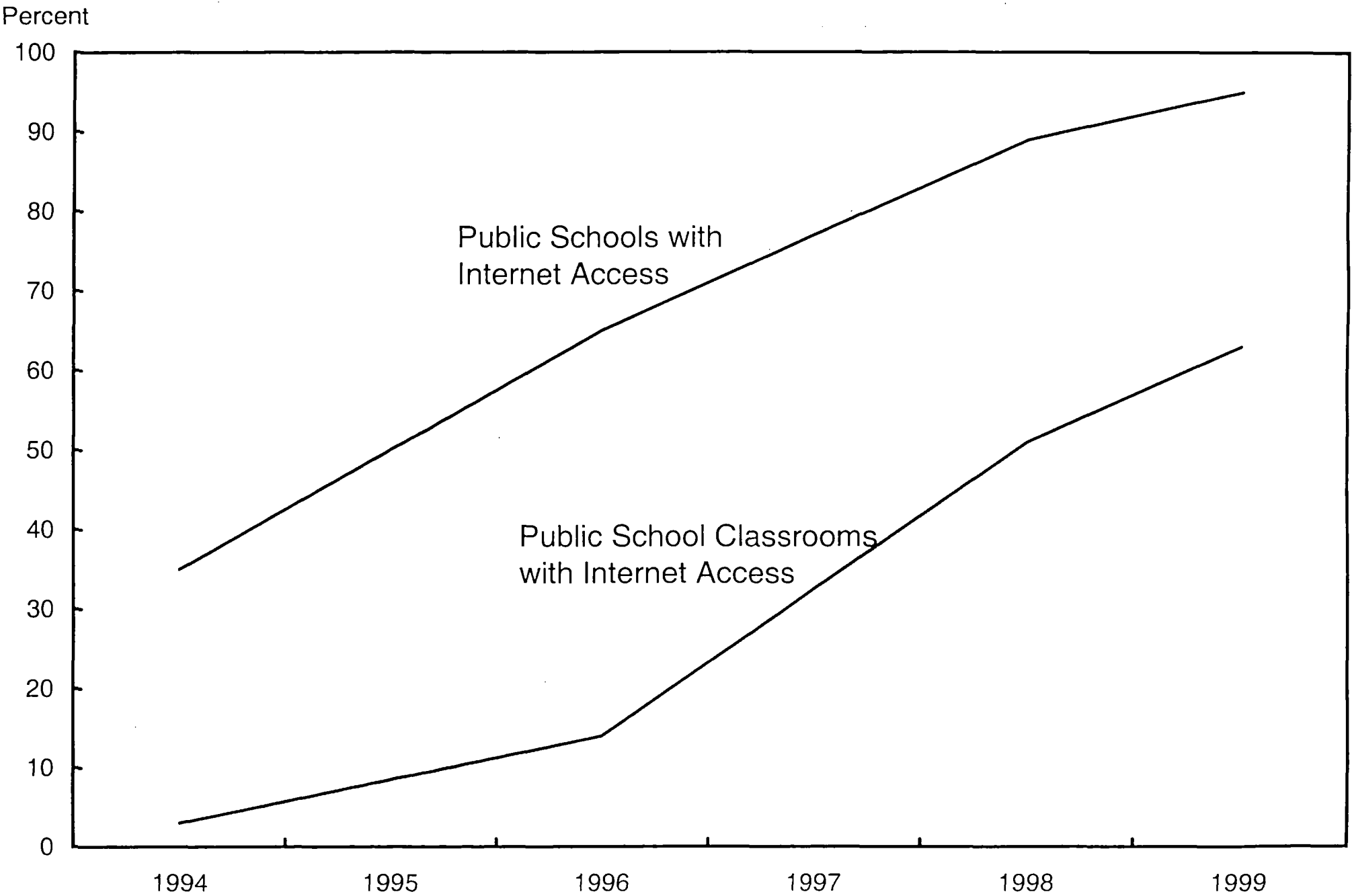
Number of Computers per school of 500 students



Source: Education Department

Chart 5-x **Internet Access in US Public Schools, 1994-1999**

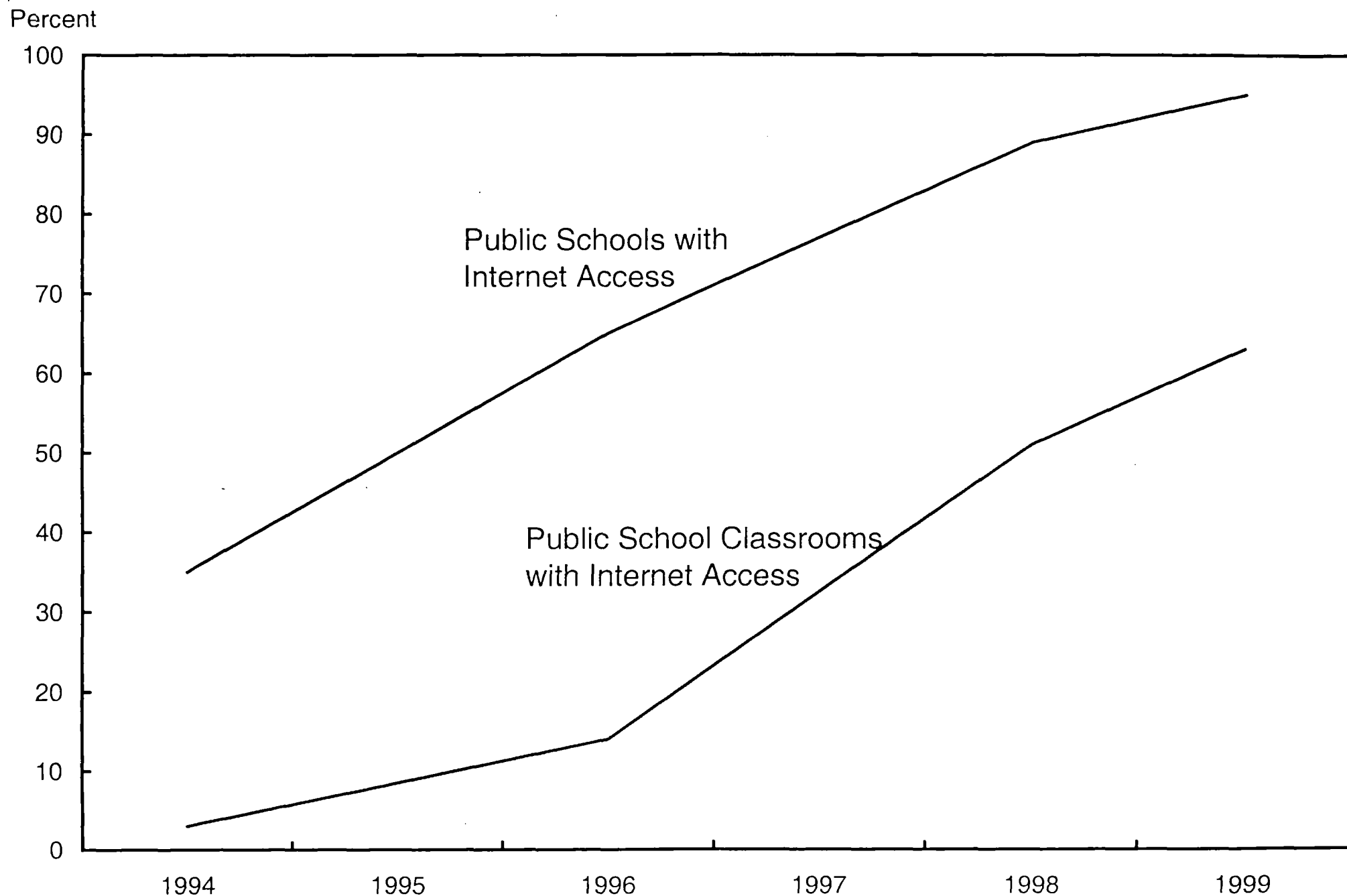
Access to the internet has been growing in schools.



Source: National Center for Education Statistics

Chart 5-x Internet Access in US Public Schools, 1994-1999

Access to the internet has been growing in schools.

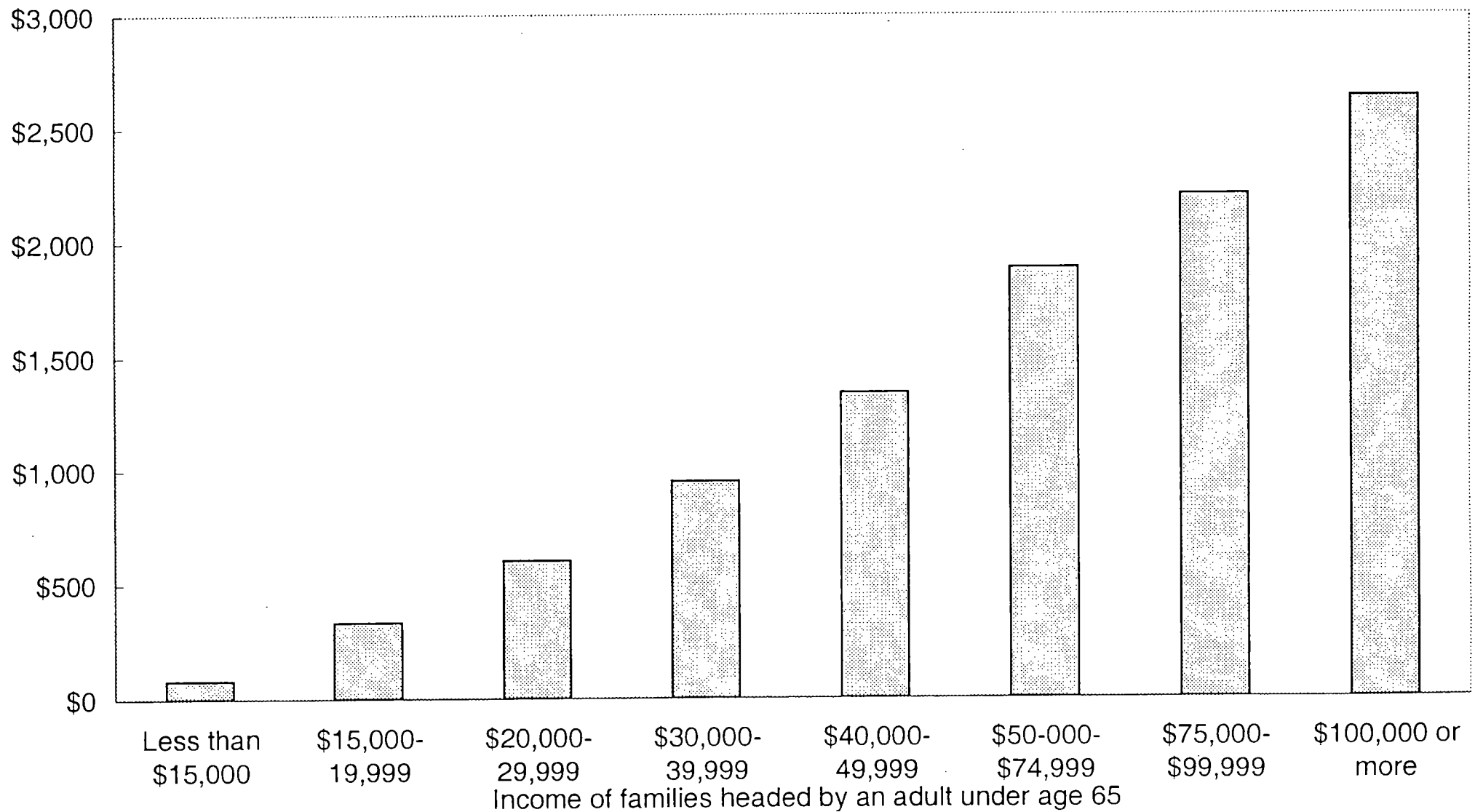


Source: Education Department (National Center for Education Statistics)

Chart X. **Average Federal Tax Benefit from Health Insurance Exemption, 2000**

Wealthier people benefit more from health provisions in the Federal Tax Code.

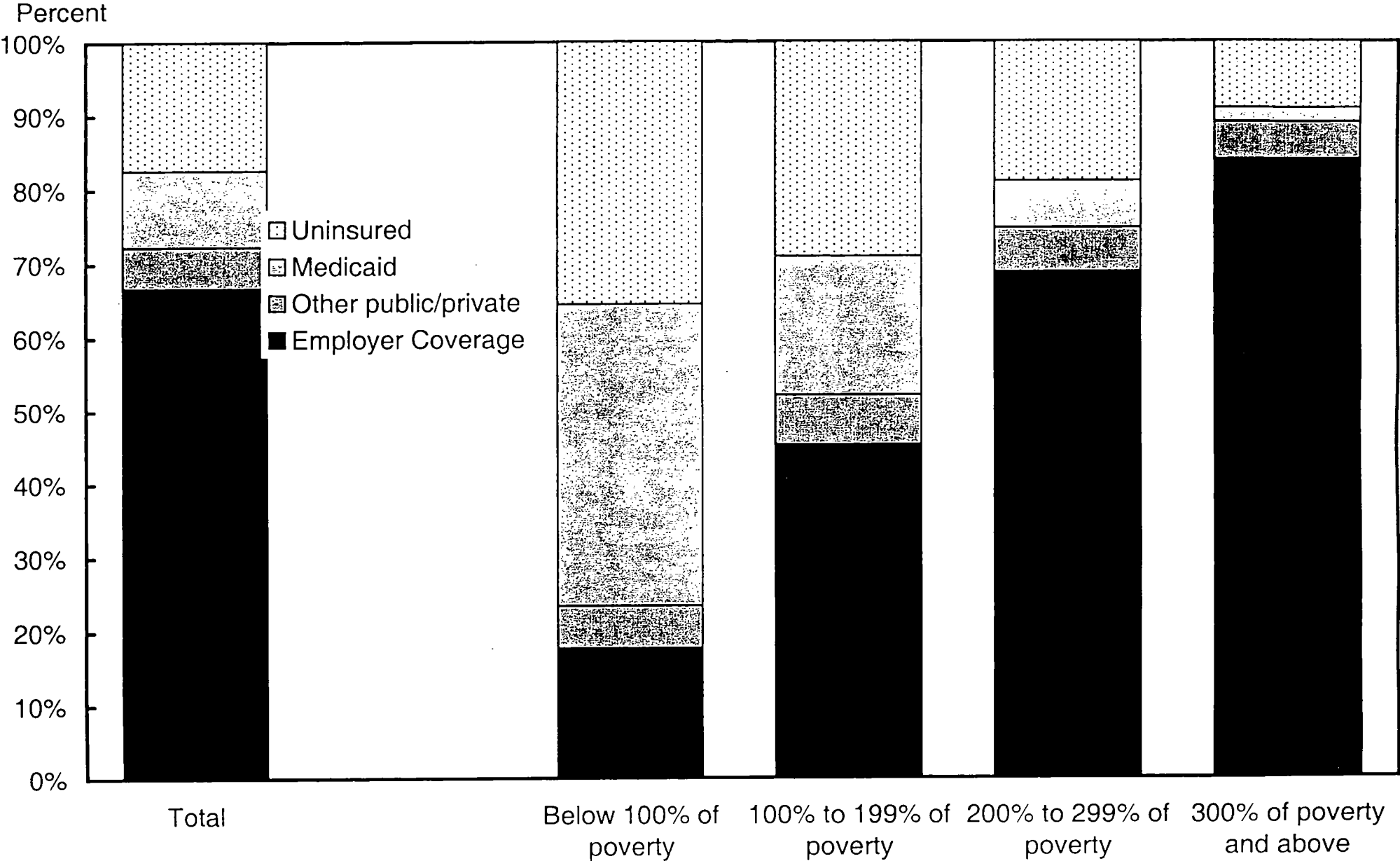
Dollars per family



Note: Calculations incorporate likelihood of receiving employer-provided health benefits and the value of the tax benefit of employer-provided health insurance

Source: John Sheils, Paul Hogan and Randall Haught, "Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy," October 1999, The Lewin Group, Inc.

Chart 5-x Health Insurance Coverage of Non-elderly People by Family Income, 1999
Rich people get Health Insurance through their jobs. Poor people get Health Insurance from the government, or not at all.



Source: Commerce Department (Census Bureau)